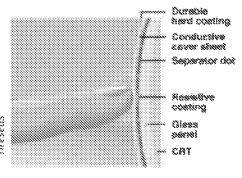


Historians generally consider the first finger-driven touchscreen to have been invented by E.A. Johnson in 1965 at the Royal Radar Establishment in Malvern, United Kingdom. Johnson originally described his work in an article entitled "Touch display—a novel input/output device for computers" published in *Electronics Letters*. The piece featured a diagram describing a type of touchscreen mechanism that many smartphones use today—what we now know as capacitive touch. Two years later, Johnson further expounded on the technology with photographs and diagrams in "Touch Displays: A Programmed Man-Machine Interface," published in *Ergonomics* in 1967.

A capacitive touchscreen panel uses an insulator, like glass, that is coated with a transparent conductor such as indium tin oxide (ITO). The "conductive" part is usually a human finger, which makes for a fine electrical conductor. Johnson's initial technology could only process one touch at a time, and what we'd describe today as "multitouch" was still somewhat a ways away. The invention was also binary in its interpretation of touch—the interface registered contact or it didn't register contact. Pressure sensitivity would arrive much later.



How capacitive touchscreens work.

Even without the extra features, the early touch interface idea had some takers. Johnson's discovery was eventually adopted by air traffic controllers in the UK and remained in use until the late 1990s.

1970s: Resistive touchscreens are invented

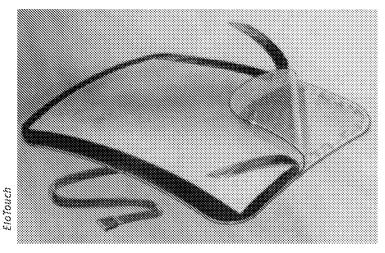
Although capacitive touchscreens were designed first, they were eclipsed in the early years of touch by *resistive* touchscreens. American inventor Dr. G. Samuel Hurst developed resistive touchscreens almost accidentally. The Berea College Magazine for alumni described it like this:

To study atomic physics the research team used an overworked Van de Graff accelerator that was only available at night. Tedious analyses slowed their research. Sam thought of a way to solve that problem. He, Parks, and Thurman Stewart, another doctoral student, used electrically conductive paper to read a pair of x- and y- coordinates. That idea led to the first touch screen for a computer. With this prototype, his students could compute in a few hours what otherwise had taken days to accomplish.

Hurst and the research team had been working at the University of Kentucky. The university tried to file a patent on his behalf to protect this accidental invention from duplication, but its scientific origins made it seem like it wasn't that applicable outside the laboratory.

Hurst, however, had other ideas. "I thought it might be useful for other things," he said in the article. In 1970, after he returned to work at the Oak Ridge National Laboratory (ORNL), Hurst began an after-hours experiment. In his basement, Hurst and nine friends from various other areas of expertise set out to refine what had been accidentally invented. The group called its fledgling venture "Elographics," and the team discovered that a touchscreen on a computer monitor made for an excellent method of interaction. All the screen needed was a conductive cover sheet to make contact with the sheet that contained the X- and Y-axis. Pressure on the cover sheet allowed voltage to flow between the X wires and the Y wires, which could be measured to indicate coordinates. This discovery helped found what we today refer to as resistive touch technology (because it responds purely to pressure rather than electrical conductivity, working with both a stylus and a finger).

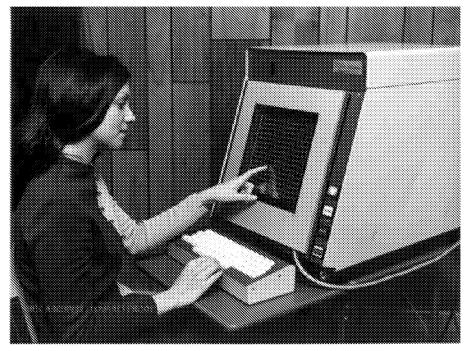
As a class of technology, resistive touchscreens tend to be very affordable to produce. Most devices and machines using this touch technology can be found in restaurants, factories, and hospitals because they are durable enough for these environments. Smartphone manufacturers have also used resistive touchscreens in the past, though their presence in the mobile space today tends to be confined to lower-end phones.



A second-gen AccuTouch curved touchscreen from EloTouch.

Elographics didn't confine itself just to resistive touch, though. The group eventually patented the first curved glass touch interface. The patent was titled "electrical sensor of plane coordinates" and it provided details on "an inexpensive electrical sensor of plane coordinates" that employed "juxtaposed sheets of conducting material having electrical equipotential lines." After this invention, Elographics was sold to "good folks in California" and became EloTouch Systems.

By 1971, a number of different touch-capable machines had been introduced, though none were pressure sensitive. One of the most widely used touch-capable devices at the time was the University of Illinois's PLATO IV terminal—one of the first generalized computer assisted instruction systems. The PLATO IV eschewed capacitive or resistive touch in favor of an *infrared* system (we'll explain shortly). PLATO IV was the first touchscreen computer to be used in a classroom that allowed students to touch the screen to answer questions.



The PLATO IV touchscreen terminal.

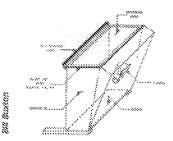
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FLORENCE ION

Florence is a former reviews editor at Ars.

1980s: The decade of touch

In 1982, the first human-controlled multitouch device was developed at the University of Toronto by Nimish Mehta. It wasn't so much a touchscreen as it was a touch-tablet. The Input Research Group at the university figured out that a frosted-glass panel with a camera behind it could detect action as it recognized the different "black spots" showing up on-screen. Bill Buxton has played a huge role in the development of multitouch technology (most notably with the PortfolioWall, to be discussed a bit later), and he deemed Mehta's invention important enough to include in his informal smelling of computer input devices:



One of the first diagrams depicting multitouch input.

The touch surface was a translucent plastic filter mounted over a sheet of glass, side-lit by a fluorescent lamp. A video camera was mounted below the touch surface, and optically captured the shadows that appeared on the translucent filter. (A mirror in the housing was used to extend the optical path.) The output of the camera was digitized and fed into a signal processor for analysis.

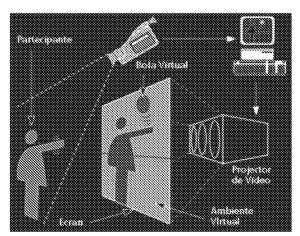
Shortly thereafter, gestural interaction was introduced by Myron Krueger, an American computer artist who developed an optical system that could track hand movements. Krueger introduced Video Place (later called Video Desk) in 1983, though he'd been working on the system since the late 1970s. It used projectors and video cameras to track hands, fingers, and the people they belonged to. Unlike multitouch, it wasn't entirely aware of who or what was touching, though the software could react to different poses. The display depicted what looked like shadows in a simulated space.

Myron Kreuger - Video Place - 1989



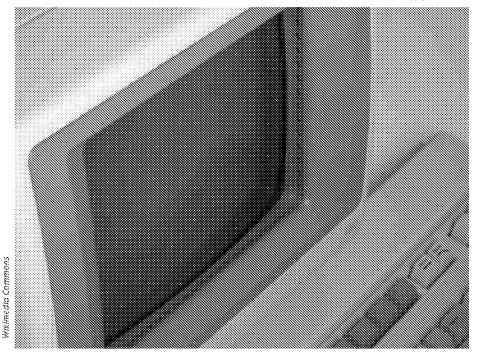
Bill Buxton introduces the PortfolioWall and details some of its abilities.

Though it wasn't technically touch-based—it relied on "dwell time" before it would execute an action—Buxton regards it as one of the technologies that "wrote the book' in terms of unencumbered... rich gestural interaction. The work was more than a decade ahead of its time and was hugely influential, yet not as acknowledged as it should be." Krueger also pioneered virtual reality and interactive art later on in his career.



A diagram (in Spanish!) detailing how the Video Place worked.

Touchscreens began being heavily commercialized at the beginning of the 1980s. HP (then still formally known as Hewlett-Packard) tossed its hat in with the HP-150 in September of 1983. The computer used MS-DOS and featured a 9-inch Sony CRT surrounded by infrared (IR) emitters and detectors that could sense where the user's finger came down on the screen. The system cost about \$2,795, but it was not immediately embraced because it had some usability issues. For instance, poking at the screen would in turn block other IR rays that could tell the computer where the finger was pointing. This resolved in what some called "Gorilla Arm," referring to muscle fatigue that came from a user sticking his or her hand out for so long.



Enlarge / The HP-150 featured MS-DOS and a 9-inch touchscreen Sony CRT.

A year later, multitouch technology took a step forward when Bob Boie of Bell Labs developed the first transparent multitouch screen overlay. As Ars wrote last year:

...the first multitouch screen was developed at Bell Labs in 1984. [Bill Buxton] reports that the screen, created by Bob Bole, "used a transparent capacitive array of touch sensors overlaid on a CRT." It allowed the user to "manipulate graphical objects with fingers with excellent response time."

The discovery helped create the multitouch technology that we use today in tablets and smartphones.

1990s: Touchscreens for everyone!



IBM's Simon Personal Communicator: big handset, big screen, and a stylus for touch input.

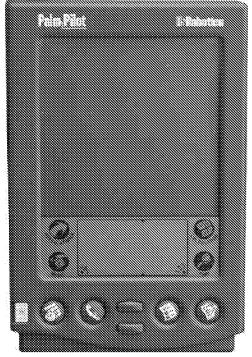
In 1993, IBM and BellSouth teamed up to launch the Simon Personal Communicator, one of the first cellphones with touchscreen technology. It featured paging capabilities, an e-mail and calendar application, an appointment schedule, an address book, a calculator, and a pen-based sketchpad. It also had a resistive touchscreen that required the use of a stylus to navigate through menus and to input data.



The original MessagePad 100.

Apple also launched a touchscreen PDA device that year: the Newton PDA. Though the Newton platform had begun in 1987, the MessagePad was the first in the series of devices from Apple to use the platform. As *Time notes*, Apple's CEO at the time, John Sculley, actually coined the term "PDA" (or "personal digital assistant"). Like IBM's Simon Personal Communicator, the MessagePad 100 featured handwriting recognition software and was controlled with a stylus.

Early reviews of the MessagePad focused on its useful features. Once it got into the hands of consumers, however, its shortcomings became more apparent. The handwriting recognition software didn't work too well, and the Newton didn't sell that many units. That didn't stop Apple, though; the company made the Newton for six more years, ending with the MP2000.



The first Palm Pilot.

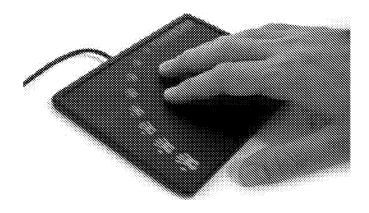
Wikimedia Commons

Three years later, Palm Computing followed suit with its own PDA, dubbed the Pilot. It was the first of the company's many generations of personal digital assistants. Like the other touchscreen gadgets that preceded it, the Palm 1000 and Pilot 5000 required the use of a stylus.

Palm's PDA gadget had a bit more success than IBM and Apple's offerings. Its name soon became synonymous with the word "business," helped in part by the fact that its handwriting recognition software worked very well. Users used what Palm called "Graffiti" to input text, numbers, and other characters. It was simple to learn and mimicked how a person writes on a piece of paper. It was eventually implemented over to the Apple Newton platform.

PDA-type devices didn't necessarily feature the finger-to-screen type of touchscreens that we're used to today, but consumer adoption convinced the companies that there was enough interest in owning this type of device.

Near the end of the decade, University of Delaware graduate student Wayne Westerman published a doctoral dissertation entitled "Hand Tracking, Finger Identification, and Chordic Manipulation on a Multi-Touch Surface." The paper detailed the mechanisms behind what we know today as multitouch capacitive technology, which has gone on to become a staple feature in modern touchscreen-equipped devices.



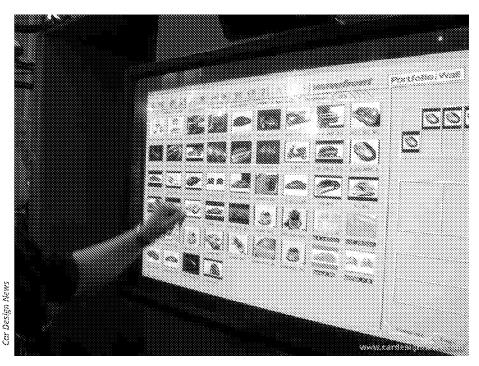
The iGesture pad manufactured by FingerWorks.

Westerman and his faculty advisor, John Elias, eventually formed a company called FingerWorks. The group began producing a line of multitouch gesture-based products, including a gesture-based keyboard called the TouchStream. This helped those who were suffering from disabilities like repetitive strain injuries and other medical conditions. The iGesture Pad was also released that year, which allowed one-hand gesturing and maneuvering to control the screen. FingerWorks was eventually acquired by Apple in 2005, and many attribute technologies like the multitouch Trackpad or the iPhone's touchscreen to this acquisition.

2000s and beyond

With so many different technologies accumulating in the previous decades, the 2000s were the time for touchscreen technologies to really flourish. We won't cover too many specific devices here (more on those as this touchscreen series continues), but there were advancements during this decade that helped bring multitouch and gesture-based technology to the masses. The 2000s were also the era when touchscreens became *the* favorite tool for design collaboration.

2001: Alias|Wavefront's gesture-based PortfolioWall



As the new millennium approached, companies were pouring more resources into integrating touchscreen technology into their daily processes. 3D animators and designers were especially targeted with the advent of the PortfolioWall. This was a large-format touchscreen meant to be a dynamic version of the boards that design studios use to track projects. Though development started in 1999, the PortfolioWall was unveiled at SIGGRAPH in 2001 and was produced in part by a joint collaboration between General Motors and the team at Alias|Wavefront. Buxton, who now serves as principal research at Microsoft Research, was the chief scientist on the project. "We're tearing down the wall and changing the way people effectively communicate in the workplace and do business," he said back then. "PortfolioWall's gestural interface allows users to completely interact with a digital asset. Looking at images now easily become part of an everyday workflow."

Portfolio Wall



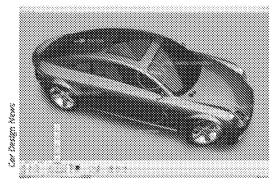
Bill Buxton introduces the PortfolioWall and details some of it abilities.

The PortfolioWall used a simple, easy-to-use, gesture-based interface. It allowed users to inspect and maneuver images, animations, and 3D files with just their fingers. It was also easy to scale images, fetch 3D models, and play back video. A later version added sketch and text annotation, the ability to launch third-party applications, and a Maya-based 3D viewing tool to use panning, rotating, zooming, and viewing for 3D models. For the most part, the product was considered a digital corkboard for design-centric professions. It also cost a whopping \$38,000 to get the whole set up installed—\$3,000 for the presenter itself and \$35,000 for the server.

The PortfolioWall also addressed the fact that while traditional mediums like clay models and full-size drawings were still important to the design process, they were slowly being augmented by digital tools. The device included addons that virtually emulated those tangible mediums and served as a presentation tool for designers to show off their work in progress.

Another main draw of the PortfolioWall was its "awareness server," which helped facilitate collaboration across a network so that teams didn't have to be in the same room to review a project. Teams could have multiple walls in different spaces and still collaborate remotely.

The PortfolioWall was eventually laid to rest in 2008, but it was a prime example of how gestures interacting with the touchscreen could help control an entire operating system.



The PortfolioWall allowed designers to display full-scale 3D models.

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PLOBENCE ION

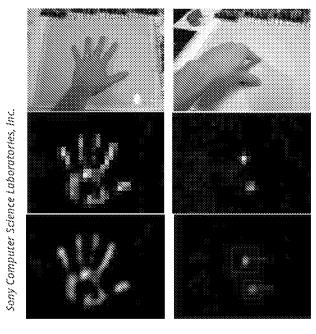
Florence is a former reviews editor at Ars.

READER COMMENTS 125

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Using the Sony SmartSkin.

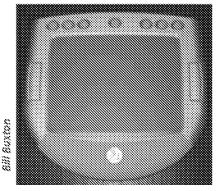
In 2002, Sony introduced a flat input surface that could recognize multiple hand positions and touch points at the same time. The company called it SmartSkin. The technology worked by calculating the distance between the hand and the surface with capacitive sensing and a mesh-shaped antenna. Unlike the camera-based gesture recognition system in other technologies, the sensing elements were all integrated into the touch surface. This also meant that it wouldn't malfunction in poor lighting conditions. The ultimate goal of the project was to transform surfaces that are used every day, like your average table or a wall, into an interactive one with the use of a PC nearby. However, the technology did more for capacitive touch technology than may have been intended, including introducing multiple contact points.



How the SmartSkin sensed gestures.

Jun Rekimoto at the Interaction Laboratory in Sony's Computer Science Laboratories noted the advantages of this technology in a whitepaper. He said technologies like SmartSkin offer "natural support for multiple-hand, multiple-user operations." More than two users can simultaneously touch the surface at a time without any interference. Two prototypes were developed to show the SmartSkin used as an interactive table and a gesture-recognition pad. The second prototype used finer mesh compared to the former so that it can map out more precise coordinates of the fingers. Overall, the technology was meant to offer a real-world feel of virtual objects, essentially recreating how humans use their fingers to pick up objects and manipulate them.

2002-2004: Failed tablets and Microsoft Research's TouchLight



A multitouch tablet input device named HandGear.

Multitouch technology struggled in the mainstream, appearing in specialty devices but never quite catching a big break. One almost came in 2002, when Canada-based DSI Datotech developed the HandGear + GRT device (the acronym "GRT" referred to the device's Gesture Recognition Technology). The device's multipoint touchpad worked a bit like the aforementioned iGesture pad in that it could recognize various gestures and allow users to use it as an input device to control their computers. "We wanted to make quite sure that HandGear would be easy to use," VP of Marketing Tim Heaney said in a press release. "So the technology was designed to recognize hand and finger movements which are completely natural, or intuitive, to the user, whether they're left- or right-

handed. After a short learning-period, they're literally able to concentrate on the work at hand, rather than on what the fingers are doing."

HandGear also enabled users to "grab" three-dimensional objects in real-time, further extending that idea of freedom and productivity in the design process. The company even made the API available for developers via AutoDesk. Unfortunately, as Buxton mentions in his overview of multitouch, the company ran out of money before their product shipped and DSI closed its doors.

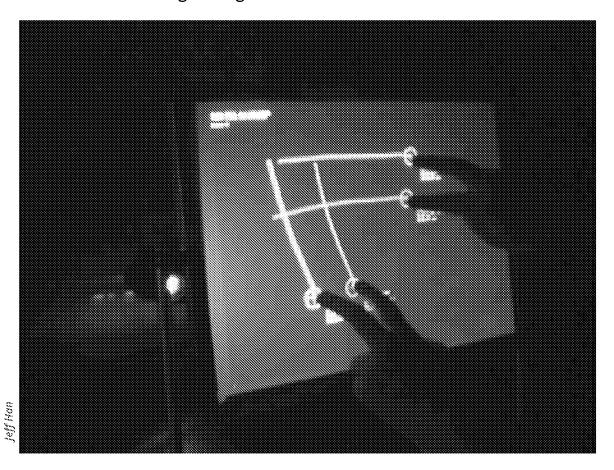


Andy Wilson explains the technology behind the TouchLight.

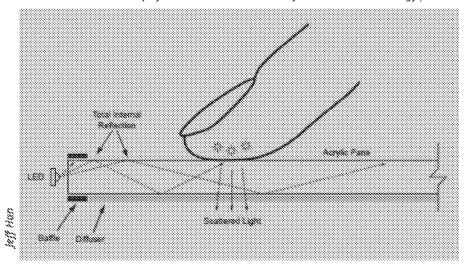
Two years later, Andrew D. Wilson, an employee at Microsoft Research, developed a gesture-based imaging touchscreen and 3D display. The TouchLight used a rear projection display to transform a sheet of acrylic plastic into a surface that was interactive. The display could sense multiple fingers and hands of more than one user, and because of its 3D capabilities, it could also be used as a makeshift mirror.

The TouchLight was a neat technology demonstration, and it was eventually licensed out for production to Eon Reality before the technology proved too expensive to be packaged into a consumer device. However, this wouldn't be Microsoft's only foray into fancy multitouch display technology.

2006: Multitouch sensing through "frustrated total internal reflection"



In 2006, Jeff Han gave the first public demonstration of his intuitive, interface-free, touch-driven computer screen at a TED Conference in Monterey, CA. In his presentation, Han moved and manipulated photos on a giant light box using only his fingertips. He flicked photos, stretched them out, and pinched them away, all with a captivating natural ease. "This is something Google should have in their lobby," he joked. The demo showed that a high-resolution, scalable touchscreen was possible to build without spending too much money.



A diagram of Jeff Han's multitouch sensing used FTIR.

Han had discovered that the "robust" multitouch sensing was possible using "frustrated total internal reflection" (FTIR), a technique from the biometrics community used for fingerprint imaging. FTIR works by shining light through a piece of acrylic or plexiglass. The light (infrared is commonly used) bounces back and forth between the top and bottom of the acrylic as it travels. When a finger touches down on the surface, the beams scatter around the edge where the finger is placed, hence the term "frustrated." The images that are generated look like white blobs and are picked up by an infrared camera. The computer analyzes where the finger is touching to mark its placement and assign a coordinate. The software can then analyze the coordinates to perform a certain task, like resize or rotate objects.

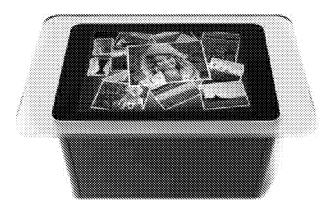


Jeff Han demonstrates his new "interface-free" touch-driven screen.

After the TED talk became a YouTube hit, Han went on to launch a startup called Perceptive Pixel. A year following the talk, he told *Wired* that his multitouch product did not have a name yet. And although he had some interested clients, Han said they were all "really high-end clients. Mostly defense."

Last year, Hann solid his company to Microsoft in an effort to make the technology more mainstream and affordable for consumers. "Our company has always been about productivity use cases," Han told AllThingsD. "That's why we have always focused on these larger displays. Office is what people think of when they think of productivity.

2008: Microsoft Surface



Before there was a 10-inch tablet, the name "Surface" referred to Microsoft's high-end tabletop graphical touchscreen, originally built inside of an actual IKEA table with a hole cut into the top. Although it was demoed to the public in 2007, the idea originated back in 2001. Researchers at Redmond envisioned an interactive work surface that colleagues could use to manipulate objects back and forth. For many years, the work was hidden behind a non-disclosure agreement. It took 85 prototypes before Surface 1.0 was ready to go.

As Ars wrote in 2007, the Microsoft Surface was essentially a computer embedded into a medium-sized table, with a large, flat display on top. The screen's image was rear-projected onto the display surface from within the table, and the system sensed where the user touched the screen through cameras mounted inside the table looking upward toward the user. As fingers and hands interacted with what's on screen, the Surface's software tracked the touch points and triggered the correct actions. The Surface could recognize several touch points at a time, as well as objects with small "domino" stickers tacked on to them. Later in its development cycle, Surface also gained the ability to identify devices via RFID.

Microsoft unveils the SURFACE



Bill Gates demonstrates the Microsoft Surface.

The original Surface was unveiled at the All Things D conference in 2007. Although many of its design concepts weren't new, it very effectively illustrated the real-world use case for touchscreens integrated into something the size of a coffee table. Microsoft then brought the 30-inch Surface to demo it at CES 2008, but the company explicitly said that it was targeting the "entertainment retail space." Surface was designed primarily for use by Microsoft's commercial customers to give consumers a taste of the hardware. The company partnered up with several big name hotel resorts, like Starwood and Harrah's Casino, to showcase the technology in their lobbies. Companies like AT&T used the Surface to showcase the latest handsets to consumers entering their brick and mortar retail locations.

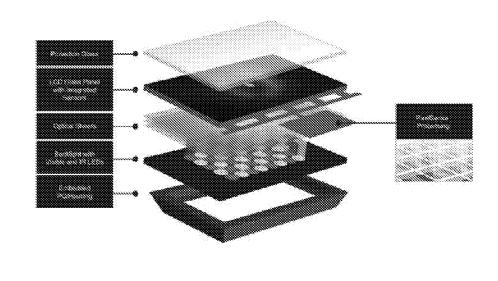
Microsoft Surface Demo @ CES 2008



Rather than refer to it as a graphic user interface (GUI), Microsoft denoted the Surface's interface as a natural user interface, or "NUI." The phrase suggested that the technology would feel almost instinctive to the human end user, as natural as interacting with any sort of tangible object in the real world. The phrase also referred to the fact that the interface was driven primarily by the touch of the user rather than input devices. (Plus, NUI—"new-ey"—made for a snappy, marketing-friendly acronym.)



In 2011, Microsoft paranered up with manufacturers like Samsung to produce sleeker, newer tabletop Surface hardware. For example, the Samsung SUR40 has a 40-inch 1080p LED, and it drastically reduced the amount of internal space required for the touch sensing mechanisms. At 22-inches thick, it was thinner than its predecessors, and the size reduction made it possible to mount the display on a wall rather than requiring a table to house the camera and sensors. It cost around \$8,400 at the time of its launch and ran Windows 7 and Surface 2.0 software.



Last year, the company rebranded the technology as PixelSense once Microsoft introduced its unrelated Surface tablet to consumers. The name "PixelSense" refers to the way the technology actually works: a touch-sensitive protection glass is placed on top of an infrared backlight. As it hits the glass, the light is reflected back to integrated sensors, which convert that light into an electrical signal. That signal is referred to as a "value," and those values create a picture of what's on the display. The picture is then analyzed using image processing techniques, and that output is sent to the computer it's connected to.

PixelSense features four main components that make up its technology: it doesn't require a mouse and keyboard to work, more than one user can interact with it at one time, it can recognize certain objects placed on the glass, and it features multiple contact points. The name PixelSense could also be attributed to that last bit especially—each pixel can actually sense whether or not there was touch contact.

Although it would make an awesome living room addition, Microsoft continues to market the Surface hardware as a business tool rather than a consumer product.

Touch today—and tomorrow?

It can't be understated—each of these technologies had a monumental impact on the gadgets we use today. Everything from our smartphones to laptop trackpads and WACOM tablets can be somehow connected to the many inventions, discoveries, and patents in the history of touchscreen technology. Android and iOS users should thank to E.A. Johnson for capacitive touch-capable

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In the next part of our series, we'll dive deeper on the devices of today. (Just how has the work of FingerWorks impacted those iDevices anyway?) But history did not end with 2011, either. We'll also discuss how some of the current major players—like Apple and Samsung—continue contributing to the evolution of touchscreen gadgets. Don't scroll that finger, stay tuned!

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FLORENCE ION

Florence is a former reviews editor at Ars.

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Exhibit 1017



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
90/006,572	03/25/2003	6251537	1568.1061RE	3636	
	49455 7590 06/30/2010 STEIN MCEWEN, LLP			EXAMINER	
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The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte SAMSUNG DISPLAY DEVICES CO., LTD., Patent Owner and Appellant

Appeal 2008-005992 Reexamination Control 90/006,572 Patent 6,251,537 B1 Technology Center 3900

Decided: June 30, 2010

Before TERRY J. OWENS, CAROL A. SPIEGEL, and ROMULO H. DELMENDO, *Administrative Patent Judges*.

DELMENDO, Administrative Patent Judge.

DECISION ON APPEAL

Samsung Display Devices Co., Ltd. (hereinafter "Appellant")¹ appeals under 35 U.S.C. §§ 134(b) and 306 from a final rejection of claims 1-64, 78, 81, 82, 84, 94, 96, 108, and 109 (Examiner's Answer mailed October 6, 2005, hereinafter "Ans.," 2; Appeal Brief filed July 12, 2005, hereinafter

¹ See Patent Assignment Abstract of Title, entered into the electronic file on April 8, 2003, for the subject patent (hereinafter the '537 Patent), which issued to Han-sung Kim, Whan-jin Roh, and Hyung-gon Noh on June 26, 2001 from Application 09/265,358 filed on March 10, 1999.

"App. Br.," 2; Final Office Action mailed January 14, 2005). We have jurisdiction under 35 U.S.C. §§ 134(b) and 306.

We AFFIRM.

STATEMENT OF THE CASE

On March 25, 2003, Appellant filed a Request for Ex Parte Reexamination, citing Japanese Patent Publications 9-265967, 9-288996, 9-288998, 9-283101, 9-283100, 9-274896, and 9-288997, and United States Patents 6,001,505 and 6,004,693. On May 28, 2003, the Examiner (acting pursuant to the delegated authority of the Director of the United States Patent and Trademark Office (USPTO) under 35 U.S.C. § 303(a)) ordered reexamination based on a determination that at least some of Appellant's cited printed publications raise a substantial new question of patentability and that "WO 97/08762, which was considered by the [E]xaminer during [the original] prosecution, has been viewed in a new light and presents a substantial new question of patentability" (Order Granting Reexamination mailed May 28, 2003 at 2-3). Appellant immediately took issue with the Examiner's determination that WO 97/08762 raised a substantial new question of patentability (Patent Owner's Statement under 37 C.F.R. § 1.530 filed on July 21, 2003). During reexamination, the Examiner applied WO 97/08762 but not the publications cited in the Request for Ex Parte Reexamination (Office Action mailed November 6, 2003 and Final Office Action mailed January 14, 2005). Appellant continued to object to the application of WO 97/08762 (See, e.g., Amendment filed on January 5, 2005) at 37-40). This appeal ensued.

We heard oral arguments on May 6, 2009, a written transcript of which may be found in the electronic file.

The '537 Patent states that the invention "relates to a secondary battery...having an improved seal structure between electrode tabs acting as terminals of the battery and a case, thereby preventing leakage of electrolyte" (col. 1, 1l. 7-12).

Originally issued claim 1 and added claims 22, 23, 30, 33, 78, and 81, which are representative of the claims on appeal, read as follows:

1. A secondary battery, comprising:

a battery body having a positive electrode, a negative electrode and a separator which are stacked, and electrode tabs for inducing current generated therein to the outside;

a dielectric package having upper and lower dielectric packages for enclosing the battery body by sealing edge portions of the upper and lower dielectric packages while the electrode tabs are partially exposed to the outside; and

sealing materials coated on portions of the electrode tabs contacted with edge portions of the upper and lower dielectric packages, wherein said sealing materials have side arms extended in parallel with the edge portions of the upper and lower dielectric packages for preventing leakage of an organic liquid electrolyte while being interposed and fused between the edge portions of the upper and lower dielectric packages.

22. The secondary battery of claim 1, wherein the sealing materials are fused according to the following process:

coating the sealing materials including the side arms on the electrode tabs so as to form side arms having a thickness of at least a thickness of the corresponding electrode tabs;

> disposing the electrode tabs such that the sealing materials including the side arms are between edge portions of the upper and lower dielectric packages; and

applying heat and pressure to the dielectric package such that the edge portions of the upper and lower dielectric packages are sealed and the sealing materials including the side arms are fused to the edge portions of the upper and lower dielectric packages such that the organic liquid electrolyte cannot leak from the dielectric package past the electrode tabs and the side arms.

- 23. The secondary battery of claim 22, wherein the coating the sealing materials comprises coating the sealing materials such that a thickness of the sealing materials on the electrode tabs is less than the thickness of the side arms.
- 30. The secondary battery of claim 1, wherein the dielectric package comprises a pre-shaped package forming a cavity to house the positive electrode, the negative electrode, the separator, and the organic liquid electrolyte, and the cavity has a same shape before and after the positive electrode, the negative electrode, the separator, and the organic liquid electrolyte are housed in the cavity of the dielectric package.
- 33. The secondary battery of claim 1, further comprising an electrolyte comprising the organic liquid electrolyte and which is disposed in the dielectric package.

78. A secondary battery, comprising:

a battery body having a positive electrode, a negative electrode and a separator which are stacked, and electrode tabs for inducing current generated therein to the outside;

> a dielectric package having upper and lower dielectric packages for enclosing the battery body by sealing edge portions of the upper and lower dielectric packages while the electrode tabs are partially exposed to the outside;

> an electrolyte comprising an organic liquid electrolyte disposed in the dielectric package; and

sealing materials coated on portions of the electrode tabs contacted with edge portions of the upper and lower dielectric packages, wherein:

each of the sealing materials has side arms extending to and terminating at corresponding connection points between the upper and lower edges portions to completely fill corresponding gaps between the corresponding tab and the connection points so as to prevent the organic liquid electrolyte from leaking through gaps during operation of the battery,

the upper and lower edges portions connect at the connection points, and

each of the sealing materials has a shape in which, prior to sealing, a thickness of the side arms extending from the corresponding tab is greater than a sum of thicknesses of portions of the sealing materials on the corresponding electrode tab to be disposed between the edges of the upper and lower dielectric packages and the electrode tab.

81. The secondary battery of claim 78, wherein the sealing materials have a shape in which, prior to sealing, the thicknesses of the side arms extending from the corresponding tab is greater than a thickness of the tab.

(Office Communication mailed May 10, 2008, Claims App'x, underlining omitted).

The Examiner relied upon the following as evidence of unpatentability:

Moulton WO 97/08762 March 6, 1997

Admitted prior art in the Drawings (Figures 1 and 2) and Specification of the '537 Patent.

Sohrab Hossain, *Rechargeable Lithium Batteries (Ambient Temperature)*, in HANDBOOK OF BATTERIES 36.1-36.3 (2d ed., David Linden ed., 1994) (hereinafter "Linden").

The Examiner rejected the claims as follows:

- I. claims 22-29, 54-61, 78, 81, 82, 84, 94, 96, 108, and 109 under 35 U.S.C. § 112, ¶1, as failing to comply with the written description requirement (Ans. 3-4);
- II. claims 16 and 48 under 35 U.S.C. \S 112, \P 2, as indefinite (*id.* at 5);
- III. claims 1-23, 26, and 27 under 35 U.S.C. § 102(b) as anticipated by Moulton (*id.* at 5-7);
- IV. claims 24, 25, 28, and 29 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as unpatentable over Moulton (*id.* at 7-8);
- V. claims 30-64, 78, 81, 82, 84, 94, 96, 108, and 109 under 35 U.S.C. § 103(a) as unpatentable over Moulton in view of Linden (*id.* at 8-9); and
- VI. claims 1, 21-64, 78, 81, 82, 84, 94, 96, 108, and 109 under 35 U.S.C. § 103(a) as unpatentable over the

admitted prior art in the Drawings and Specification of the '537 Patent in view of Moulton (*id.* at 9-13).

ISSUES

Substantial New Question of Patentability

After prosecution on the merits was closed (*i.e.*, after the claims were allowed), the Supervisory Patent Examiner in the original examination stated that Moulton does not teach "sealing materials hav[ing] side-arms extended in parallel with the edge portions of the upper and lower dielectric packages" as recited in claim 1 (Office Communication mailed May 10, 2001 in Application 09/265,358).

The Examiner in this reexamination found that while Moulton was cited after closing of prosecution in the original examination, the reexamination statute does not necessarily preclude reexamination based on previously cited prior art (Ans. 14-15). According to the Examiner, "Figure 6 [of the '537 Patent] shows the battery after fusing/sealing wherein the sealing materials no longer have side arms that extend in parallel with the edge portions of the upper and lower dielectric packages" (Ans. 14). Thus, the Examiner reasoned that "[t]he issue being relied upon for a rejection during reexamination (side arms with gradual curvature [after sealing]) was not the same issue that was examined by the Examiner during the prior prosecution (side arms extending in parallel [before sealing]" (id. at 15).

Appellant, on the other hand, contends that the reexamination based on Moulton is inappropriate *ab initio* because the "prior Examiner and Supervisory Patent Examiner carefully considered the scope of the claims as

compared to the disclosure in [Moulton] and found that the shape of the strip 114 found in [Moulton] does not anticipate the shape of the sealing materials as recited in claim 1" (App. Br. 8-9). Nevertheless, Appellant concedes that "the term 'parallel' as recited in claim 1 does not require the side arms to remain in the same shape as shown in FIG. 5 of the instant patent and instead encompasses the shape as shown in FIG. 6 of the instant patent" (App. Br. 9).

Thus, an issue raised by the respective positions of the Examiner in this reexamination and Appellant is:

- (1) Do we have jurisdiction to review the Director's Order, which held that Moulton raised a substantial new question of patentability within the meaning of 35 U.S.C. § 303(a)?
- (2) If so, does the limited post-allowance consideration of Moulton's teachings in the original examination preclude a substantial new question of patentability based on Moulton?

Lack of Written Description: Claims 22-29, 54-61, 78, 81, 82, 84, 94, 96, 108, and 109

The Examiner found that the claims violate the written description requirement of 35 U.S.C. § 112, ¶1, because "[t]he claims recite limitations regarding a thickness of the side arms relative to a thickness of the corresponding electrode tabs or a thickness of the sealing material on the electrode tabs" that are not supported by the disclosure of the '537 Patent as originally filed (Ans. 3-4). With respect to claim 22, the claim recites "coating the sealing materials including the side arms on the electrode tabs so as to form side arms having a thickness of at least a thickness of the

corresponding electrode tabs" (Office Communication mailed May 10, 2008, Claims App'x at 4-5; see also claim 54) but the Examiner found that the '537 Patent "does not support a side arm having a thickness equal to the thickness of the electrode tab" (id. at 4). With respect to claim 23, the claim recites "coating the sealing materials such that a thickness of the sealing materials on the electrode tabs is less than the thickness of the side arms" (Office Communication mailed May 10, 2008, Claim App'x, 5) but the Examiner found that the '537 Patent "does not support a sealing material having side arms wherein the side arms and the sealing material on the electrode tabs do not form a planar surface " (Ans. 4; see also claim 55). With respect to claim 78, the claim recites that, prior to sealing, "a thickness of the side arms extending from the corresponding tab is greater than a sum of thicknesses of portions of the sealing materials on the corresponding electrode tab to be disposed between the edges of the upper and lower dielectric packages and the electrode tab" (Office Communication mailed May 10, 2008, Claims App'x, 12-13) but the Examiner found that the '537 Patent does not support this subject matter (Ans. 4). Likewise, the Examiner also found claim 81 in violation of the written description requirement (id.).

Appellant, on the other hand, contends that: (i) claim 22 is supported because "the disclosure of a limited number of examples does not prevent the specification from supporting a broader recitation of the invention" (App. Br. 35); (ii) claim 23 is supported because "the Examiner has not provided evidence that the specification does not convey non-planar surfaces, or that the shown example would not convey the use of non-planar surfaces by necessity" (*id.* at 38); (iii) claim 78 is supported because "the

disclosure of a limited number of examples does not prevent the specification from supporting a broader recitation of the invention" (*id.* at 40); and (iv) claim 81 is supported because "[t]he Examiner has not provided evidence that the planar surface assumed by the Examiner would not result in this configuration as a matter of geometry or otherwise" (*id.* at 41).

Thus, the issues arising from the contentions of the Examiner and Appellant are:

- (3) Does the original disclosure reasonably convey to one skilled in the relevant art that the inventors had possession of the invention encompassed by claim 22 in which the coated side arms have a thickness equal to the thickness of the electrode tab?
- (4) Does the original disclosure reasonably convey to one skilled in the relevant art that the inventors had possession of the invention encompassed by claim 23 in which the coated side arms and the coated sealing materials on the electrode tabs do not form a planar surface?
- (5) Does the original disclosure reasonably convey to one skilled in the relevant art that the inventors had possession of the invention encompassed by claim 78 in which the thickness of the side arms is greater than the sum of the thicknesses of the portions of the sealing materials on the corresponding electrode tab to be disposed between the edges of the upper and lower dielectric packages and the electrode tab?
- (6) Does the original disclosure reasonably convey to one skilled in the relevant art that the inventors had possession of the invention encompassed by claim 81 in which the sealing materials have a shape in

which, prior to sealing, the thickness of the side arms extending from the corresponding tab is greater than a thickness of the tab?

Indefiniteness: Claims 16 and 48

The Examiner contends that claims 16 and 48 are indefinite because they recite "an outermost edge of each of the side arms of the sealing material terminates at a connection point" but that "it is unclear how the outermost edge of each of the side arms terminates at a single point" (Ans. 5).

Appellant, on the other hand, asserts that the Examiner's reasoning is merely "conclusory" (App. Br. 43). According to Appellant, one skilled in the relevant art would understand the scope of claims when read in light of the disclosure in the '537 Patent, *e.g.*, Figure 6 (*id.* at 43-44).

Thus, an issue raised by the respective positions of the Examiner and Appellant is:

(7) Are claims 16 and 48 indefinite because "it is unclear how the outermost edge of each of the side arms terminates at a single point?"

Anticipation over Moulton: Claims 1-23, 26, and 27

The Examiner found that Moulton describes every limitation of claim 1 (Ans. 5-7). Specifically, the Examiner found that "Moulton teaches a battery cell enclosed by a protective package layer that is heat sealed around the periphery of the cell," wherein "[t]he cell includes an anode layer 12, an electrolyte layer 14, 16 (separator), a cathode layer 18, 20, an anode tab 32 electrically connected to the anode and a cathode tab 34 electrically

connected to the cathode (see Figures 1-2 and page 6, lines 8-34)" (Ans. 5). The Examiner further found that Moulton teaches that a "seal between the tabs and protective package can be enhanced/improved by forming a strip of sealable material around a portion of the tabs," which after application of heat and pressure forms a hermetic seal (Ans. 5-6).

Appellant, on the other hand, contends that Moulton does not anticipate claim 1 because "[t]here is no suggestion in [Moulton] that an organic liquid electrolyte is used or contemplated " (App. Br. 12). Appellant further argues that Moulton's sealing material "prevent[s] contamination from atmospheric-pressure moisture leaking *into* the envelope," which is not the same as "preventing such leakage where an organic liquid electrolyte is used" as claimed herein (id.). Additionally, Appellant argues that while Moulton describes the formation of a hermetic seal, "small gaps exist between the strip 114 and edges 28a', 28a" such that strip 114 does not extend in parallel with the edges 28a', 28a''' (id. at 13). According to Appellant, "the thick metal tab 112 shown in FIG. 6 [of Moulton] would always be thicker than the strips 114 and, especially without a gradual curvature at location 114a, would be unable to extend parallel to the edges 28a', 28a" before or after sealing of the envelope 28" (id.). According to Appellant, "pressure 140 [in Moulton's Figure 4a] is unable to cause adequate spreading of the sealing strip 114 at outer edges since the thick metal tab 112 does not allow for deformation below the tab 112 thickness, resulting in a stress concentration on the tab 112 " (id. at 14).

Thus, the issues arising from the contentions of the Examiner and Appellant are:

- (8) Does claim 1 require "an organic liquid electrolyte," which is not described in Moulton?
- (9) Did the Examiner provide a sufficient basis upon which to shift the burden of proof to Appellant to show that Moulton does not inherently describe "sealing materials hav[ing] side arms extended in parallel with the edge portions of the upper and lower dielectric packages for preventing leakage of an organic liquid electrolyte while being interposed and fused between the edge portions of the upper and lower dielectric packages" as required by claim 1?
- (10) Has Appellant identified entered, persuasive declaration evidence (*e.g.*, experimental data duplicating the prior art) showing that Moulton's battery is incapable of "preventing leakage of an organic liquid electrolyte?"

Anticipation/Obviousness over Moulton: Claims 24, 25, 28, & 29

The Examiner found that Moulton anticipates claims 24, 25, 28, and 29 for the same reasons given for claims 1-23, 26, and 27 (Ans. 7-8).

Alternatively, the Examiner concluded that a person having ordinary skill in the art would have found the claimed subject matter obvious in view of Moulton's teachings (*id.* at 8). As to the limitation "disposing each of the electrode tabs in a frame having a depression having the same size as the side arms," the Examiner asserted that these process limitations have not been shown to result in a patentably different product (*id.*).

Appellant, on the other hand, relies on substantially the same arguments provided in support of claims 1-23, 26, and 27, which was that Moulton's sealing material results in gaps, thus rendering the sealing material incapable of "preventing leakage of an organic liquid electrolyte" (App. Br. 19-20).

Thus, an issue raised by the contentions of the Examiner and Appellant is:

(11) Has Appellant shown that Moulton would necessarily result in gaps after sealing -i.e., has Appellant directed us to entered, persuasive declaration evidence (e.g., experimental data duplicating the prior art) showing that Moulton's battery is incapable of "preventing leakage of an organic liquid electrolyte?"

Obviousness over Moulton & Linden: Claims 30-64, 78, 81, 82, 84, 94, 96, 108, & 109

The Examiner found that while "Moulton does not explicitly teach a battery containing a liquid organic electrolyte," Linden teaches that lithium ion cells, which are useful for consumer electronic devices such as cellular phones, may contain either a liquid organic electrolyte or a solid polymer electrolyte (Ans. 8). Because the Examiner further found that Moulton's disclosed battery may be used for portable telephones, the Examiner concluded that one of ordinary skill in the art would have found it obvious to use a liquid organic electrolyte in Moulton as shown in Linden (*id.* at 8-9).

In addition to arguments already made in connection with the rejections based solely on Moulton, Appellant asserts that "Linden does not suggest using a liquid organic electrolyte in all batteries, and does not

suggest using the liquid organic electrolyte in batteries with sealing strips 114 such as that suggested in [Moulton]" (App. Br. 20). According to Appellant, "Linden does not suggest an advantage to using the liquid organic electrolyte . . . over a solid electrolyte not using a liquid organic electrolyte" (*id.*). Appellant further contends that "the use of liquid electrolytes requires an improved seal over the type of hermetic seal described in [Moulton]" (*id.* at 21). Furthermore, Appellant argues that Moulton does not disclose a battery useful for portable phones (*id.*). With specific reference to claim 30, which recites "the cavity has a same shape before and after the positive electrode, the negative electrode, the separator, and the organic liquid electrolyte are housed in the cavity of the dielectric package" (*id.* at 22), Appellant argues that Moulton "discloses a pouch type battery in which the package layer 28 is made of plastic and aluminum, which thus has a different shape before and after insertion of the cell 26" (*id.* at 22).

Thus, the issues arising from the contentions of the Examiner and Appellant are:

- (12) Did the Examiner identify a reason for combining Moulton and Linden?
- (13) Did Appellant identify entered, persuasive declaration evidence (*e.g.*, experimental data duplicating the prior art) showing that Moulton's battery is incapable of "preventing leakage of an organic liquid electrolyte?"
- (14) Did the Examiner err in concluding obviousness as to claim 30 because Moulton does not disclose a "cavity ha[ving] a same shape before and after the positive electrode, the negative electrode, the separator, and the organic liquid electrolyte are housed in the cavity of the dielectric package?"

Obviousness over Admitted Prior Art & Moulton: Claims 1, 21-64, 78, 81, 82, 84, 94, 96, 108, and 109

The Examiner found that Figures 1 and 2 of the '537 Patent disclose a prior art secondary battery including a battery body having a positive electrode, a negative electrode, and a separator in stacked form and a dielectric package for sealing around the battery body (Ans. 9). The Examiner further found that while the prior art battery did not include a sealing material as claimed herein, the Specification of the '537 Patent states that the prior art device prevented leakage of liquid organic electrolyte for 20 minutes (*id.* at 10). The Examiner then relied on the teachings of Moulton to support the conclusion that one of ordinary skill in the art would have found it obvious to provide a sealing material in the secondary battery of the admitted prior art to improve the seal around a portion of the tabs (*id.* at 13).

Appellant, on the other hand, contends that Moulton "teaches away from using the sealing strips 114 for low power applications such as portable telephones having tabs less than 1-2 mils" (App. Br. 28). Furthermore, Appellant argues that the Examiner did not establish that the hermetic seal provided by Moulton would be sufficient for preventing leakage of organic liquid electrolytes (*id.* at 29).

Thus, the issues arising from the contentions of the Examiner and Appellant are:

(15) Does Moulton teach away from using the disclosed sealing materials in low power applications such as those disclosed for the device of the admitted prior art?

(16) Has Appellant identified entered, persuasive declaration evidence (*e.g.*, experimental data duplicating the prior art) showing that Moulton's sealing material is incapable of "preventing leakage of an organic liquid electrolyte?"

FINDINGS OF FACT

Substantial New Question of Patentability

- 1. The Examiner in the '537 Patent allowed the claims over United States Patent 4,664,994 on the basis that the prior art reference does not teach "sealing materials hav[ing] side arms extended in parallel with the edge portions of the upper and lower dielectric packages" (Notice of Allowability mailed February 12, 2001 at 3).
- 2. Moulton was cited to the Examiner in the '537 Patent only after prosecution on the merits was closed (Supplemental Notice of Allowability mailed May 10, 2001; Information Disclosure Statement filed February 26, 2001; Notice of Allowability mailed February 12, 2001).
- 3. The Examiner in the prosecution of the '537 Patent did not apply Moulton in any rejection of the claims.
- 4. The Examiner's consideration of Moulton in the prosecution of the '537 Patent was limited to whether the side arms of the sealing materials were parallel with the edge portions of the upper and lower dielectric packages, as follows (May 10, 2001 Supplemental Notice of Allowability at 2):

It is further noted that the reference, WO 97/08762 [Moulton], does teach a sealing material with side-arms, however, the sidearms are not in parallel with the edge portions of the upper and lower dielectric packages. The claimed subject matter is to an elongated strip having a cross-section shaped with a gradual curvature as shown in claim 5 and figure 3. Thus, the prior art does not read upon the instant claims. [Italics added.]

5. Figures 5 and 6 of the '537 Patent are reproduced below:

FIG. 5

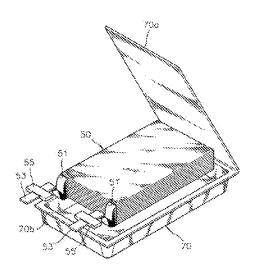
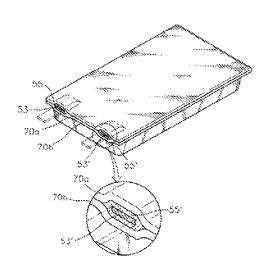


FIG. 6



Figures 5 and 6 depict a perspective view of a secondary battery according to an embodiment of the claimed invention and a section view showing in detail a sealing portion between electrode tabs and upper and lower dielectric packages in the secondary battery, respectively, wherein 55 and 55' represent the sealing materials (col. 3, 11. 24-29; col. 5, 11. 36-40).

- 6. Appellant concedes: "[T]he term "parallel" as recited in claim 1 does not require the side arms to remain in the same shape as shown in FIG. 5 of the instant patent and instead encompasses the shape shown in FIG. 6 of the instant patent" (App. Br. 9).
- 7. The Examiner in this reexamination, acting pursuant to delegated authority of the Director under 35 U.S.C. § 303(a), held: "It is important to note that WO 97/08762 [Moulton], which was considered by the examiner during [the original]

prosecution, has been viewed in a new light and presents a substantial new question of patentability" (Order Granting Request for *Ex Parte* Reexamination mailed May 28, 2003 at 3).

8. Appellant did not file a timely petition pursuant to 37 C.F.R. § 1.181 to overturn the Examiner's determination that Moulton raises a substantial new question of patentability under 35 U.S.C. § 303(a) but did contest the application of the reference throughout the reexamination proceeding.

Additional Facts Relevant to Lack of Written Description: Claims 22-29, 54-61, 78, 81, 82, 84, 94, 96, 108, and 109

9. Figure 3 of the '537 Patent is reproduced below:

FIG. 3

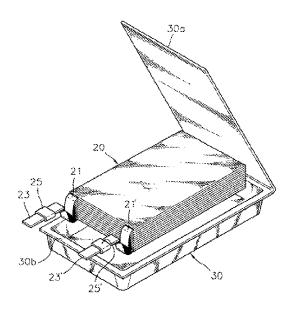


Figure 3 of the '537 Patent depicts an exploded perspective view of a secondary battery according to a preferred embodiment of the invention, wherein sealing materials 25 and 25' are coated on predetermined surface portions of electrode tabs 23 and 23' (col. 3, 11. 18-20 and 45-47).

10. Figure 4 of the '537 Patent is reproduced below:

FIG. 4

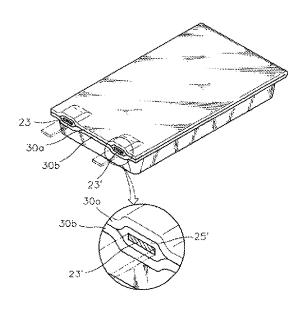


Figure 4 depicts a section view in detail of a sealing portion between electrode tabs and upper and lower dielectric packages in the secondary battery shown in Figure 3 (col. 3, ll. 21-23).

11. Figure 7 of the '537 Patent is reproduced below:

FIG. 7

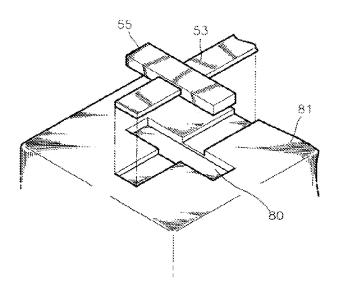


Figure 7 of the '537 Patent is said illustrate a method for coating sealing materials having side arms on the electrode tabs of the secondary battery shown in Figure 5 (reproduced above in Fact 5), wherein 53 is the electrode tab and 55 is the sealing material (col. 3, 1l. 30-32; col. 5, 1l. 62-64).

12. The '537 Patent touts the advantage of using a sealing material in the manner as shown in Figure 4 as follows:

In fact, the adhesive force between the electrode tabs 23 and 23' pre-coated with SURLYN (manufactured by Dupont Co.) as the sealing materials 25 and 25' and the dielectric package 30 covered with SURLYN as heat sealable material layer is approximately 98.2 gf/mm, which is 30 times higher than the adhesive force of approximately 3.4 gf/mm between non-coated electrode

tabs and the dielectric package covered with SURLYN as a heat sealable material... [col. 4, ll. 53-59].

13. The '537 Patent does not contain any explicit description of an embodiment in which sealing material is not coated on the top portions of the electrode tabs.

Additional Fact Relevant to Indefiniteness: Claims 16 and 48

14. The '537 Patent states:

Also, electrode tabs 23 and 23' acting as electrical paths for inducing current generated in the battery body 20 to the outside are connected to the battery body 20 by connection tabs 21 and 21' respectively provided on the positive and negative electrodes [col. 3, 11. 41-45].

Additional Facts Relevant to Anticipation over Moulton: Claims 1-29

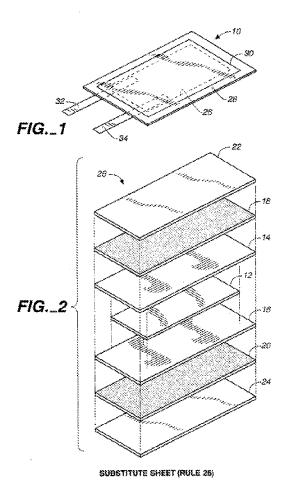
- 15. Appealed claim 1 does not positively recite that the secondary battery comprises an organic liquid electrolyte.
- 16. Dependent claim 33 further limits appealed claim 1 by reciting that the secondary battery "further compris[es] an electrolyte comprising the organic liquid electrolyte."
- 17. In view of the further limitation recited in dependent claim 33 that the secondary battery further comprises an electrolyte comprising an organic liquid electrolyte, one skilled in the relevant art would understand that claim 1 does not require an organic liquid electrolyte as part of the secondary battery.

- 18. The '537 Patent states that the dielectric package material "is in the form of a film obtained by forming a heat sealable material layer [e.g., SURLYN®] on a metal base such as aluminum thin film" (col. 3, 11. 48-55).
- 19. The '537 Patent further states that for "strong adhesiveness," the heat sealable material coated on the electrode tabs may be the same material as the heat sealable material layer of the dielectric package, *e.g.*, SURLYN® (col. 4, 11. 7-10 and 52-59).
- 20. The '537 Patent does not limit the heat and pressure to be applied in adhering the dielectric package with the heat sealable materials (col. 4, ll. 11-16).
- 21. The '537 Patent does not limit the organic liquid electrolyte to any particular composition (col. 2, 11, 40-44).
- 22. The '537 Patent states (col. 4, 11. 60-67):

Also, in the leakage preventing effect of the organic liquid electrolyte, when the conventional Li ion polymer battery having the structure of FIG. 2, containing 3g of organic liquid electrolyte, is left at 90° C. under a pressure of 0.2 atm, the organic liquid electrolyte leaks after 20 minutes. However, the Li ion polymer battery having the structure of FIG. 4 according to the present invention leaks organic liquid electrolyte after 16 hours under the same conditions.

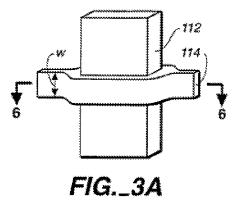
23. Moulton discloses that electrical batteries with relatively thin or relatively thick copper tabs are used in low-power (*e.g.*, portable telephone) as well as high-power applications (p. 1, 1. 24 to p. 2, 1. 7).

- 24. Moulton further discloses that an objective is "to provide an electrical cell with a thick tab that can be hermetically sealed to the protective package covering the cell" (p. 2, 1l. 26-29).
- 25. Moulton's Figures 1 and 2 are reproduced below:



Moulton's Figures 1 and 2 depict a battery 26 including: a cell laminate with an anode layer 12, first and second layers of an ionically conductive electrolyte 14, 16 contacting anode 12 on opposite sides, respectively, first and second cathode layers 18, 20 contacting the sides of electrolyte 14 and 16 not in contact

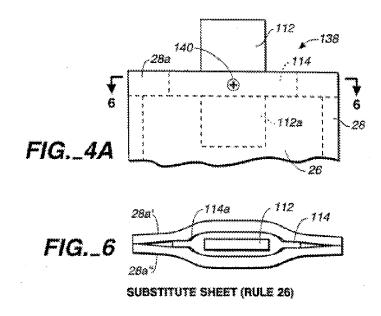
- with anode layer 12; current collectors 22 and 24; an anode tab 32; and a cathode tab 34 (p. 6, 1l. 8-34).
- 26. Moulton teaches that the battery is enveloped by a protective package layer that renders the battery "impermeable to air and water" (p. 6, ll. 11-16).
- 27. According to Moulton, the protective package layer typically comprises one or more plastic material layers and an aluminum foil (p. 6, ll. 16-18).
- 28. Moulton's Figure 3A is reproduced below:



Moulton's Figure 3A depicts a solid thick metal tab 112, a portion of which is covered by a strip of a sealable material to enhance the seal around the anode and cathode tabs (p. 8, 11. 30-32).

29. Moulton teaches that the "sealable material in strip 114 does not have to be the same as the package material" but "has to be 'compatible' with the package material in order for hermetic sealing to occur between them" (p. 10, ll. 1-5).

- 30. Moulton discloses that the sealable material in strip 114 may be, *e.g.*, SURLYN® (p. 10, 11. 11-18).
- 31. Moulton's Figures 4A and 6 are reproduced below:



Moulton's Figure 4A depicts the sealing of the envelope material 28 including edge 28a around tab 112 using a strip of sealable material 114 while Figure 6 shows the disposition of the sealing material prior to application of heat and pressure (p. 9, 11, 27-32; p. 13, 1, 10 to p. 14, 1, 25).

- 32. Moulton teaches (p. 13, ll. 16-22; emphasis added):

 As shown in FIG. 6, the strip of sealable material 114 with the gradual curvature, such as at 114a, is attached to a center portion of solid tab 112. The gradual curvature (instead of abrupt corners) of strip 114 enables a better adhesion and sealing between the strip of the heat sealable material 114 with edges 28a' and 28a''.
- 33. Moulton teaches the application of heat and pressure (0°F to 300°F and 0-500 psi) (p. 14, 11, 4-21).

- 34. Hyung-gon Noh (Noh) is a named inventor of the '537 Patent ('537 Patent, front page).
- 35. Noh was Patent Owner's employee on January 5, 2004, the date on which Noh executed a declaration pursuant to 37 C.F.R. § 1.132 (Noh Declaration, ¶2).
- 36. Noh declares that Moulton does not describe an organic liquid electrolyte (id., \P 7).
- 37. Noh states that Moulton's sealing method is insufficient to form a seal that would prevent leakage of an organic liquid electrolyte (*id.*, ¶8).
- 38. Noh did not refer to any actual experimental evidence in which Moulton's disclosed sealing method was duplicated for a meaningful comparison against the claimed invention (*id.*).
- 39. After final rejection, the Examiner in this reexamination stated (*Ex Parte* Reexamination Interview Summary of April 26, 2005):

Continuation of Description of Exhibit Shown or Demonstration Conducted: computer movie showing the battery of Moulton as manufactured by Applicant, when placed in a sealing simulation shows evidence of gassing (bubbles present in movie). The battery of the patented invention, as manufactured by Applicant, did not show evidence of gassing when placed in the sealing simulation. Applicant also presented pictures showing the battery of Moulton (as manufactured by Applicant) depicted the tabs and sealing materials wherein the light green area appears to show evidence of spaces between the top and bottom layer of the battery package which allowed the gassing (bubbles) present in the movie, Copy of movie provided to the Examiner.

- 40. The Examiner indicated in the April 26, 2005 Interview Summary form that "[a]greement with the respect to the claims . . . was not reached" (*id*.).
- 41. On May 12, 2005, Patent Owner filed a paper captioned "FURTHER SUPPLEMENTAL RESPONSE AND REQUEST FOR RECONSIDERATION UNDER 37 C.F.R. § 1.116 FOR EX PARTE REEXAMINATION" including a declaration pursuant to 37 C.F.R. § 1.132 executed by Noh on May 10, 2005 allegedly providing "details in regards to the movies and pictures during the [April 26, 2005] Examiner Interview" (p. 2).
- 42. The Examiner denied entry of the May 10, 2005 Noh Declaration because Patent Owner "failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented" (*Ex Parte* Reexamination Advisory Action Before the Filing of an Appeal Brief mailed May 27, 2005).
- 43. Patent Owner filed a petition pursuant to 37 C.F.R. § 1.181 to invoke supervisory authority over the Examiner's decision to deny entry of the May 10, 2005 Noh Declaration (Petition filed July 11, 2005).
- 44. Director Jacqueline M. Stone of Technology Center 1700 denied Patent Owner's July 11, 2005 Petition (Decision on Petition mailed July 28, 2005).
- 45. In reply to another petition filed by Patent Owner on June 7, 2006, Director Lissi Mojica Marquis of the Central

Reexamination Unit stated (Decision on Petition mailed March 5, 2008 at 5):

The exhibits shown during the interview were not required by the Office, and entry was not requested [by Patent Owner] via a petition under 37 CFR 1.191(a)(3) [sic, 1.181(a)(3)]. Even if the exhibits A-D comply with the requirements of 37 CFR 1.191 [sic], such exhibits would have to comply with 37 CFR 1.116 in order to be admitted to the record for consideration by the examiner after a final rejection. The examiner has stated that the evidence filed on May 12, 2005 did not comply with the requirements of 37 CFR 1.116, and therefore, would not be entered . . . Upon petition, the technology center director agreed with the examiner's position . . . Patent owner did not request reconsideration of this decision.

Additional Fact Relevant to Obviousness over Moulton & Linden: Claims 30-64, 78, 81, 82, 84, 94, 96, 108, & 109

46. Linden teaches that liquid organic electrolytes are interchangeable with solid polymer electrolytes in rechargeable lithium batteries and suggests that it is safer than lithium in metallic form (p. 36.2; Figure 36.1).

Additional Fact Obviousness over Admitted Prior Art & Moulton: Claims 1, 21-64, 78, 81, 82, 84, 94, 96, 108, and 109

47. Figure 2 (Prior Art) of the '537 Patent is reproduced below:

FIG. 2(PRIOR ART)

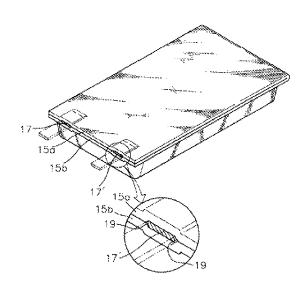


Figure 2 of the '537 Patent depicts the sealing state between a dielectric package and electrode tabs in a conventional secondary battery (col. 3, ll. 15-17).

PRINCIPLES OF LAW

Substantial New Question of Patentability

35 U.S.C. § 303(a) "now mandates that 'the existence of a substantial new question of patentability is not precluded by the fact that a patent or printed publication was previously cited by or to the Office or considered by the Office." *In re Swanson*, 540 F.3d 1368, 1379-80 (Fed. Cir. 2008). Section 303(a) now returns the focus "to whether the particular question of patentability presented by the reference in reexamination was previously evaluated by the PTO." *Id.* at 1380. "[T]o decide whether a reference that

was previously considered by the PTO creates a substantial new question of patentability, the PTO should evaluate the context in which the reference was previously considered and the scope of the prior consideration and determine whether the reference is now being considered for a substantially different purpose." *Id*.

Claim Construction

"During reexamination, as with original examination, the PTO must give claims their broadest reasonable construction consistent with the specification Therefore, we look to the specification to see if it provides a definition for claim terms, but otherwise apply a broad interpretation." *In re ICON Health and Fitness, Inc.*, 496 F.3d 1374, 1379 (Fed. Cir. 2007). "[A]s applicants may amend claims to narrow their scope, a broad construction during prosecution creates no unfairness to the applicant or patentee." *ICON Health*, 496 F.3d at 1379.

Written Description

"If the applicant claims embodiments of the invention that are completely outside the scope of the specification [and drawings], then the examiner or Board need only establish this fact to make out a prima facie case [of failure to comply with the written description requirement]." *In re Alton*, 76 F.3d 1168, 1175 (Fed. Cir. 1996). *See also In re Wertheim*, 541 F.2d 257, 263-64 (CCPA 1976) ("By pointing to the fact that claim 1 ['at least 35%'] reads on embodiments outside the scope of the description [25-60%], the PTO has satisfied its burden. Appellants thus have the burden of

showing that the upper limit of solids content described, i.e., 60%, is inherent in 'at least 35%,' as that limitation appears in claim 1.").

The mere fact that a later presented claim recites broader subject matter relative to the original disclosure does not necessarily establish that the claim is insufficiently described in the specification. See, e.g., In re Rasmussen, 650 F.2d 1212, 1215 (CCPA 1981). Nevertheless, our appellate reviewing court cautioned that obviousness is an inappropriate standard for evaluating compliance with the written description requirement. Lockwood v. American Airlines, Inc., 107 F.3d 1565, 1572 (Fed. Cir. 1997). Thus, the original disclosure must "immediately convey" to one skilled in the relevant art that the inventors had possession of the broader subject matter. Cf. In re Smythe, 480 F.2d 1376, 1384 (CCPA 1973). Accord In re Curtis, 354 F.3d 1347, 1355 (Fed. Cir. 2004) (genus claim not supported by narrower disclosure where there was unpredictability); PIN/NIP Inc. v. Platte Chemical Co., 304 F.3d 1235, 1247-48 (Fed. Cir. 2002) ("[N]othing in the specification indicates that the invention is anything other than a mixture of two chemicals . . . [T]he originally filed application, which is devoid of any mention or even implication that the two chemicals can be applied in a spaced, sequential manner, does not support the later-added claim 33."); Tronzo v. Biomet, Inc., 156 F.3d 1154, 1159 (Fed. Cir. 1998) (broad claims not supported by a species in the original disclosure where the disclosure touted the advantage of and thus limited the invention to the disclosed species); Gentry Gallery, Inc. v. Berkline Corp., 134 F.3d 1473, 1479 (Fed. Cir. 1998) (holding that patent claims directed to a sectional sofa were invalid as lacking written description under 35 U.S.C. § 112, ¶1, because

they did not limit the location of the reclining controls to the console area in direct conflict with the original disclosure, which identified the console as the only possible location of the controls).

Definiteness

"The legal standard for definiteness is whether a claim reasonably apprises those of skill in the art of its scope." *In re Warmerdam*, 33 F.3d 1354, 1361 (Fed. Cir. 1994).

Anticipation

"To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently." *In re Schreiber*, 128 F.3d 1473, 1477 (Fed. Cir. 1997).

"A patent applicant is free to recite features of an apparatus either structurally or functionally... Yet, choosing to define an element functionally, *i.e.*, by what it does, carries with it a risk." *Schreiber*, 128 F.3d at 1478 (internal citation omitted). When the PTO has reason to believe that a functional limitation asserted to be critical may in fact be an inherent characteristic of the prior art, it possesses the authority to shift the burden of proof to applicant or patent owner to prove otherwise. *Id.*; *accord In re Spada*, 911 F.2d 705, 708 (Fed. Cir. 1990); *In re Best*, 562 F.2d 1252, 1255 (CCPA 1977). Whether the rejection is based on inherency under 35 U.S.C. § 102 or on obviousness under 35 U.S.C. § 103, jointly or alternatively, the burden of proof is the same, and its fairness is evidenced by the PTO's

inability to manufacture products or to obtain and compare prior art products. *Best*, 562 F.2d at 1255.

In considering the disclosures of prior art references, it is appropriate to take into account not only the specific teachings of the references but also the inferences one skilled in the relevant art would reasonably be expected to draw therefrom. *In re Preda*, 401 F.2d 825, 826-27 (CCPA 1968).

Obviousness

The Supreme Court of the United States instructed "that when a patent claims a structure already known in the prior art that is altered by mere substitution of one element for another known in the field, the combination must do more than yield a predictable result." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 416 (2007). *KSR* further explains that "[w]hen a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one." *Id.* at 417.

KSR disapproved a rigid approach to obviousness (i.e., an analysis limited to lack of teaching, suggestion, or motivation contained within the prior art references). Id. at 419 ("The obviousness analysis cannot be confined by a formalistic conception of the words teaching, suggestion, and motivation, or by overemphasis on the importance of published articles and the explicit content of issued patents.").

A reference "teaches away" if a person of ordinary skill in the art would have been discouraged or led to a divergent path from the one taken by the inventors. *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994). While a

teaching away is a significant factor to be considered, "[a] known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." *Id.*; *accord In re Fulton*, 391 F.3d 1195, 1201 (Fed. Cir. 2004) ("[M]ere disclosure of alternative designs does not teach away.").

ANALYSIS

Arguments for Separate Patentability

In support of patentability over the prior art, Appellant has presented various arguments under separate headings and sub-headings. We address these arguments separately only to the extent that they constitute distinct, separate arguments within the meaning of 37 C.F.R. § 41.37(c)(1)(vii).

Substantial New Question of Patentability

We have jurisdiction to review the Examiner's decision that Moulton raises a substantial new question of patentability. *See* Clarification on the Procedure for Seeking Review of a Finding of a Substantial New Question of Patentability in *Ex Parte* Reexamination Proceedings, 75 Fed. Reg. 36357 (June 25, 2010).

35 U.S.C. § 303(a) "now mandates that 'the existence of a substantial new question of patentability is not precluded by the fact that a patent or printed publication was previously cited by or to the Office or considered by the Office." *Swanson*, 540 F.3d at 1379-80. Instead, the focus is "whether the particular question of patentability presented by the reference in reexamination was previously evaluated by the PTO." *Id.* at 1380. "[T]o

decide whether a reference that was previously considered by the PTO creates a substantial new question of patentability, the PTO should evaluate the context in which the reference was previously considered and the scope of the prior consideration and determine whether the reference is now being considered for a substantially different purpose." *Id*.

The Examiner and the Supervisory Patent Examiner in the prosecution of the '537 Patent appear to have limited their post-allowance consideration of Moulton to whether it made up for a particular claimed feature lacking in what they regarded as the closest prior art (United States Patent 4,664,994) (Facts 1-3). Without any reasonably detailed analysis, the Examiners in the original prosecution merely commented that Moulton's "sidearms are not in parallel with the edge portions of the upper and lower dielectric packages" because they have a "gradual curvature" (Fact 4). Nowhere did the original Examiners provide any indication that Moulton had been considered as a principal prior art reference, taking into account the enlightenment in the Drawings and Specification of the '537 Patent.

As Appellant readily concedes, Figure 6 of the '537 Patent would have indicated to one skilled in the relevant art that the sealing material in the secondary battery produced (*i.e.*, after sealing) can have a gradual curvature (Facts 5 and 6). It follows then that reexamination based on Moulton cannot constitute an old question of patentability because Appellant is not relying on the *sole* reasoning of the prior Examiner and Supervisory Patent Examiner that the claim limitation in question does not encompass the "gradual curvature" of Moulton's sealing material. Thus, it is not surprising that Appellant did not file a timely petition pursuant to 37 C.F.R. § 1.181 to

review the Examiner's determination that Moulton raises a substantial new question of patentability (Facts 7 and 8).

Under these circumstances, we are in agreement with the current Examiner's position that "[t]he issue being relied upon for a rejection during reexamination (side arms with gradual curvature [after sealing]) was not the same issue that was examined by the Examiner during the prior prosecution (side arms extending in parallel [before sealing])" (Ans. 15).

Lack of Written Description: Claims 22-29, 54-61, 78, 81, 82, 84, 94, 96, 108, and 109

With respect to claim 22, the Examiner's basic position is that the disclosure of the '537 Patent does not contain written description sufficient to support an embodiment in which the thickness of the side arm (prior to applying heat and pressure) is equal to the thickness of the electrode tab (Ans. 4). In counter argument, Appellant contends that "there is no evidence of record that one of ordinary skill in the art would understand the specific examples shown as conveying only this specific example [sic]" (App. Br. 35).

We agree with the Examiner that claim 22 violates the written description requirement because it reads on an embodiment that is not supported by the original disclosure. No embodiment described in the original disclosure of the '537 Patent shows a sealing material having side arms having thicknesses equal to the thickness of the electrode tab (Facts 5, 9-11, and 13). Thus, the Examiner has established a prima facie case of lack of written description. *In re Alton*, 76 F.3d at 1175; *Wertheim*, 541 F.2d at 263-64.

Appellant did not rebut this prima facie case by pointing to any disclosure that supports the now claimed subject matter. Indeed, the original disclosure of the '537 Patent indicates that the inventors did not possess an embodiment in which the thickness of the side arm (prior to applying heat and pressure) is equal to the thickness of the electrode tab. To the contrary, the '537 Patent touts the advantage of disposing a sealing material between the upper and lower dielectric packages and the electrode tabs (Fact 12). *Tronzo*, 156 F.3d at 1159 (broad claims not supported by a species in the original disclosure where the disclosure touted the advantage of and thus limited the invention to the disclosed species); *Gentry Gallery*, 134 F.3d at 1479 (holding that patent claims directed to a sectional sofa were invalid as lacking written description under 35 U.S.C. § 112, ¶1, because they did not limit the location of the reclining controls to the console area in direct conflict with the original disclosure, which identified the console as the only possible location of the controls).

We also agree with the Examiner that claim 23, which recites "a thickness of the sealing materials on the electrode tabs is less than the thickness of the side arms," violates the written description requirement (Ans. 4). While it is true that claim 23 includes within its broad scope the embodiments shown in Figures 3, 5 and 7 of the '537 Patent, the claim encompasses more than what is disclosed. As pointed out by the Examiner (Ans. 4), claim 23 reads on an embodiment in which the thicknesses of the side arms are such that the side arms are not co-planar with the sealing material over the electrode tabs. Because a co-planar configuration is the only possible configuration described in the '537 Patent, claim 23 violates

the written description requirement. *PIN/NIP* ("[N]othing in the specification indicates that the invention is anything other than a *mixture* of two chemicals . . . [T]he originally filed application, which is devoid of any mention or even implication that the two chemicals can be applied in a spaced, sequential manner, does not support the later-added claim 33."); *Gentry Gallery*, 134 F.3d at 1479.

Appellant argues that "the Examiner has not provided evidence that the specification does not convey non-planar surfaces" (App. Br. 38). This argument appears to be based on the belief that the non-planar configuration would have been obvious over Figures 3, 5, and 7 of the '537 Patent. Obviousness, however, is an inappropriate standard for measuring compliance with the written description requirement. *Lockwood*, 107 F.3d at 1572.

Claims 78, 81, and 110 violate the written description requirement for reasons analogous to those given for claims 22 and 23.

For these reasons, we uphold the Examiner's rejection on this ground.

Indefiniteness: Claims 16 and 48

The Examiner asserts that "it is unclear how the outermost edge of each of the side arms terminates at a single point" (Ans. 5). Appellant, on the other hand, argues that the "Examiner does not provide an explanation or evidence as to how one of ordinary skill in the art, in view of the claims, the specification, and the prior art, would be unable to determine the metes and bounds of the [claimed] invention" (App. Br. 43).

We must agree with Appellant on this issue. To support the rejection, the Examiner appears to have interpreted the term "point" in the claim recitation "connection point" to be a geometric point. We think that this interpretation is unreasonable because it did not take into account the disclosure of the Specification. When "connection point" is read in light of the Specification, one skilled in the relevant art would immediately understand that the inventors were not referring to a geometric point but rather a "point" in the more general sense -i.e., a point for electrical connection (Fact 14).

Anticipation over Moulton: Claims 1-23, 26, and 27

Contrary to Appellant's erroneous belief, appealed claim 1 does not require the claimed secondary battery to contain an organic liquid electrolyte. Instead, claim 1 merely requires that the claimed battery have a particular characteristic with respect to the sealing materials (*i.e.*, "sealing materials have side arms extended in parallel with the edge portions of the upper and lower dielectric packages for preventing leakage of an organic liquid electrolyte"). Appellant failed to show that Moulton lacks this characteristic.

Specifically, appealed claim 1 recites that the claimed secondary battery comprises a particular battery body, a dielectric package, and sealing materials. An organic liquid electrolyte, however, is not listed as one of the components "comprising" the claimed secondary battery (Fact 15). While claim 1 does recite "sealing materials . . . for preventing leakage of an organic liquid electrolyte," we construe this language as merely reciting a

function for the sealing materials top prevent organic liquid electrolyte if it were present. *Schreiber*, 128 F.3d at 1478 (holding that "dispensing top for passing only several kernels of a popped popcorn at a time from an openended container filled with popped popcorn" merely recited function).

Our construction of claim 1 is consistent with the recitations of, *e.g.*, dependent claim 33, which is presumed to further limit claim 1 and specifies that the secondary battery "further comprise[s] an electrolyte comprising an organic liquid electrolyte" (Facts 16 and 17). *See* 37 C.F.R. § 1.75(c).

We also find that the Examiner established a reasonable basis upon which to shift the burden of proof to Appellant to show that the seals in Moulton's battery are not capable of performing the function recited in claim 1. The '537 Patent informs one skilled in the relevant art that even the claimed sealing materials "leaks organic liquid electrolyte after 16 hours under" a specified set of conditions (Fact 22). Moulton discloses a battery that is formed from the same or substantially the same materials using the same or substantially the same sealing method described in the '537 Patent (Facts 18-21, 23, and 25-33). Moulton even states that the sealing materials provide a hermetic seal, thus eliminating the possibility of the presence of any gaps (Fact 24). Under these circumstances, it would reasonably appear that Moulton's battery would have a seal capable of "preventing leakage of organic liquid electrolyte" to the same or similar extent as recited in claim 1. *Spada*, 911 F.2d at 708; *Best*, 562 F.2d at 1255.

Appellant failed to direct us to entered, persuasive experimental evidence to the contrary -i.e., experimental evidence in which Moulton is duplicated using the same structure, heat, and pressure described therein

(Facts 39-45). While Noh alleges that Moulton's seals do not perform the recited function, Noh's statement amounts to conjecture or speculation by an interested party and is therefore accorded little weight (Facts 34-38). On this point, it is well settled that mere lawyer's arguments and conclusory statements, which are unsupported by factual evidence, are entitled to little probative value. *See*, *e.g.*, *In re Geisler*, 116 F.3d 1465, 1470 (Fed. Cir. 1997).

We find no merit in Appellant's contention that in Moulton's Figure 6, "small gaps exist between strip 114 and the edges 28a', 28a'" such that the strip 114 does not extend in parallel with the edges 28a', 28a'" (App. Br. 13). As stated by the Examiner (Ans. 17-18 and 20), Moulton's Figure 6 shows the sealing material prior to the application of heat and pressure (Fact 31). Furthermore, we are in complete agreement with the Examiner (Ans. 18-19) that the Drawings of the '537 Patent undermine the argument that Moulton's sealing material would not eliminate the gaps upon application of heat and pressure (Facts 5, 9, and 10).

For these reasons, we affirm the Examiner's rejection.

Anticipation/Obviousness over Moulton: Claims 24, 25, 28, & 29

Appellant relies on the same arguments offered in support of claims 123, 26, and 27. For the reasons already given, we find Appellant's arguments unpersuasive to overcome the Examiner's rejection.

Obviousness over Moulton & Linden: Claims 30-64, 78, 81, 82, 84, 94, 96, 108, & 109

Claim 30 recites that "the dielectric package comprises a pre-shaped package forming a cavity to house . . . the organic liquid electrolyte." The Examiner acknowledged that Moulton does not explicitly disclose the presence of an organic liquid electrolyte (Ans. 8). To account for this difference, the Examiner relied on the teachings of Linden (Ans. 8-9).

We detect no error in the Examiner's reasoning. Linden teaches that organic liquid electrolytes are interchangeable with solid polymer electrolytes and even suggests that is safer than lithium in metallic form (Fact 46). Thus, we share the Examiner's conclusion that a person having ordinary skill in the art would have found it obvious to substitute Moulton's electrolyte with a organic liquid electrolyte with the reasonable expectation that these electrolytes would work be interchangeable in rechargeable batteries. *KSR*, 550 U.S. at 416 ("when a patent claims a structure already known in the prior art that is altered by mere substitution of one element for another known in the field, the combination must do more than yield a predictable result.").

While Linden does not explicitly teach that organic liquid electrolytes can be used in the same types of batteries disclosed in Moulton, this does not negate the Examiner's obviousness conclusion. *KSR*, 550 U.S. at 416 ("When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one.").

Appellant contends that "the use of liquid electrolytes requires an improved seal over the type of hermetic seal described in [Moulton]" (App.

Br. at 21). We find this argument unpersuasive because no credible evidence supports it. As we discussed above, it would reasonably appear – based on the substantial similarities between the structures and sealing methods of the claimed invention and Moulton – that Moulton's battery would have a seal that would be capable of "preventing leakage of organic liquid electrolyte" to the same or similar extent as recited in claim 1. *Spada*, 911 F.2d at 708; *Best*, 562 F.2d at 1255.

With respect to claim 30, which recites "the cavity has a same shape before and after the positive electrode, the negative electrode, the separator, and the organic liquid electrolyte are housed in the cavity of the dielectric package," Appellant argues that Moulton "discloses a pouch type battery in which the package layer 28 is made of plastic and aluminum, which thus has a different shape before and after insertion of the cell 26" (App. Br. at 22). This argument is unpersuasive, because the '537 Patent also describes the use of a heat sealable material over a metal base such as aluminum (Fact 18).

Obviousness over Admitted Prior Art & Moulton: Claims 1, 21-64, 78, 81, 82, 84, 94, 96, 108, and 109

The Examiner reasoned that although the admitted prior art (Figure 2 of the '537 Patent) does not disclose the claimed sealing material around the tabs, Moulton's teachings would have led a person having ordinary skill in the art to provide such sealing materials in order to improve the seal (Ans. 9-13).

According to Appellant, Moulton "teaches away from using sealing strips 114 for low power applications such as portable telephones having tabs less than 1-2 mils" because "the sealings strips 114 are for high power

applications having thick tabs (preferably in the 13-15 mil range)" (App. Br. 28). This argument lacks merit because the appealed claims fail to specify any thickness range or limit the invention to any particular type of secondary battery. Nothing in Moulton would have discouraged a person of ordinary skill in the art to a divergent path from the one taken by the inventors. *Gurley*, 27 F.3d at 553.

Lastly, nothing substantiates Appellant's contention that Moulton's seal would be incapable of preventing leakage of an organic liquid electrolyte.

CONCLUSION

On this record, we determine that:

we have jurisdiction to review the Director's Order, which held that Moulton raised a substantial new question of patentability within the meaning of 35 U.S.C. § 303(a);

the limited post-allowance consideration of Moulton's teachings to account for a difference between the claims and another reference in the original examination does not preclude a substantial new question of patentability based on Moulton in this reexamination proceeding;

the original disclosure does not reasonably convey to one skilled in the relevant art that the inventors had possession of the invention encompassed by claim 22 in which the coated side arms have a thickness equal to the thickness of the electrode tab;

the original disclosure does not reasonably convey to one skilled in the relevant art that the inventors had possession of the invention

encompassed by claim 23 in which the coated side arms and the coated sealing materials on the electrode tabs do not form a planar surface;

the original disclosure does not reasonably convey to one skilled in the relevant art that the inventors had possession of the invention encompassed by claim 78 in which the thickness of the side arms is greater than the sum of the thicknesses of the portions of the sealing materials on the corresponding electrode tab to be disposed between the edges of the upper and lower dielectric packages and the electrode tab;

the original disclosure does not reasonably convey to one skilled in the relevant art that the inventors had possession of the invention encompassed by claim 81 in which the sealing materials have a shape in which, prior to sealing, the thickness of the side arms extending from the corresponding tab is greater than a thickness of the tab;

claim 1 does not require "an organic liquid electrolyte;"

Moulton provides a sufficient basis upon which to shift the burden of proof to Appellant to show that Moulton does not inherently describe "sealing materials hav[ing] side arms extended in parallel with the edge portions of the upper and lower dielectric packages for preventing leakage of an organic liquid electrolyte while being interposed and fused between the edge portions of the upper and lower dielectric packages" as required by claim 1;

Appellant failed to identify entered, persuasive declaration evidence (*e.g.*, experimental data duplicating the prior art) showing that the prior art battery is incapable of "preventing leakage of an organic liquid electrolyte;"

Appellant did not show that Moulton would necessarily result in gaps after sealing and thus incapable of "preventing leakage of an organic liquid electrolyte;"

the Examiner articulated a legally sufficient reason for combining Moulton and Linden;

Appellant failed to show that Moulton does not necessarily disclose a "cavity ha[ving] a same shape before and after the positive electrode, the negative electrode, the separator, and the organic liquid electrolyte are housed in the cavity of the dielectric package;" and

Moulton does not teach away from using the disclosed sealing materials in low power applications such as those disclosed for the device of the admitted prior art.

The Examiner erred, however, in concluding that claims 16 and 48 are indefinite.

DECISION

The Examiner's decision to reject:

claims 22-29, 54-61, 78, 81, 82, 84, 94, 96, 108, and 109 under 35 U.S.C. § 112, ¶1, as failing to comply with the written description requirement is AFFIRMED;

claims 16 and 48 under 35 U.S.C. § 112, ¶2, as indefinite is REVERSED;

claims 1-23, 26, and 27 under 35 U.S.C. § 102(b) as anticipated by Moulton is AFFIRMED;

claims 24, 25, 28, and 29 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as unpatentable over Moulton is AFFIRMED;

claims 30-64, 78, 81, 82, 84, 94, 96, 108, and 109 under 35 U.S.C. § 103(a) as unpatentable over Moulton in view of Linden is AFFIRMED; and

claims 1, 21-64, 78, 81, 82, 84, 94, 96, 108, and 109 under 35 U.S.C. § 103(a) as unpatentable over the admitted prior art in the Drawings and Specification of the '537 Patent in view of Moulton is AFFIRMED.

The Examiner's decision to reject appealed claims 1-64, 78, 81, 82, 84, 94, 96, 108, and 109 is therefore AFFIRMED.

Requests for extensions of time in this *ex parte* reexamination proceeding are governed by 37 C.F.R. § 1.550(c). *See* 37 C.F.R. § 41.50(f).

AFFIRMED

MAT

STEIN MCEWEN, LLP 1400 EYE STREET, NW SUITE 300 WASHINGTON DC 20005

Exhibit 1018



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
90/013,808	09/12/2016	8023580	3277-0114US-RXM1	2211
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE



Commissioner for Patents United States Patents and Trademark Office P.O.Box 1450 Alexandria, VA 22313-1450 www.uspto.gov

THIRD PARTY REQUESTER'S CORRESPONDENCE ADDRESS ROPES & GRAY LLP PRUDENTIAL TOWER IPRM DOCKETING -FLOOR 43 800 BOYLSON STREET BOSTON, MA 02199-3600

Date: June 15, 2018

EX PARTE REEXAMINATION COMMUNICATION TRANSMITTAL FORM

REEXAMINATION CONTROL NO.: 90013808

PATENT NO.: 8023580

ART UNIT: 3992

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified ex parte reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the ex parte reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).



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In re Gordon F. Bremer

Ex Parte Reexamination Proceeding : DECISION Control No. 90/013,808 : DISMISSING Filed: September 12, 2016 : PETITION

For: U.S. Patent No.: 8,023,580

This is a decision on patent owner's September 18, 2017 petition entitled "Petition Requesting Reconsideration of OPLA's November 28, 2016 Dismissal of Rembrandt's September 30, 2016 Petition under Rule 181/182 Requesting the Director to Exercise Her Discretionary Authority under 35 U.S.C. § 325(D) [sic] and a Final Petition Decision in Accordance with PTAB Practice", which is taken as a combined petition (patent owner's September 18, 2017 combined petition) including:

- a petition under 37 CFR 1.183 to waive the provisions of 37 CFR 1.181(f); and
- a request for reconsideration of the November 28, 2016 petition decision, including a request to vacate the order and all subsequently-mailed Office actions, and issue an order denying reexamination (patent owner's September 18, 2017 request for reconsideration).

Patent owner's September 18, 2017 combined petition and the record as a whole, are before the Office of Patent Legal Administration for consideration.

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SUMMARY

Patent owner's September 18, 2017 petition under 37 CFR 1.183 requesting waiver of the provisions of 37 CFR 1.181(f) is **dismissed**.

Patent owner's September 18, 2017 request for reconsideration of the Office's November 28, 2016 decision, including patent owner's request that the Office vacate the order and "terminate" reexamination, i.e., vacate all subsequently-mailed Office actions and issue an order denying reexamination on the basis set forth in 35 U.S.C. 325(d) that the request is limited to the same or substantially the same prior art or arguments previously presented to the Office, is **dismissed as untimely**.

As an alternate basis for dismissal, patent owner's September 18, 2017 request for reconsideration **would have been dismissed even if timely filed** within the two-month period set forth in 37 CFR 1.181(f), because patent owner's original petition was filed after the order. The discretionary determination by the Office under 35 U.S.C. 325(d) whether to reject the request is not petitionable once the order granting reexamination has issued.

As a second alternate basis for dismissal, patent owner's September 18, 2017 request for reconsideration **would have been dismissed, even if timely filed**, in view of the arguments presented in the request for reexamination.

The September 27, 2016 order granting reexamination, and all subsequently-mailed Office actions, <u>will not be vacated</u>. Prosecution in the present reexamination proceeding <u>will</u> <u>continue</u>.

REVIEW OF THE RELEVANT FACTS

- On April 6, 2004, U.S. Patent No. 8,023,580 (the '580 patent) issued to Gordon F. Bremer.
- On March 20, 2014, the third party requester, Samsung Electronics Co. Ltd., Samsung Electronics America, Inc., Samsung Telecommunications America, LLC, and Samsung Austin Semiconductor, LLC filed a petition for *inter partes* review of claims 1-2, 4-5, 10, 13, 19-22, 49, 52-54, 57-59, 61-62, 66, 70, and 76-79 of the '580 patent, based on the Draft Standard reference alone or in view of U.S. Patent No. 5,706,428 (Boer). The *inter partes* review was assigned case number IPR2014-00514 (the '514 IPR).
- Also on March 20, 2014, the same third party requester filed a second petition for *inter partes* review of claims 1-2, 4-5, 10, 13, 19-22, 49, 52-54, 57-59, 61-62, 66, 70, and 76-79 of the '580 patent, based on the admitted prior art (APA) in view of Boer. The *inter partes* review was assigned case number IPR2014-00518 (the '518 IPR).

¹ Draft Standard for Wireless LAN, Medium Access Control (MAC) and Physical Layer (PHY) Specification P802.11D4.0, May 20, 1996 (Draft Standard).

- On September 9, 2014, the Patent Trial and Appeal Board (PTAB) issued a decision in the '514 IPR denying institution of *inter partes* review of all of the challenged claims of the '580 patent, i.e., claims 1-2, 4-5, 10, 13, 19-22, 49, 52-54, 57-59, 61-62, 66, 70, and 76-79. The PTAB determined that the IPR petitioner had not met its burden in establishing that the Draft Standard reference is a printed publication; and for this reason, the IPR petitioner had not shown a reasonable likelihood of prevailing on the grounds asserted (no RLP).
- On September 23, 2014, the PTAB issued a decision in the '518 IPR granting institution with respect to claims 1, 4, 5, 10, 13, 20-22, 54, 57, 58, 61, 62, 66, 70, and 76-79 of the '580 patent. The PTAB also denied institution with respect to claims 2, 19, 49, 52, 53, and 59 of the '580 patent (no RLP).
- On October 21, 2014, the same third party requester filed a third petition for *inter partes* review of claims 2, 19, 49, 52, 53, and 59 of the '580 patent, based on the APA in view of Boer. The *inter partes* review was assigned case number IPR2015-00114 (the '114 IPR).
- On December 4, 2014, the patent owner Rembrandt Wireless Technologies, LP (Rembrandt), filed a disclaimer under 35 U.S.C. 1.321(a) in the file of the '580 patent, disclaiming claims 32, 34, 40, 43, and 44.
- On December 15, 2014, the patent owner filed a second disclaimer under 35 U.S.C. 1.321(a) in the file of the '580 patent, disclaiming claims 24, 26-28, 31, 33, 35-37, 39, 42, 45, 46, and 48.
- On January 28, 2015, the PTAB issued a decision in the '114 IPR, in which the PTAB exercised its discretion under 35 U.S.C. 325(d) to deny institution of *inter partes* review of all of the challenged claims, i.e., claims 2, 19, 49, 52, 53, and 59 of the '580 patent, stating that "the sole difference" between the grounds presented in the '518 IPR and the '114 IPR with respect to the challenged claims is the presence of "further reasoning in support of the same combination of prior art".
- On September 17, 2015, the PTAB issued a Final Written Decision in the '518 IPR, in which the PTAB held that all of the claims of the '580 patent under review in the '518 IPR, i.e., claims 1, 4, 5, 10, 13, 20-22, 54, 57, 58, 61, 62, 66, 70, and 76-79, were unpatentable. No appeal was filed.
- On September 12, 2016, the third party requester Samsung Electronics Co. Ltd. and Samsung Electronics America, Inc. (Samsung)³ filed a request for *ex parte* reexamination of claims 2 and 59 of the '580 patent. The reexamination proceeding was assigned

² Application serial number 12/543,910.

³ Samsung Telecommunications America, LLC and Samsung Austin Semiconductor, LLC were listed as co-petitioners in the '514, '518, and '114 IPRs, but were not listed as co-requesters in the present reexamination proceeding.

control number 90/013,808 (the present reexamination proceeding) and was accorded a filing date of September 12, 2016.⁴

- On September 27, 2016, reexamination of claims 2 and 59 of the '580 patent was ordered in the present reexamination proceeding.
- On September 30, 2016, the patent owner filed a petition in the present reexamination proceeding entitled "Petition Requesting the Director to Exercise Her Discretionary Authority under 35 U.S.C. § 325(d) Pursuant to 37 C.F.R. § 181(a)(2) and/or § 1.182", which was taken as a combined petition (patent owner's September 30, 2016 combined petition), including: 1) a petition under 37 CFR 1.183 to waive the rules and enter patent owner's petition under 37 CFR 1.182; and 2) a petition under 37 CFR 1.182 to vacate the order granting reexamination and issue an order denying reexamination.
- On October 13, 2016, the third party requester Samsung filed, in the present reexamination proceeding, an opposition to patent owner's September 30, 2016 petition, entitled "Third Party Requester's Opposition to Patent Owner's Petition to Reject Reexamination Request" (requester's October 13, 2016 opposition).
- Also on October 13, 2016, the third party requester Samsung filed, in the present reexamination proceeding, a petition entitled "Third Party Requester's Petition to Respond to Patent Owner's Petition to Reject Reexamination Request" (requester's October 13, 2016 petition).
- On November 28, 2016, the Office mailed a decision in the present reexamination proceeding dismissing patent owner's September 30, 2016 petition under 37 CFR 1.182 to vacate the order granting reexamination and issue an order denying reexamination (the November 28, 2016 petition decision). The November 28, 2016 petition decision also granted patent owner's September 30, 2016 petition under 37 CFR 1.183, and requester's

⁴ Three other previously-filed petitions for *inter partes* review of the '580 patent, which did not involve the claims under reexamination, i.e., claims 2 and 59, were simultaneously filed with the '514, '518, and '114 IPRs. Specifically:

[•] IPR2014-00515 (the '515 IPR) (relying on the Draft Standard reference) and IPR2014-00519 (the '519 IPR) (relying on the APA and Boer), both of which requested review of claims 23, 25, 29-30, 32, 34, 38, 40-41, 43-44, and 47, were filed on March 20, 2014, the same date that the '514 and '518 IPRs were filed; and

[•] IPR2015-00118 (the '118 IPR) (relying on the APA and Boer), requesting review of claims 23, 25, 29, 30, and 41, was filed on October 21, 2014, the same date that the '114 IPR was filed.

Petitions in trial proceedings at the PTAB are subject to a word count or page limit. See 37 CFR 42.24. Where, as here, the petition involves a substantial number of claims, it is not unexpected that a petitioner may choose to split a substantial number of claims into two or more groups, and file multiple petitions *simultaneously* in order to separately challenge each group of claims. It is also not unexpected that a petitioner may choose to challenge these claims over more than one combination of references, and file multiple petitions *simultaneously* in order to separately challenge each set of claims in view of each separate set of references. *Simultaneous* filings of IPRs for these reasons is not necessarily evidence of harassment.

October 13, 2016 petition, to the extent that patent owner's September 30, 2016 combined petition, and requester's October 13, 2016 petition and opposition, have been entered and considered.

- On December 13, 2016, the PTAB issued an Inter Partes Review Certificate reflecting the results of the '518 and '519 IPRs (the December 13, 2016 Inter Partes Review Certificate). The December 13, 2016 Inter Partes Review Certificate cancels claims 1, 4, 5, 10, 13, 20-22, 38, 47, 54, 57, 58, 61, 62, 66, 70 and 76-79 of the '580 patent, and notes that claims 32, 34, 40, 43 and 44 are disclaimed.
- On March 31, 2017, a non-final Office action rejecting claims 2 and 59 of the '580 patent was mailed in the present reexamination proceeding.
- On July 18, 2017, a final rejection rejecting claims 2 and 59 of the '580 patent was mailed in the present reexamination proceeding.
- On September 18, 2017, the patent owner filed a petition in the present reexamination proceeding entitled "Petition Requesting Reconsideration of OPLA's November 28, 2016 Dismissal of Rembrandt's September 30, 2016 Petition under Rule 181/182 Requesting the Director to Exercise Her Discretionary Authority under 35 U.S.C. § 325(D) [sic] and a Final Petition Decision in Accordance with PTAB Practice" (patent owner's September 18, 2017 combined petition).
- On October 16, 2017, an advisory action was mailed in the present reexamination proceeding.
- On December 18, 2017, the patent owner filed a notice of appeal to the PTAB in the present reexamination proceeding.
- On March 19, 2018, the patent owner filed an appeal brief in the present reexamination proceeding.

STATUS OF CLAIMS

Of the original 79 claims of the '580 patent, claims 1, 4, 5, 10, 13, 20-22, 38, 47, 54, 57, 58, 61, 62, 66, 70 and 76-79 have been cancelled by the December 13, 2016 Inter Partes Review Certificate. Claims 24, 26-28, 31-37, 39, 40, 42-46, and 48 have been disclaimed by the patent owner.

Dependent claims 2 and 59 are under reexamination and are finally rejected in the present proceeding. Claim 2 depends from cancelled independent claim 1. Claim 59 depends from cancelled independent claim 58.

DECISION

The patent owner requests the Office to: i) reconsider the Office's petition decision mailed on November 28, 2016; ii) vacate the September 27, 2016 order for reexamination; and iii) "terminate" reexamination, i.e., vacate all subsequently-mailed Office actions and issue an order denying reexamination, on the basis set forth in 35 U.S.C. 325(d) that the request is limited to the same or substantially the same prior art or arguments previously presented to the Office. The present petition is taken as a combined petition including:

- 1) a petition under 37 CFR 1.183 requesting waiver of 37 CFR 1.181(f), and entry and consideration of patent owner's September 18, 2017 combined petition (patent owner's September 18, 2017 petition under 37 CFR 1.183 to waive the provisions of 37 CFR 1.181(f)); and
- 2) a request for reconsideration of the Office's petition decision mailed on November 28, 2016, including a request to vacate the September 27, 2016 order for reexamination and all subsequently-mailed Office actions, and issue an order denying reexamination on the basis set forth in 35 U.S.C. 325(d) that the request is limited to the same or substantially the same prior art or arguments previously presented to the Office (patent owner's September 18, 2017 request for reconsideration).

I. Patent Owner's September 18, 2017 Petition under 37 CFR 1.183 to Waive the Provisions of 37 CFR 1.181(f) is Dismissed

Patent owner's September 18, 2017 petition under 37 CFR 1.183 requests the Office to waive the provisions of 37 CFR 1.181(f) and enter and consider patent owner's September 18, 2017 combined petition. 37 CFR 1.181(f) provides, in pertinent part:

Any petition under this part not filed within two months of the mailing date of the action or notice from which relief is requested may be dismissed as untimely, except as otherwise provided. This two-month period is not extendable.

Patent owner's September 18, 2017 request for reconsideration, however, was filed nearly ten months after the November 28, 2016 decision, well after the two-month period set forth in 37 CFR 1.181(f) had elapsed. Furthermore, prosecution in the present proceeding progressed during this nearly ten-month period, during which a non-final Office action and a final rejection have issued.

The patent owner argues that its request for reconsideration is timely because, in the final Office action mailed on July 18, 2017 in the present proceeding, "the CRU conceded substantial similarity between at least some of the art and arguments in the present reexamination and those previously presented to the Office". The patent owner asserts that "the CRU's concession" is a "material change in fact [that] only came to light in the [final Office action] of July 18, 2017, and therefore, the present request to revisit the Petition Dismissal is timely." To support its

argument, the patent owner points to the following statements made by the examiner in the July 18, 2017 final Office action:⁵

Further, claims 1 and 58 recite using multiple modulation methods and it is determined by the PTAB that APA and Boer discloses it. Snell and Harris AN9614 similarly disclose all the limitation [sic] of claims 1 and 58.

As an initial matter, however, independent claims 1 and 58 are not under reexamination. These claims, which were under review in the '518 IPR, were determined by the PTAB to be unpatentable over the APA in view of Boer, and were cancelled by the December 13, 2016 Inter Partes Review Certificate, which issued after no appeal was filed.

Claims 2 and 59, which depend from cancelled independent claims 1 and 58, respectively, are under reexamination in the present proceeding.

A dependent claim necessarily includes all of the limitations of the claim from which it depends. To be proper, any rejection of the dependent claim must necessarily be based on one or more references that anticipate or render obvious all of the claim limitations, including the limitations of the claim from which it depends. In the present case, dependent claims 2 and 59 include all of the limitations of claims 1 and 58, respectively. To be proper, any rejection of claims 2 and 59 must necessarily be based on references which anticipate or render obvious all of the limitations of these claims, including the limitations of claims 1 and 58.

Therefore, contrary to patent owner's assertions, it is not a "material change in fact" that the examiner determined that the references applied against claims 2 and 59, i.e., Snell, which incorporates by reference the Harris AN9614 reference, 6 disclose not only the limitations of claims 2 and 59, but also all of the limitations of the claims from which claims 2 and 59 depend, i.e., claims 1 and 58. In fact, the rejection would not have been proper if the examiner had not done so.

Claims 1 and 58 were under review by the PTAB in the '518 IPR. The PTAB determined that all of the limitations of claims 1 and 58 were disclosed by the APA in view of Boer. In fact, the claims were cancelled by trial certificate without appeal. It is not a "material change in fact" that Snell, which incorporates by reference Harris AN9614, similarly disclose the limitations of claims 1 and 58, since these references are applied against the same limitations. Any proper rejection of dependent claims 2 and 59 must be based on references which disclose not only the limitations of claims 2 and 59, but also all of the limitations of claims 1 and 58, from which they depend.

For these reasons, patent owner's September 18, 2017 petition under 37 CFR 1.183 to waive the provisions of 37 CFR 1.181(f) is **dismissed**.

⁵ See the final Office action mailed on July 18, 2017, page 40. See also page 32.

⁶ See column 5, lines 5-7 of U.S. Patent No. 5,982,807 to James Leroy Snell (Snell).

II. Patent Owner's September 18, 2017 Request for Reconsideration is Dismissed as Untimely

Patent owner's September 18, 2017 request for reconsideration was filed nearly ten months after the November 28, 2016 decision, well after the two-month period set forth in 37 CFR 1.181(f) had elapsed, as set forth above.

Because the provisions of 37 CFR 1.181(f) have not been waived, patent owner's September 18, 2017 request for reconsideration is **dismissed as untimely**.

The September 27, 2016 order granting reexamination, and all subsequently-mailed Office actions, <u>will not be vacated</u>. Prosecution in the present reexamination proceeding <u>will continue</u>.

III. As an Alternate Basis for Dismissal, Patent Owner's September 18, 2017 Request for Reconsideration Would Have Been Dismissed Even If Timely Filed within the Two-Month Period Set Forth in 37 CFR 1.181(f)

Even if patent owner's September 18, 2017 request for reconsideration were timely filed with the two-month time period set forth in 37 CFR 1.181(f), patent owner's September 18, 2017 request for reconsideration would have been dismissed.

In its September 18, 2017 request for reconsideration, the patent owner requests the Office to: i) reconsider the November 28, 2016 petition decision; ii) vacate the order granting reexamination mailed on September 27, 2016; and iii) "terminate" reexamination, i.e., vacate all subsequently-mailed Office actions and issue an order denying reexamination, on the basis set forth in 35 U.S.C. 325(d) that the present request is limited to the same or substantially the same prior art or arguments previously presented to the Office.

The November 28, 2016 petition decision dismissed patent owner's original petition submitted on September 30, 2016 to "reject" the request, i.e., issue an order denying reexamination on the basis set forth in 35 U.S.C. 325(d) that the present request is limited to the same or substantially the same prior art or arguments previously presented to the Office.

Patent owner's original petition submitted on September 30, 2016, however, was not filed until *after* the order granting reexamination was mailed on September 27, 2016. The Office stated, in its November 28, 2016 petition decision, that a petition requesting the Office to exercise its discretion and "reject" the request pursuant to 35 U.S.C. 325(d) would be considered to be timely if the petition were filed after the order granting reexamination. This statement, however, was in error, ⁷ and has not been followed. ⁸ The patent owner was not harmed because patent owner's original September 30, 2016 petition was, in any event, entered and considered.

⁷A similar erroneous statement was made in the petition decision mailed on November 28, 2016 in related reexamination proceeding control number 90/013,809 (the '809 reexamination proceeding). The patent owner in the '809 proceeding was not harmed because patent owner's original petition in the '809 proceeding was, in any event, entered and considered.

35 U.S.C. 325(d) provides the Office with the discretion to "reject" a request for reexamination *prior to* the order. It does not, however, provide the Office with the discretion to terminate an ongoing reexamination proceeding on the basis set forth in 35 U.S.C. 325(d) if no petition requesting such relief is filed until *after* reexamination has been ordered.

35 U.S.C. 325(d) provides, in pertinent part (emphasis added):

In determining whether to . . . order a proceeding under . . . chapter 30, . . . the Director may take into account whether, and reject the . . . request because, the same or substantially the same prior art or arguments previously were presented to the Office.

As an initial matter, the provisions of 35 U.S.C. 325(d) are *discretionary*, not mandatory. The statute states that "the Director **may** take into account whether, and reject the . . . request because . . ." The statute does not require the Director to make a determination whether to reject a request for *ex parte* reexamination pursuant to 35 U.S.C. 325(d).

The provisions of 35 U.S.C. 325(d) clearly refer to the determination whether to order a reexamination proceeding or whether to reject the request, which occurs *prior* to the order. In addition, 35 U.S.C. 305 *requires* the Office to conduct reexamination *once the order has been issued* pursuant to 35 U.S.C. 304. See 35 U.S.C. 305, which provides, in pertinent part:

After the times for filing the statement and reply provided for by section 304 have expired, **reexamination will be conducted** . . .

Therefore, once an order granting reexamination has issued, the Office is required to conduct reexamination pursuant to 35 U.S.C. 305.

In summary, pursuant to provisions of 35 U.S.C. 304, 305, and 325(d), the Office does not have the discretion to terminate an ongoing reexamination on the basis set forth in 35 U.S.C. 325(d), if no petition requesting such relief is filed until *after* reexamination has been ordered. For these reasons, the *discretionary* determination by the Office under 35 U.S.C. 325(d) whether to reject the request is not petitionable once the order granting reexamination has issued.⁹

For this reason, patent owner's original September 30, 2016 petition requesting the Office to reject the request pursuant to 35 U.S.C. 325(d), which was filed *after* the September 27, 2016 order granting reexamination, was properly dismissed. The November 28, 2016 petition decision, however, did not provide the reason for the dismissal set forth above.

⁸See, *e.g.*, the petition decisions in *ex parte* reexamination proceeding control nos. 90/013,811; 90/013,812; and 90/013,813, which were mailed on March 27, 2017.

⁹ In contrast, a petition requesting the Office to vacate an order granting reexamination on the basis that the request does not raise a substantial new question of patentability may be entertained by the Office after the order has issued. The basis for such a petition is that, because no substantial new question of patentability is raised by the request, the Office was not authorized under 35 U.S.C. 304 to order reexamination, i.e., the issuance of the order was an *ultra vires* action on the part of the Office. See MPEP 2246, subsection II.

Accordingly, as an alternate basis for dismissal, patent owner's September 18, 2017 request for reconsideration would have been dismissed even if timely filed within the two-month period set forth in 37 CFR 1.181(f), because patent owner's original petition was filed after the order. The discretionary determination by the Office under 35 U.S.C. 325(d) whether to reject the request is not petitionable once the order granting reexamination has issued.

IV. As a Second Alternate Basis for Dismissal, Patent Owner's September 18, 2017 Request for Reconsideration Would Have Been Dismissed, Even If Timely Filed, in View of the Arguments Presented in the Request for Reexamination

The patent owner agrees that the prior art relied upon in the present request, including Snell, ¹⁰ Yamano, and Kamerman, were not previously presented to the Office. The patent owner asserts, however, that the arguments presented in the request for reexamination are substantially the same as those previously presented to the Office.

The patent owner provides, in the present petition, a detailed discussion explaining why the patent owner believes that the arguments presented in the request for reexamination are substantially the same arguments that were presented in the '518 and '114 IPR petitions.¹¹ The requester, however, presented new arguments in its request for reexamination, which are discussed in detail below. The record does not sufficiently show that these specific arguments were previously presented to the Office.

A. Claims 2 and 59 Were Requested to be Reexamined

Dependent claims 2 and 59 of the '580 patent, which are the only claims requested to be reexamined in the present proceeding, have similar recitations. Claim 2 is representative: 12

2. The device of claim 1, wherein the transceiver is configured to transmit a third sequence after the second sequence, wherein the third sequence is transmitted in the first modulation method and indicates that communication from the master to the slave has reverted to the first modulation method.

The limitations of claims 2 and 59 include three limitations: i) the third sequence is transmitted after the second sequence; ii) the third sequence is transmitted in the first modulation method; and iii) the third sequence indicates that communication from the master to the slave has reverted to the first modulation method.

¹⁰ See U.S. Patent 5,982,807 (Snell), which incorporates by reference the Harris 4064.4 and Harris AN9614 references.

¹¹ See pages 20-34 of the present petition.

¹² Claim 59 of the '580 patent recites:

^{59.} The device of claim 58, wherein the transceiver is configured to transmit a third sequence after the second sequence, wherein the third sequence is transmitted in the first modulation method and indicates that communication from the master to the slave has reverted to the first modulation method.

B. The Determinations by the PTAB in Previous IPRs with Respect to Claims 2 and 59

In the '518 IPR, the PTAB determined that claims with limitations corresponding in scope to the first two limitations of claims 2 and 59 were unpatentable. Specifically, the PTAB determined that the limitations of dependent claims 21 and 78, the scope of which are substantially the same as, if not identical to, the first two limitations of claims 2 and 59, did not render the claims patentable. Claims 21 and 78 have similar recitations. Claim 21 is representative: 13

21. The device of claim 1, [sic] the transceiver is configured transmit a third sequence, according to the first modulation method, at a time after the second sequence is transmitted.

The PTAB also determined in the '518 IPR that independent claims 1 and 58, from which claims 2 and 59 depend, respectively (and also from which claims 21 and 78 depend, respectively) were unpatentable. In fact, the only limitation that is recited in claims 2 and 59 that was not in the claims held unpatentable by the PTAB in the '518 IPR is the third limitation, where the third sequence "indicates that communication from the master to the slave has reverted to the first modulation method."

With respect to claims 2 and 59, the PTAB held that the petitioner (the requester in the present proceeding) had not sufficiently explained how the Boer reference taught the third limitation of claims 2 and 59, i.e., that the third sequence "indicates that communication from the master to the slave has reverted to the first modulation method." Specifically, the PTAB held that the petitioner "failed to show how the SIGNAL and SERVICE fields [in the header of Boer] might be deemed, as alleged, to 'indicate' that communication from the master to the slave has reverted to the first modulation method, as recited in claim 2." ¹⁴

In the '114 IPR, ¹⁵ the PTAB denied institution, stating that "the sole difference" between the grounds presented in the '518 IPR and the '114 IPR with respect to the challenged claims, including claims 2 and 59, is the presence of "further reasoning in support of the same combination of prior art". ¹⁶

¹³ Claim 78 of the '580 patent recites:

^{78.} The device of claim 58, [sic] the transceiver is configured to transmit a third sequence, according to the first modulation method, at a time after the second sequence is transmitted.

¹⁴ See *Samsung Electronics Co. Ltd.*, et al. v. Rembrandt Wireless Technologies LP, IPR2014-00518 (the '518 IPR), Paper No. 16, pages 14-15.

¹⁵ See Samsung Electronics Co. Ltd., et al. v. Rembrandt Wireless Technologies LP, IPR2015-00114 (the '114 IPR), Paper No. 14, pages 6-7.

¹⁶ Claims 2 and 59 were also among the claims challenged in the '514 IPR, which was filed on March 20, 2014, the same day that the '518 IPR was filed. The PTAB denied institution with respect to all challenged claims. The PTAB determined that the IPR petitioner had not met its burden in establishing that the Draft Standard reference is a printed publication; and for this reason, the IPR petitioner had not shown a reasonable likelihood of prevailing on the grounds asserted (no RLP). The remaining prior art was not analyzed on the merits with respect to any of the challenged claims, including claims 2 and 59. See *Samsung Electronics Co. Ltd.*, et al. v. Rembrandt Wireless Technologies LP, IPR2014-00514 (the '514 IPR), Paper No. 18, pages 4-10.

The PTAB in the '518 IPR denied institution with respect to various claims including claims 2 and 59, but granted institution with respect to other challenged claims. However, in SAS Institute v. Iancu, 138 S.Ct. 1348 (decided April, 24, 2018), the Supreme Court later held that, unlike the ex parte reexamination statute, 35 U.S.C. 314(a) does not authorize the Director to determine, on a claim-by-claim basis, whether to institute inter partes review (see slip op., pages 7-8):

Rather than contemplate claim-by-claim institution, then, the language [if 35 U.S.C. 314(a)] anticipates a regime where a reasonable prospect of success on a single claim justifies all . . . [The ex parte reexamination] statute allows the Director to institute proceedings on a claim-by-claim, and ground-by-ground basis.

In response to *SAS*, the PTAB issued a memorandum on April 26, 2018, which provides guidance on how the PTAB may address any pending *inter partes* review in which a trial was not instituted on all of the challenges raised in the petition.¹⁷ The '518 and '114 IPRs, however, have been concluded, and are not pending.

Pursuant to SAS and the April 26, 2018 memorandum by the PTAB, however, the PTAB would likely have instituted *inter partes* review of claims 2 and 59, had the '518 or the '114 IPR been pending at the time the Supreme Court's opinion in SAS had been rendered. In addition, claims 2 and 59 are the only claims requested to be reexamined in the present proceeding. These facts weigh in favor of ordering reexamination in the present reexamination proceeding.

C. The Prior Art and Arguments Presented in the Request for Reexamination

In the present request for reexamination, the requester asserts that the Snell reference, ¹⁸ in combination with other references such as Yamano and Kamerman, render obvious the limitations of claims 2 and 59. The patent owner, in its present petition, does not dispute that these references were not previously presented to the Office, i.e.., that these references were not previously cited or considered in any rejection by the examiner during prosecution of the application which became the '580 patent, or by the PTAB in a trial proceeding involving the '580 patent.

The requester explains in the present request that the third sequence of Snell (e.g. the SIGNAL field in the header of Snell), is always transmitted using DBPSK, the first modulation method ¹⁹ (as also taught by Boer, as discussed in the '518 IPR). The requester further explains that: i) the second modulation method of Snell, QPSK, is of a different type than the first modulation method, BPSK; and ii) the SIGNAL field in the header can have four values, each of which corresponds to a modulation method for the data to be transmitted to the receiving transmitter (such as, e.g., the MPDU data)²⁰ (both of which are also taught by Boer as discussed in the '518 and '114 IPR petitions).

¹⁷ See "Guidance on the Impact of SAS on AIA Trial Proceedings", released on April 26, 2018 at www.uspto.gov/patents-application-process/patenttrialandappealboard.

¹⁸ See U.S. Patent 5,982,807 (Snell), which incorporates by reference the Harris 4064.4 and Harris AN9614 references.

¹⁹ See, e.g., column 6, lines 35-36 of Snell: "The header may always be BPSK".

²⁰ See, e.g., column 6 as well as Figure 3 of Snell.

In addition, however, the requester more clearly sets forth in the present request for reexamination²¹ that the Snell reference teaches the third limitation of claims 2 and 59. The requester explains how the third sequence of Snell (e.g., the SIGNAL field in the header) "indicates" the modulation type (e.g., BPSK) used for modulating the data to be transmitted to the receiving transmitter (the MPDU data), i.e., by using a value, such as "OAh". Specifically, the requester points to the table appearing in lines 55-59 of column 6 of Snell. This table, which does not appear in the Boer reference, ²² more clearly sets forth how the SIGNAL (third sequence) "indicates" that communication has reverted to the first modulation method as recited in claim 2. The requester explains that the SIGNAL field of Snell "indicates", by using one of the four values listed in the table, which modulation method, e.g., BPSK or QPSK, is used for modulating the MPDU data, and that one of the four values transmitted by the SIGNAL field in the header is "OAh", which "indicates" the BPSK modulation type at 1 Mbit/s. ²³

The requester points out, for example, that Snell's transceiver transmits a first sequence (e.g., the preamble and the header) in the first modulation method, e.g., BPSK, and "indicates" the modulation type used, e.g., QPSK, for modulating the second sequence of Snell (e.g., the MPDU data) by using the value "14h". The requester further states that Snell's transceiver *then* transmits a third sequence, (e.g., the preamble and the header), in the first modulation method, BPSK, and "indicates" the modulation type used by using the value "OAh". 24

The requester explains that for this reason, Snell not only teaches transmitting a third sequence after the second sequence, where the third sequence is transmitted in the first modulation method, but also teaches that the third sequence "indicates that communication from the master to the slave has reverted to the first modulation method", as recited in claims 2 and 59.

These specific arguments by the requester, which more clearly set forth how the third sequence of Snell "indicates" that the modulation type used has reverted to the first modulation method, e.g., BPSK, were not previously presented to the Office. In addition, the Office determined that these arguments by the requester have merit, and specifically apply to a limitation recited in each of the only two claims requested to be reexamined, i.e., claims 2 and 59. For these reasons, the presentation of these arguments was deemed to warrant an order for reexamination.

D. The Office Balances the Protection of the Patent Owner Against Harassment with the Public Interest in Ensuring the Validity of Patent Claims

When determining whether to exercise its discretion under 35 U.S.C. 325(d) in an *ex parte* reexamination proceeding, the Office reviews the entire record of the patent requested to be

²¹ For example, see, generally, pages 23-29, and particularly pages 25-27 of the request for reexamination.

²² Boer discloses that the SIGNAL field of Boer has a first predetermined value if the DATA field is transmitted at the 1 Mbps rate and a second predetermined value if the DATA field is transmitted at the 2, 5 or 8 Mbps rates (see column 4, lines 4-7 of Boer). Boer also discloses that the 1 and 2 Mbps rates use DBPSK and DQPSK modulation, respectively. The 5 and 8 Mbps rates use PPM/DQPSK modulation (see the abstract of Boer). The table of Snell, however, *more clearly sets forth* how the SIGNAL (third sequence) "indicates" that communication has reverted to the first modulation method as recited in claim 2, as set forth in this decision.

²³ See page 25 of the request.

²⁴ See pages 26-27 of the request.

reexamined, including the original prosecution of the patent and any post grant Office proceedings involving the patent, including reexamination proceedings, reissue applications, and PTAB trial proceedings such as *inter partes* reviews. Where, as here, multiple challenges have been filed with the Office against the patent requested to be reexamined, the Office balances the protection of the patent owner against harassment with the public interest in ensuring the validity of patent claims. ²⁵

As evidence of harassment by the requester, the patent owner points to thirteen previous *inter partes* reviews filed by the requester. However, the record shows that ten of the thirteen previous *inter* partes reviews pointed out by the patent owner as evidence of harassment either did not involve the '580 patent (7), or involved the '580 patent but did not involve the specific claims of the '580 patent requested to be reexamined in the present proceeding (3). Of the remaining three previous *inter* partes reviews, which did involve the claims requested to be reexamined, the petitions for *inter* partes review in two of them were filed on the same day. Petitions in trial proceedings at the PTAB, such as *inter* partes reviews, are subject to a word count or page limit. See 37 CFR 42.24. For this reason, the *simultaneous* filing of *inter* partes review petitions is not necessarily evidence of harassment. ²⁸

Furthermore, this is not a case where the requester's previous challenges to the '580 patent claims have been unsuccessful. In fact, of the original 79 claims of the '580 patent, 21 claims have been cancelled by the December 16, 2016 Inter Partes Review Certificate. In addition, 19 claims were disclaimed by the patent owner during the previous *inter partes* reviews.

In view of these facts, the patent owner cannot expect the Office, in a reexamination proceeding, to ignore requester's arguments in the request for reexamination where, as here: i) requester's arguments in the request specifically apply to a limitation recited in each of the only two claims requested to be reexamined; ii) that claim limitation is the focus of the reexamination proceeding; iii) requester's arguments in the request, with respect to how the prior art *specifically* teaches that claim limitation, were not previously presented to the Office; iv) requester's arguments clearly set forth how the prior art relied upon in the request is believed to teach that claim limitation; and v) the Office determines that requester's arguments with respect to that claim limitation have merit, such that order for reexamination is warranted.

Furthermore, the prior art relied upon in the request for reexamination to teach that limitation, i.e., Snell, was not previously presented to the Office; and the disclosure of Snell more clearly teaches that claim limitation, which is the focus of the reexamination proceeding. In the present case, the Office reviewed the facts of the case, including any evidence of harassment, in addition to requester's arguments newly presented in the request with respect to the asserted unpatentability of claims 2 and 59, including those discussed in detail above. The

²⁵ See, e.g., *In re Etter*, 225 USPQ 1 (Fed. Cir. 1985), in which the Federal Circuit, when discussing whether the § 282 presumption of validity has application in reexamination proceedings, stated: "Reexamination is thus neutral, the patentee and the public having an equal interest in the issuance and maintenance of valid patents."

²⁶ See, for example, page 8 of the present petition.

²⁷ See footnote 4 of this decision.

²⁸ The petitions in the '514 and '518 IPRs were simultaneously filed on March 20, 2014.

Office determined that the evidence and arguments presented in the request of the asserted unpatentability of claims 2 and 59 outweighs any evidence in the record of alleged harassment.

Taking into consideration all of the evidence of record, as discussed in detail above, the Office declined to exercise its discretion and reject the request under 35 U.S.C. 325(d) in the present reexamination proceeding.

E. <u>The Evidence Presented in the Request of the Asserted Unpatentability of Claims 2 and 59</u> Weighs in Favor of Ordering Reexamination

The record shows that the PTAB in the '114 IPR exercised its discretion under 35 U.S.C. 325(d) to deny institution of *inter partes* review of claims 2 and 59. The patent owner argues that the prior art and arguments are substantially the same as those presented in the '114 IPR. However, the evidence in the present request for reexamination of the asserted unpatentability of claims 2 and 59 weighs in favor of ordering reexamination.

The patent owner is essentially arguing in its present petition that, even though the focus of the reexamination proceeding is a claim limitation which is not thought by the Office to render the claims patentable in view of the prior art and arguments presented in the request for reexamination, and that claim limitation is recited in the only claims requested to be reexamined, the Office should nevertheless exercise its discretion and reject the request pursuant to 35 U.S.C. 325(d), on the basis that the prior art and/or arguments presented in the request are substantially the same as the prior art and/or arguments which were previously presented to the Office.

The provisions of 35 U.S.C. 325(d), however, are discretionary, not mandatory. The statute states that "the Director **may** take into account whether, and reject the . . . request because . . ." (emphasis added). The statute does not require the Director to reject a request for ex parte reexamination. Even if the prior art and/or arguments presented in the request are considered to be substantially the same as the prior art and arguments presented in the '114 IPR, the Office is not required to reject the request under 35 U.S.C. 325(d), particularly where, as here, the evidence of the unpatentability of claims 2 and 59 weigh heavily in favor of ordering reexamination. In the present case, the Office reviewed the record and declined to exercise its option to reject the request under 35 U.S.C. 325(d).

Furthermore, the present proceeding is an *ex parte* reexamination proceeding, not an *inter partes* review. The statutory framework of *inter partes* review proceedings differs significantly from the statutory framework for *ex parte* reexamination proceedings. As a result, the application of 35 U.S.C. 325(d) to the facts with respect to a request for reexamination may result in a different outcome than when applied to a petition for *inter partes* review, due to the different nature of the two proceedings, as discussed Section VI of this decision.

F. The Determination by the Office Not to Exercise its Discretion under 35 U.S.C. 325(d) in the Present Proceeding is Not Inconsistent with *Inter Partes* Review Practice

The patent owner argues that the Office's determination not to exercise its discretion under 35 U.S.C. 325(d) in the present *ex parte* reexamination proceeding is inconsistent with *inter partes* review practice. Specifically, the patent owner asserts that the Office has "declined to

consider factors" that the PTAB has applied when making determinations pursuant to 35 U.S.C. 325(d). The determination by the Office not to exercise is discretion under 35 U.S.C. 325(d) in the present *ex parte* reexamination proceeding, however, is not inconsistent with *inter partes* review practice.

As an initial matter, the Supreme Court has held that, unlike the *ex parte* reexamination statute, 35 U.S.C. 314(a) does not permit the Director to determine whether to institute *inter partes* review on a claim-by-claim basis. *SAS*, slip op., pages 7-8. Pursuant to *SAS*, the PTAB issued a memorandum on April 26, 2018 stating that, where a pending *inter partes* review trial has been instituted on only some of the challenges raised in the petition, trial may be instituted on all challenges raised in the petition.²⁹ Pursuant to *SAS* and the April 26, 2018 memorandum by the PTAB, the PTAB would likely have instituted *inter partes* review of claims 2 and 59 of the '580 patent, had the '518 or the '114 IPRs been pending at the time the Supreme Court's opinion in *SAS* had been rendered. This fact weighs in favor of granting reexamination in the present proceeding.

In any event, when determining whether to institute *inter partes* review, the PTAB may apply factors relevant to its determination under 35 U.S.C. 314(a) *in addition to* analyzing whether the same or substantially the same prior art or arguments previously were presented to the Office pursuant to 35 U.S.C. 325(d). See the PTAB's precedential opinion in *General Plastic Industrial Co. v Canon Kabushiki Kaisha*, IPR2016-01357, Paper No. 19 (PTAB September 6, 2017). Therefore, in addition to an analysis under 35 U.S.C. 325(d), the PTAB may consider factors relevant to a 35 U.S.C. 314(a) determination. The present proceeding, however, is an *ex parte* reexamination proceeding, not an *inter partes* review. 35 U.S.C. 314(a) governs the institution of *inter partes* review, and does not apply to *ex parte* reexamination proceedings.

In General Plastic, the PTAB stated (citations omitted) (emphasis added):³¹

The Director has discretion to institute an *inter partes* review under 35 U.S.C. § 314(a) . . . The Board consistently has considered a number of factors in determining whether to exercise that discretion . . . To reiterate, those factors are as follows:

- 1. Whether the same petitioner previously filed a petition directed to the same claims of the same patent;
- 2. Whether at the time of filing of the first petition, the petitioner knew of the prior art asserted in the second petition or should have known of it;

²⁹ See "Guidance on the Impact of SAS on AIA Trial Proceedings", released on April 26, 2018 at www.uspto.gov/patents-application-process/patenttrialandappealboard.

³⁰ The PTAB's decision in *General Plastic*, when taken with the Supreme Court's opinion in *SAS*, identifies factors which may be applied by the PTAB when determining whether to institute review of all of the claims challenged in the petition for *inter partes* review.

³¹ See *General Plastic*, Paper No. 19, pages 15-16.

- 3. Whether at the time of filing the second petition, the petitioner already received the patent owner's preliminary response to the first petition or received the Board's decision on whether to institute review in the first petition;
- 4. The length of time that elapsed between the time the petitioner learned of the prior art asserted in the second petition and the filing of the second petition;
- 5. Whether the petitioner provides adequate explanation for the time elapsed between the filings of multiple petitions directed to the same claims of the same patent;
- 6. The finite resources of the Board; and
- 7. The requirement under 35 U.S.C. § 316(a)(11) to issue a final determination not later than 1 year after the date on which the Director notices institution of review.

The PTAB further stated: 32

[T]he factors set forth above . . . serve to act as a baseline of factors to be considered in our future evaluation of follow-on petitions.

When determining whether to exercise its discretion under 35 U.S.C. 314(a) in an *inter partes* review proceeding, the PTAB may evaluate the factors identified above. The PTAB may also perform an analysis pursuant to 35 U.S.C. 325(d), where appropriate. An analysis pursuant to 35 U.S.C. 325(d) is *another factor* that may be *additionally* considered by the PTAB when determining whether to exercise its discretion under 35 U.S.C. 314(a). See *General Plastic*, in which the PTAB explained (emphasis added):³³

§ 325(d) is not intended to be the **sole factor** in the exercise of discretion **under** § **314(a)**.

In other words, an analysis pursuant to 35 U.S.C. 325(d) is a factor that may be considered by the PTAB in addition to the § 314(a) factors identified in General Plastic.³⁴

The patent owner argues that the Office, in the present reexamination proceeding, declined to consider factors used by the PTAB when denying institution pursuant to 35 U.S.C. 325(d). In the '114 IPR, however, which included challenges to claims 2 and 59 of the '580 patent, the factors considered by the PTAB, other than its analysis pursuant to 35 U.S.C. 325(d), are factors identified by the PTAB in *General Plastic* to be considered when exercising its discretion under 35 U.S.C. 314(a), not 35 U.S.C. 325(d).

Pursuant to *General Plastic*, an analysis pursuant to 35 U.S.C. 325(d) in an *inter partes* review does not include an analysis pursuant to 35 U.S.C. 314(a). In *General Plastic*, the PTAB

³² *Id.*, page 18.

³³ *Id*.

³⁴ The factors identified in *General Plastic* were first set forth in *NVIDIA Corp. v. Samsung Elec. Co.*, IPR2016-00134, Paper No. 9 (PTAB May 4, 2016).

explained that its discretion under 35 U.S.C. 314(a) is not "subordinate to or *encompassed by* § 325(d)" (emphasis added). Rather, an analysis under 35 U.S.C. 325(d), i.e., whether the prior art or arguments previously were presented to the Office, is a factor considered by the PTAB *in addition to* the § 314(a) factors when determining whether to institute *inter partes* review. The PTAB's decision in the '114 IPR, when taken with the PTAB's precedential opinion in *General Plastic*, shows that the PTAB used factors relevant to a 35 U.S.C. 314(a) determination in the '114 IPR, in addition to evaluating whether the prior art or arguments previously were presented to the Office pursuant to 35 U.S.C. 325(d), when determining whether to institute *inter partes* review.

One of the factors that the PTAB considered in the '114 IPR when making its determination whether to institute *inter partes* review was the limited resources of the PTAB: ³⁶

Petitioner is requesting, essentially, a second chance to challenge the claims. . . Permitting second chances in cases like this one ties up the Board's limited resources; we must be mindful not only of this proceeding, but of "every proceeding."

The limited resources of the PTAB, however, are not relevant to the *factual* issue of whether the same or substantially the same prior art or arguments were previously presented to the Office, pursuant to the language of 35 U.S.C. 325(d). The limited resources of the PTAB is *a factor* which is considered by the PTAB when determining whether to institute inter partes review under 35 U.S.C. 314(a). See, e.g., factor no. 6 listed above. The PTAB was using factors relevant to a 35 U.S.C. 314(a), in addition to its evaluation pursuant to 35 U.S.C. 325(d), when making its determination whether to institute *inter partes* review. An *ex parte* reexamination proceeding, however, is not an *inter partes* review proceeding. 35 U.S.C. 314(a) does not apply to *ex parte* reexamination proceedings. The limited resources of the PTAB is not a consideration which would weigh heavily when determining whether to exercise the Office's discretion under 35 U.S.C. 325(d) in an *ex parte* reexamination proceeding.

Furthermore, when determining whether to exercise its discretion under 35 U.S.C. 325(d) in an *inter partes* review, the PTAB has considered whether the petitioner uses, in the later IPR petition, information from earlier PTAB decisions, such as additional reasoning which was found by the PTAB to be lacking in an earlier IPR petition, in order to bolster challenges that were advanced unsuccessfully in the earlier IPR petition.³⁷ There is no mention in the language of 35 U.S.C. 325(d), however, of the use of information from earlier PTAB decisions. Rather, whether the petitioner in a trial proceeding at the PTAB uses information from earlier PTAB decisions to bolster its arguments is a *factor considered by the PTAB when determining whether to institute inter partes review under 35 U.S.C. 314(a)*. See, e.g., factor no. 3 listed above. The PTAB was using factors relevant to a 35 U.S.C. 314(a) determination, in addition to its evaluation pursuant to 35 U.S.C. 325(d), when making its determination whether to institute *inter partes* review. An *ex parte* reexamination proceeding, however, is not an *inter partes* review proceeding.

³⁵ *Id.*, page 19.

³⁶ '114 IPR, Paper no. 14, page 7.

³⁷ See also, e.g., *Unilever, Inc. v. The Procter & Gamble Company*, IPR2014-00506, Paper No. 17, page 8 (PTAB, July 7, 2014).

The patent owner particularly points to another factor which the PTAB has considered when determining whether to exercise its discretion under 35 U.S.C. 325(d), i.e., whether the prior art newly cited in the later IPR petition was known by the petitioner or was available to the petitioner at the time of filing the earlier IPR petition. There is no mention in the language of 35 U.S.C. 325(d), however, of a determination whether the prior art newly cited in a later IPR petition was known by the petitioner or was available to the petitioner at the time of filing an earlier IPR petition. Rather, whether newly cited art was known by or available to the petitioner in a trial proceeding at time of filing an earlier petition in another trial proceeding is a *factor considered by the PTAB when determining whether to institute inter partes review under 35 U.S.C. 314(a)*. See, e.g., factor no. 2 listed above. The PTAB was using factors relevant to a 35 U.S.C. 314(a) determination, in addition to its evaluation pursuant to 35 U.S.C. 325(d), when making its determination whether to institute *inter partes* review. An *ex parte* reexamination proceeding, however, is not an *inter partes* review proceeding.

35 U.S.C. 314(a) does not apply to *ex parte* reexamination proceedings. It is not inconsistent for the Office, in an *ex parte* reexamination proceeding, to decline to consider factors relevant to an analysis under 35 U.S.C. 314(a), since that statute that does not apply to *ex parte* reexamination proceedings.

Furthermore, 35 U.S.C. 314(a) governs the institution of *inter partes* review, and the factors identified in *General Plastic* were specifically formulated to apply to those proceedings:³⁹

The factors set forth above, in our view, represent a formulation of relevant considerations that permit the Board to assess the potential impacts on . . . the efficiency of the *inter* partes review process . . .

The efficiency of the *inter partes* review process, however, is not relevant to an *ex parte* reexamination proceeding. The legislative history of the America Invents Act (AIA) distinguishes a reexamination proceeding from an *inter partes* review by describing an *inter partes* review as an adjudicative proceeding:⁴⁰

The Act converts inter partes reexamination from an examinational to an adjudicative proceeding, and renames the proceeding "inter partes review".

In an adjudicative proceeding, the judge is concerned not only with the interests of the parties and the interests of the public, but also with the efficiency of the judicial process, or, in this case, the efficiency of the *inter partes* review process. An *ex parte* reexamination proceeding, however, is not an adjudicative proceeding, let alone a trial proceeding such as an *inter partes* review. The efficiency of the *inter partes* review process is not relevant to an *ex parte* reexamination proceeding.

³⁸ See, e.g., Samsung v. Rembrandt, IPR '114, Paper No. 14, page 7; Unilever, Inc. v. The Procter & Gamble Company, IPR2014-00506, Paper No. 17, page 6 (PTAB, July 7, 2014). See also Ariosa Diagnostics v. Verinata Health, Inc., Case Nos. IPR 2013-00276 and IPR2013-00277, Paper No. 63, page 12 (PTAB May 24, 2016).

³⁹ Id., page 18.

⁴⁰ See H.R. Report No. 112-98, part 1, pages 46-47.

In fact, the Supreme Court distinguishes *ex parte* reexamination proceedings from *inter partes* review proceedings by describing an *ex parte* reexamination proceeding as "an agency-led, inquisitorial process" for reconsidering patents, in contrast to an *inter partes* review, which is "a party-directed, adversarial process". *SAS Institute v. Iancu*, 138 S.Ct. 1348 (decided April 24, 2018), slip op., page 6.

Therefore, it is not inconsistent for the Office, in an *ex parte* reexamination proceeding, to decline to consider factors that were formulated not with respect to an *ex parte* reexamination proceeding, but with respect to an entirely different type of proceeding.

Furthermore, even if the PTAB's decision in the '114 IPR to deny *inter partes* review were considered to be solely due to an analysis under 35 U.S.C. 325(d), the statutory framework of *inter partes* review proceedings differs significantly from the statutory framework for *ex parte* reexamination proceedings. As a result, the application of 35 U.S.C. 325(d) to the facts with respect to a request for reexamination may result in a different outcome than when applied to a petition for *inter partes* review, due to the different nature of the two proceedings, as discussed in Section VI of this decision.

This is not to say that some of the factors that happen to be relevant to a determination under 35 U.S.C. 314(a) in an *inter partes* review may never be considered in an *ex parte* reexamination proceeding. While some of the factors (such as, e.g., the first factor) may be considered in an *ex parte* reexamination proceeding, it is not *inconsistent* for the Office to decline to use these factors in an *ex parte* reexamination proceeding for all of the reasons set forth above. The determination pursuant to 35 U.S.C. 325(d) in an *ex parte* reexamination proceeding is conducted on a case-by-case basis.

For all of the reasons set forth above, the determination by the Office not to exercise its discretion under 35 U.S.C. 325(d) in the present *ex parte* reexamination proceeding is not inconsistent with *inter partes* review practice.

G. Patent Owner's Request for Reconsideration Would Have Been Dismissed, Even If Timely Filed

For all of the reasons set forth above, patent owner's September 18, 2017 request for reconsideration would have been dismissed, even if it were timely filed, in view of the prior art and arguments presented in the request.

In view of the specific facts and circumstances of the present case, however, the Office provides additional comments below in order to clarify Office policy with respect to issues involving 35 U.S.C. 325(d) in reexamination proceedings.

V. Clarification of Office Policy Regarding 35 U.S.C. 325(d) Issues in Reexamination Proceedings

A. The November 28, 2016 Decision

The patent owner argues that in the November 28, 2016 decision, the Office treated the second sentence of 35 U.S.C. 325(d) as a nullity because the Office pointed out, in that decision, that the patent owner did not discuss whether the references at issue raised a substantial new question of patentability. The patent owner also asserts that "OPLA takes the position that § 325(d), which was implemented *after* § 304, only permits the Office to deny reexamination requests that do not present a substantial new question of patentability" (emphasis in original). The patent owner further argues that "OPLA has taken the position that § 325(d)'s instruction to take into account whether or not 'the same or substantially the same prior art or arguments previously *were presented to the Office*' is limited to considering issues which have been considered after an *inter partes* review trial has begun and has been completed" (emphasis in original). 42

The patent owner misunderstands the November 28, 2016 decision. In that decision, the Office treated patent owner's original September 30, 2016 petition, which was filed *after* the order for reexamination, as a petition to vacate the order. Patent owner's original petition was treated in the same manner as a petition alleging that the reexamination order is *ultra vires*, i.e., the Office was not authorized under 35 U.S.C. 304 to order reexamination because no substantial new question of patentability is raised by the request. See MPEP 2246, subsection II. In order to challenge the order for reexamination, such a petition addresses whether a substantial new question of patentability is raised by the request.

In the November 28, 2016 decision, the Office first pointed out that the patent owner, while claiming that the same or substantially the same arguments were previously presented to the Office, did not provide any explanation of why the patent owner believed that the arguments were the same or substantially the same as those previously presented to the Office, as set forth in 35 U.S.C. 325(d). The Office also pointed out that while the determination under 35 U.S.C. 325(d) is discretionary, 35 U.S.C. 304 *requires* the Office to order reexamination if a substantial new question of patentability is raised by the request. This was not to say, however, that 35 U.S.C. 304 "does not permit the Office to deny a request for reexamination pursuant to 35 U.S.C. 325(d)" when a substantial new question of patentability is found, contrary to patent owner's assertions. Rather, the Office intended to point out that the patent owner, in addition to omitting an explanation of patent owner's position regarding a discretionary determination by the Office pursuant to 35 U.S.C. 325(d), also omitted any discussion of a determination under 35 U.S.C. 303(a) that the Office is required to make prior to the order for reexamination pursuant to 35 U.S.C. 304. 43 35 U.S.C. 303(a) provides, in pertinent part (emphasis added):

⁴¹ See the present petition, page 6.

⁴² See the present petition, page 8.

⁴³ Because the Office treated patent owner's original petition in the same manner as a petition alleging that the reexamination order was *ultra vires*, the Office was pointing out that the patent owner not only failed to provide a *specific* basis under 35 U.S.C. 325(d) to reject the request, but also did not provide a *specific* basis to vacate the order as *ultra vires* by showing that no substantial new question of patentability was raised by the request, pursuant to 35 U.S.C. 303(a) and 35 U.S.C. 304. In other words, the patent owner could have provided at least one of the

Within three months following the filing of a request for reexamination under the provisions of section 302, the Director will determine whether a substantial new question of patentability affecting any claim of the patent concerned is raised by the request.

Contrary to patent owner's assertions, there is no mention in the November 28, 2016 decision that 35 U.S.C. 325(d) "only permits the Office to deny reexamination requests that do not present a substantial new question of patentability", or that "§ 325(d)'s instruction to take into account whether or not 'the same or substantially the same prior art or arguments previously were presented to the Office' is limited to considering issues which have been considered after an *inter partes* review trial has begun and has been completed". 44

In any event, the Office's statement in the November 28, 2016 decision that a petition addressing issues involving 35 U.S.C. 325(d) is considered to be timely, if filed *after* the order for reexamination, was in error, and has not been followed as discussed previously in this decision.

To be considered, a petition limited to issues involving 35 U.S.C. 325(d) must be filed *before* the order for reexamination has issued. In addition, because the petition is filed *before* the order, the petition must be limited to issues involving 35 U.S.C. 325(d), and may not address any other issues, including whether a substantial new question of patentability is raised by the request. The petition should also request waiver under 37 CFR 1.183 of the provisions of 37 CFR 1.530(a) and the second sentence of 37 CFR 1.540, on the basis that the petition is limited to issues involving 35 U.S.C. 325(d).

B. Office Policy With Respect to 35 U.S.C. 325(d) in Ex Parte Reexamination Proceedings

35 U.S.C. 304 requires the Office to issue an order granting reexamination in an *ex parte* reexamination proceeding if the Office determines that a substantial new question of patentability affecting any claim of the patent is raised by the reexamination request. 35 U.S.C. 325(d) was promulgated after the enactment of 35 U.S.C. 304. For this reason, the Office considers the provisions of 35 U.S.C. 325(d), taken together with the provisions of 35 U.S.C. 304, as permitting the Office to exercise its discretion and issue an order denying reexamination on the basis that the same or substantially the same prior art or arguments previously were presented to the Office, even if a substantial new question of patentability is determined to be raised by the request.

In the present case, reexamination was ordered on September 27, 2016.

The patent owner argues that the requester "failed to provide", in the request, a comparison of the art and arguments presented in the request with those previously presented to the Office. The

following: i) a specific basis under 35 U.S.C. 325(d) to reject the request; and/or ii) a specific basis under 35 U.S.C. 303(a) and 35 U.S.C. 304 to vacate the order. Neither was provided.

⁴⁴ Rather, the Office summarized the outcome, with respect to claims 2 and 59, of the *inter partes* reviews raised by the patent owner in its original petition. The Office erroneously stated that the '518 IPR did not include a challenge to claims 2 and 59 of the '580 patent. The '518 IPR, however, did include a challenge to claims 2 and 59. Institution was denied with respect to these claims.

patent owner also asserts that the Office did not make a determination pursuant to 35 U.S.C. 325(d) prior to the order, presumably because 35 U.S.C. 325(d) was not directly addressed in the order.⁴⁵

There is no requirement, however, for a requester in an *ex parte* reexamination proceeding to address the provisions of 35 U.S.C. 325(d) in the request. There is also no requirement for the examiner to discuss, in an order granting reexamination, why the Office did not exercise its discretion pursuant 35 U.S.C. 325(d) and "reject" the request.

When drafting an order or an Office action, the Office generally refers only to those statutes that the Office finds necessary to discuss in that order or Office action. For example, the issuance of an Office action that only includes rejections under 35 U.S.C. 103 does not mean that the provisions of 35 U.S.C. 102 were not also considered. Similarly, the issuance of an order that refers only to 35 U.S.C. 303 and 35 U.S.C. 304 does not mean that the provisions of 35 U.S.C. 301, 35 U.S.C. 302, and 35 U.S.C. 325(d) were not also considered.

In the present case, the Office reviewed the provisions of 35 U.S.C. 325(d) in addition to the provisions of all other applicable statutes when determining whether to order reexamination. The Office, in its discretion, determined not to reject the request under 35 U.S.C. 325(d). Instead, reexamination was ordered.

VI. The Determination Whether to Reject a Reexamination Request Pursuant to 35 U.S.C. 325(d) Differs from the Analysis under 35 U.S.C. 325(d) Used by the PTAB to Deny Institution in an *Inter Partes* Review

The patent owner argues that the analysis pursuant to 35 U.S.C. 325(d), when conducted in an *inter partes* review, should not differ from the analysis performed in an *ex parte* reexamination proceeding with respect to 35 U.S.C. 325(d).⁴⁷

The statutory framework of *inter partes* review proceedings, however, differs significantly from the statutory framework for *ex parte* reexamination proceedings, and as a result, the considerations with respect to issues involving 35 U.S.C. 325(d) are not identical. The application of 35 U.S.C. 325(d) to the facts with respect to a request for reexamination may

⁴⁵ See the present petition, pages 3-4; see also footnote 4.

⁴⁶ The patent owner points out that the examiner states, on page 17 of the final Office action mailed on July 18, 2017, that "there is no provision in the MPEP that requires [a determination that a reference is cumulative when determining if an SNQ exists] for claims that have not been reexamined before." The patent owner also points out that the examiner states that where the claims under reexamination were the subject of a petition for *inter partes* review, but review was not instituted with respect to those claims, any teachings of the references presented in the request with respect to those claims are "new and non-cumulative". In standard reexamination practice, however, a reference is "new and non-cumulative" if a request for reexamination of the patent claims, which may or may not rely on that reference, was previously filed, but *reexamination was not ordered with respect to those claims*. Whether the prior art or arguments presented in the request were previously presented to the Office, however, is a separate issue under 35 U.S.C. 325(d). Examiners are encouraged to contact their supervisor, or the Director of the CRU, when encountering issues under 35 U.S.C. 325(d) in a reexamination proceeding, particularly where, as here, the issues involve previously-filed trial proceedings such as *inter partes* reviews.

⁴⁷ See the present petition, page 11.

result in a different outcome than when applied to a petition for a trial proceeding at the PTAB. It is the nature of the proceedings and the facts and circumstances surrounding these different proceedings that can result in different outcomes.

In an *inter partes* review proceeding, both parties have a full right of participation throughout the entire procedure. Both parties also have a right to appeal the PTAB's final decision to the Court of Appeals for the Federal Circuit (Federal Circuit). In an *ex parte* reexamination proceeding, however, the right of participation of a third party requester is limited. The active participation of the third party requester ends with the reply pursuant to 37 CFR 1.535, and no further submissions on behalf of the reexamination requester is acknowledged or considered. See 35 U.S.C. 305 and 37 CFR 1.550(g). **The third party requester in an** *ex parte* **reexamination proceeding does not have a right to appeal the examiner's decision to the PTAB, or the resulting PTAB decision to the Federal Circuit. See 35 U.S.C. 141. As a result, unlike** *inter partes* **review practice, the determination by the Office whether to exercise its discretion and deny** *ex parte* **reexamination pursuant to 35 U.S.C. 325(d) takes into account the fact that a third party requester does not have a full right of participation in the proceeding, including a right to appeal.**

In addition, the *ex parte* reexamination statute "allows the Director to institute proceedings on a claim-by-claim and ground-by-ground basis". *SAS*, slip op., page 7. In contrast, the language of the *inter partes* review statute does not permit institution on a claim-by-claim basis. Rather, the language of the statute "anticipates a regime where a reasonable prospect of success on a single claim justifies review of all." *Id.* The Supreme Court distinguished *ex parte* reexamination proceedings from *inter partes* review proceedings by describing an *ex parte* reexamination proceeding as "an agency-led, inquisitorial process" for reconsidering patents, in contrast to an *inter partes* review, which is "a party-directed, adversarial process." *Id.*, page 6.

Furthermore, the standard used for ordering *ex parte* reexamination differs from the standard used for instituting *inter partes* review. The standard for determining whether to institute *inter partes* review is whether there is a reasonable likelihood that the petitioner would prevail with respect to at least one of the claims challenged in the petition (RLP standard). See 35 U.S.C. 314(a). The standard for determining whether to order *ex parte* reexamination is whether a substantial new question of patentability affecting any claim of the patent concerned is raised by the request (SNQ standard). See 35 U.S.C. 303(a). For example, **there is no requirement in the RLP standard that the issue, or question, be "new"**. The SNQ standard, however, requires a substantial **new** question of patentability. **There is no such element in the RLP standard used in** *inter partes* **review proceedings. Thus, 35 U.S.C. 325(d) introduces to PTAB proceedings the protection already substantially afforded in** *ex parte* **reexamination against harassment based on repetitive arguments.**

As another example, a substantial new question of patentability may be raised merely because a reasonable examiner would consider the teaching of a reference *important* in determining the patentability of the claims. See MPEP 2242. In contrast, the RLP standard requires a reasonable likelihood that the petitioner would *prevail*.

In addition, the *inter partes* review statute is permissive. It does not *require* institution of *inter partes* review even if the PTAB finds that there is a reasonable likelihood that the petitioner

would prevail with respect to at least one of the claims challenged in the petition (RLP). ⁴⁸ In contrast, absent the provisions of 35 U.S.C. 325(d), the *ex parte* reexamination statute *requires* the Office to order reexamination if the request is found to raise a substantial new question of patentability (SNQ). ⁴⁹ In other words, if the Office does not find that the same or substantially the same prior art or arguments previously were presented to the Office, or if the Office declines to exercise its discretion under 35 U.S.C. 325(d) in view of, for example, evidence of unpatentability that was not previously evaluated by the Office, the Office is *required* to order reexamination if the request is found to raise a substantial new question of patentability, unlike *inter partes* review.

Furthermore, once an order granting *ex parte* reexamination has been issued, the Office is *required* to conduct reexamination. See 35 U.S.C. 305. There is no such statutory requirement for *inter partes* review proceedings. In fact, an *inter partes* review proceeding may be terminated upon the joint request of the petitioner and the patent owner pursuant to 35 U.S.C. 317.

In addition, unlike the *inter partes* review statute, the *ex parte* reexamination statute does not provide for the filing of a response by the patent owner *prior to* an order granting reexamination. Instead, 35 U.S.C. 304 specifies that a response by the patent owner may be filed *after* the order has issued.

For all of the reasons discussed above, the determination whether to exercise the Office's discretion and deny *ex parte* reexamination under 35 U.S.C. 325(d) differs from the analysis used by the PTAB to refuse to institute *inter partes* review, due to the significant differences in the statutory framework of the two proceedings. The application of 35 U.S.C. 325(d) to the facts with respect to a request for reexamination may result in a different outcome than when applied to a petition for a trial proceeding at the PTAB.

This is not to say that a request for reexamination filed subsequent to multiple concluded trial proceedings, such as *inter partes* reviews, involving the same claims of the same patent, and filed by the same party, is always permitted. The determination whether to exercise the Office's discretion under 35 U.S.C. 325(d) in an *ex parte* reexamination proceeding is performed on a case-by-case basis.

VII. The Provisions of 35 U.S.C. 325(d) *Complement* the Protections Provided by the Substantial New Question of Patentability Standard

The patent owner asserts that "§ 325(d) was added to the America Invents Act [AIA] for, *inter alia*, the express purpose of curing the inability of the substantial new question of patentability

⁴⁸ 35 U.S.C. 314(a) provides, in pertinent part (emphasis added):

The Director **may not authorize** an inter partes review to be instituted **unless** the Director determines that the information presented in the petition . . . shows that there is a reasonable likelihood that the petition would prevail with respect to at least 1 of the claims challenged in the petition.

⁴⁹ 35 U.S.C. 304 provides, in pertinent part (emphasis added):

If . . . the Director finds that a substantial new question of patentability is raised, the determination will include an order for reexamination of the patent for resolution of the question.

standard to prevent the abuse of *ex parte* reexamination."⁵⁰ However, there is no evidence in the record which shows that the provisions of 35 U.S.C. 325(d) were drafted solely to cure a widespread "inability" in the substantial new question of patentability standard to prevent the abuse of *ex parte* reexamination. Rather, the record shows that the provisions of 35 U.S.C. 325(d) were intended to prevent an AIA proceeding from being used as a tool for harassment, and to *complement* the protections already provided by the substantial new question of patentability standard set forth in 35 U.S.C. 303(a).

To support its argument, the patent owner points to the legislative history of the AIA in H.R. Rep. No. 112-98, part 1 (June 1, 2011) (the House report), at page 48. However, there is no mention on page 48 of the House report of 35 U.S.C. 325(d) or, for that matter, of the purpose for promulgating the provisions of 35 U.S.C. 325(d). The House report at page 48 merely states that "the *changes made by* [the amendment establishing AIA proceedings] are not to be used as tools for harassment" (emphasis added). In other words, *the AIA proceedings themselves* are not to be used as tools for harassment. There is nothing on page 48 that states that previously established Office proceedings, such as reexamination proceedings, do not prevent abuse, as presently asserted. In fact, the House report expressly states (emphasis in bold added):⁵¹

... However, we have significant concerns about the limitations that H.R. 1249 imposes on *inter partes* review ... The limitations imposed by H.R. 1249 and the managers [sic] amendment are motivated by assertions that **the inter partes** procedure may be abused to harass patent owners and interfere with the enforcement of valid patents. However, no empirical evidence, even anecdotally, was proffered to the Committee to demonstrate such abuses occur in the current reexamination system. On the contrary, of the 253 *inter partes* reexaminations decided since the procedure was created in 1999, 224 (89%) resulted in the modification or nullification of at least one patent claim, which means that the challenges were ultimately found meritorious. This suggests that further limitations and deterrents against *inter partes* petitions, beyond those already in place in current law, are unnecessary and counterproductive. (Footnotes omitted).

Contrary to patent owner's assertions, Congress expressly stated that there was no empirical evidence that abuses occur in the current reexamination system. ⁵²

The patent owner points out that the legislative history of the AIA refers to the "abuse of ex parte reexamination" by stating that "[t]he second sentence of section 325(d) complements the protections against abuse of ex parte reexamination that are created by sections 315(e) and

⁵⁰ See page 42 of the present petition.

⁵¹ See H.R. Rep. No. 112-98, part 1 (June 1, 2011) (the House report), at page 164.

⁵² The standard for *inter partes* reexaminations which was in effect at the time of H.R. Rep. 112-98, part I, *prior to* the effective date of the relevant provisions of the AIA, was the same standard used in *ex parte* reexamination proceedings, i.e., the SNQ standard. The standard used in *inter partes* reexaminations, however, was later amended by the AIA, effective September 15, 2011, which was *after the June 1, 2011* date of H.R. Rep. 112-98, part 1. The standard for *inter partes* reexamination proceedings filed on or after September 16, 2011 and before September 16, 2012 is similar to the standard used in *inter partes* review proceedings, i.e., whether "the information presented in the request shows that there is a reasonable likelihood that the requester would prevail with respect to at least one of the claims challenged in the request" (RLP). See 35 U.S.C. 312 (transitional provision).

325(e)." In fact, the legislative history of the second sentence of 35 U.S.C. 325(d) specifically provides (emphasis added):⁵³

In the second sentence of section 325(d), the present bill also authorizes the Director to reject any request for ex parte reexamination or petition for post-grant or inter partes review on the basis that the same or substantially the same prior art or arguments previously were presented to the Office. This will prevent parties from mounting attacks on patents that raise issues that are substantially the same as issues that were already before the Office with respect to that patent . . . The second sentence of section 325(d) complements the protections against abuse of ex parte reexamination that are created by sections 315(e) and 325(e). The estoppels in subsection (e) will prevent inter partes and post-grant review petitioners from seeking ex parte reexamination of issues that were raised or could have been raised in the inter partes or post-grant review. The Office has generally declined to apply estoppel . . . to an issue that is raised in a request for inter partes reexamination if the request was not granted with respect to that issue. Under section 325(d), second sentence, however, the Office could nevertheless refuse a subsequent request for ex parte reexamination with respect to such an issue, even if it raises a substantial new question of patentability, because the issue previously was presented to the Office in the petition for inter partes or post-grant review.

The legislative history of the second sentence of 35 U.S.C. 325(d) specifically shows that these statutory provisions apply to reexaminations because Congress intended to provide the Office with the *option* to reject a request for *ex parte* reexamination in the particular case where an issue raised in the request was previously raised, for example, in an earlier-filed request for reexamination or petition for *inter partes* review, *and reexamination was not ordered*, *or review was not instituted*, *with respect to that issue*.

The patent owner may argue that the present case is one which the second sentence of 35 U.S.C. 325(d) is designed to address, i.e., the request in the present case proposes a rejection of claims 2 and 59, and a rejection of claims 2 and 59 was also proposed in a previous *inter partes* review, but review was not instituted with respect to those claims. In the present case, however, the Office was not "forced to accept" the reexamination request. The Office declined to reject the request under 35 U.S.C. 325(d) in view of requester's specific arguments in the request with respect to one of the limitations of claims 2 and 59, which are the only claims requested to be reexamined in the present proceeding. This claim limitation is the focus of the proceeding, and requester's specific arguments with respect to how the prior art teaches that claim limitation were not previously presented to the Office, as discussed in detail previously. Furthermore, even if the prior art and arguments are considered to be substantially the same as those previously presented to the Office, the Office is not required to reject the request under 35 U.S.C. 325(d). In the present case, the Office carefully reviewed the record and declined to reject the request under 35 U.S.C. 325(d).

The patent owner further asserts that "the purpose behind the second sentence of § 325(d) is to permit the Office to reject reexamination requests that it was previously "forced to accept". 54

⁵³ 157 Cong. Rec. S1376 (daily ed. March 8, 2011) (statement of Sen. Kyl).

⁵⁴ See the present petition, page 6.

The legislative history shows, however, that the purpose behind the second sentence § 325(d) is to prevent AIA proceedings from being used as tools for harassment, and not merely "to reject reexamination requests that it was previously 'forced to accept'", as discussed previously. To support its argument, the patent owner points to the legislative history of the AIA which states: ⁵⁵

The Patent Office has indicated that it currently is forced to accept many requests for ex parte and inter partes reexamination that raise challenges that are cumulative to or substantially overlap with issues previously considered by the Office with respect to the patent.

This statement is accurate in the particular case where a request for reexamination raises an issue that was previously raised, for example, in an earlier-filed request for reexamination or petition for *inter partes* review, and reexamination was not ordered, or review was not instituted, in the earlier-filed proceeding with respect to that issue. <u>In all other instances, however, where the substantial new question of patentability standard is used, the Office determines whether the teaching of a reference is cumulative to the prior art of record as a matter of standard procedure. See MPEP 2216 and 2242.</u>

Furthermore, Congress did not amend the provisions of 35 U.S.C. 303(a) when promulgating the provisions of 35 U.S.C. 325(d). The fact that Congress left the provisions of 35 U.S.C. 303(a) intact shows that Congress intended to *complement* the protections already provided by the substantial new question of patentability standard. For example, the legislative history of the *ex parte* reexamination statute reflects an intent by Congress that the *ex parte* reexamination process would not create new opportunities to harass the patent owner. See, e.g., H.R. Rep. No. 1307 (part I), 96th Cong., 2d Sess. 7 (Statement of Congressman Kastenmeier, September 9, 1980):

This "substantial new question" requirement would protect patentees from having to respond to, or participate in unjustified reexaminations.

The legislative history of the 2002 amendment to the reexamination statute also states that the amendment "preserves the 'substantial new question standard' that is an important safeguard to protect all inventors against frivolous action and against harassment," and "also preserves the discretion of the Patent and Trademark Office in evaluating these cases." See also *Industrial Innovation & Patent & Copyright Law Amendments: Hearings on H.R. 6933, 6934, 3806, & 214 Before the Subcommittee on Courts, Civil Liberties and the Administration of Justice of the House Committee on the Judiciary, 96th Cong., 2nd Sess. 594 (1980) (statement of Sidney Diamond, Commissioner of Patents & Trademarks, April 24, 1980):*

[The proposed *ex parte* reexamination statute] carefully protects patent owners from reexamination proceedings brought for harassment or spite. The possibility of harassing patent holders is a classic criticism of some foreign reexamination systems and we made sure it would not happen here.

⁵⁵ See 157 Cong. Rec. S1376 (daily ed. March 8, 2011) (statement of Sen. Kyl).

⁵⁶ 147 Cong. Rec H 5358, 107th Congress, (September 5, 2001).

To prevent the use of the reexamination process to harass the patent owner, Congress included the requirement that a substantial new question of patentability based on patents and printed publications must be raised by the request. See also *Patlex v. Mossinghoff*, 771 F.2d 480, 483-484 (Fed. Cir. 1985)(italics in original), where the Federal Circuit, in quoting the statement of Commissioner Diamond immediately above, stated:

Study of the genesis of the reexamination statute leaves no doubt that the major purpose of the threshold determination whether or not to reexamine is to provide a safeguard to the patent holder . . . That is the only purpose of the procedure established by 35 U.S.C. § 303: "carefully" to protect holders of issued patents from being subjected to unwarranted reexaminations.

In addition, the purpose of *ex parte* reexamination is to permit the Office to reexamine the patent on the basis of prior art which was not previously considered, or was not fully considered, with respect to the specific claims of the patent during an earlier examination or review of the patent. There is a strong public interest that all of the prior art be considered. See *In re Etter*, 225 USPQ 1 (Fed. Cir. 1985), in which the Federal Circuit, when discussing whether the § 282 presumption of validity has application in reexamination proceedings, stated:

Reexamination is thus neutral, the patentee and the public having an equal interest in the issuance and maintenance of valid patents.

The patent owner points out that it is more than two decades since the substantial new question of patentability standard was implemented. The time lapse since implementation, however, does not render the substantial new question of patentability standard less valid, or less effective.

For all of the reasons set forth above, the record shows that Congress intended the provisions of 35 U.S.C. 325(d) to *complement* the protections provided by the substantial new question of patentability standard.

VIII. The Decision in *Ariosa* to Terminate a Reexamination Proceeding Was Made in the Context of Deciding a Co-Pending *Inter Partes* Review

The patent owner points out that in *Ariosa v. Verinata Health*, IPR2013-00276 and IPR2013-00277, Paper 63 (PTAB May 24, 2016) (*Ariosa*), the PTAB terminated a co-pending ex parte reexamination request pursuant to 35 U.S.C. 325(d). In *Ariosa*, however, an *inter partes* review of the patent under reexamination was ongoing, which is not the case here. In *Ariosa*, the decision by the PTAB to terminate a co-pending *ex parte* reexamination was made in the context of deciding a co-pending *inter partes* review of the same patent. Furthermore, the section of the statute, 35 U.S.C. 315(d), that authorizes the Director to terminate an on-going reexamination proceeding during the pendency of an *inter partes* review is separate and distinct from the last sentence of 35 U.S.C. 325(d), also as explained by the PTAB: "That section of the statute [35 U.S.C. 315(d)] does not refer to whether 'the same or substantially the same prior art or arguments previously were presented to the Office'. Thus, while we may consider whether the same arguments were before us in the *inter partes* review proceeding, those considerations are not determinative of the analysis." *Ariosa v. Illumina*, IPR2014-01093, Paper 81, page 9 (PTAB May 24, 2016). In addition, even if *Ariosa* may be considered to represent a policy of

terminating an *ex parte* reexamination proceeding which is co-pending with an *inter partes* review, there is nothing in *Ariosa* that establishes a policy with respect to ordering reexamination subsequent to a concluded *inter partes* review.

IX. It is Longstanding Petition Practice in Reexamination Proceedings that a Petitioner Requesting the Office to Take (or Not to Take) an Action Has the Burden to Explain Why It Believes that the Action Must (or Must Not) Be Taken

The patent owner asserts that the Office dismissed patent owner's original September 30, 2016 petition "without determining whether the same or substantially the same art or arguments had been previously presented to the Office". The provisions of 35 U.S.C. 325(d), however, were expressly reviewed in the November 28, 2016 decision. Furthermore, in the November 28, 2016 decision, the Office expressly pointed out (emphasis added, footnotes omitted): 58

The patent owner, however, does not argue that the same or substantially the same prior art or arguments previously were presented to the Office. In fact, the patent owner admits that the art relied upon by the third party requester in the present request was not previously presented to the Office, also as argued by the requester in its October 13, 2016 opposition. Furthermore, the patent owner does not provide any discussion regarding whether the arguments presented in the request are the same or substantially the same as those previously presented to the Office.

The patent owner asserts, without basis, that that if the patent owner files a petition in an *ex parte* reexamination proceeding requesting the Office to "reject" the request pursuant to 35 U.S.C. 325(d), the burden to compare the art and arguments presented in the request with those previously presented to the Office rests with the Office. ⁵⁹ Patent owner's original petition, however, requested the Office to "reject" the request pursuant to 35 U.S.C. 325(d), because, according to the patent owner, the same prior art or arguments were previously presented to the Office. In reexamination proceedings as well as in patent applications, it is longstanding practice that a party who files a petition requesting the Office to take an action, particularly a discretionary action, is required to provide any necessary evidence with its petition in order to support its request. It is not reasonable to expect the Office to speculate what the specific basis of patent owner's request might be, or why the patent owner believes that *in this particular case*, action must (or must not) be taken.

Furthermore, the patent owner filed a petition in an *ex parte* reexamination proceeding, not a preliminary response or other paper in an *inter partes* review. The requester in an *ex parte* reexamination proceeding is not required to address the provisions of 35 U.S.C. 325(d) in the request. In addition, unlike *inter partes* review practice, there is no statutory provision for a

⁵⁷ *Id.*, page 3.

⁵⁸ See the November 28, 2016 decision, pages 3-4.

⁵⁹ In an *ex parte* reexamination proceeding, the Office analyzes whether the prior art relied upon in the request is cumulative to the prior art of record when making its determination whether a substantial new question of patentability is raised by the request. This determination is reflected in the order granting reexamination. The patent owner, however, does not dispute the Office's determination in the order that a substantial new question of patentability is raised by the request.

"preliminary response" by the patent owner *prior* to the order for reexamination. In fact, the reexamination statute, 35 U.S.C. 304, specifies that a response by the patent owner may be filed *after* the order has issued. The statutory framework of *inter partes* review proceedings differs significantly from the statutory framework for *ex parte* reexamination proceedings, and as a result, the considerations with respect to issues involving 35 U.S.C. 325(d) are not identical, as discussed in detail previously. It is not reasonable to expect the Office, when deciding a petition which requests the Office to exercise its discretion under 35 U.S.C. 325(d) in an *ex parte* reexamination proceeding, to accept a burden that might be procedurally applicable in an entirely different type of proceeding, and ignore longstanding petition practice in reexamination proceedings.

It is also not reasonable to expect the Office to deviate from longstanding petition practice in this particular case, while maintaining the same longstanding practice in all other reexamination proceedings, including those in which an issue involving 35 U.S.C. 325(d) has been specifically raised by petition.

X. Prosecution in the Present Reexamination Proceeding Will Continue

In summary, patent owner's September 18, 2017 petition under 37 CFR 1.183 to waive the provisions of 37 CFR 1.181(f) and enter and consider patent owner's September 18, 2017 combined petition is dismissed for the reasons set forth in this decision. Furthermore, in view the fact that the provisions of 37 CFR 1.181(f) have not been waived, patent owner's September 18, 2017 request for reconsideration is dismissed as untimely.

In addition, as an alternate basis for dismissal, the present petition was filed after reexamination in the present case was ordered on September 27, 2016. The Office does not have the discretion to terminate an ongoing reexamination on the basis set forth in 35 U.S.C. 325(d) if no petition requesting such relief is filed until *after* reexamination has been ordered, as discussed previously. For this reason, the *discretionary* determination by the Office under 35 U.S.C. 325(d) whether to reject the request is not petitionable once the order granting reexamination has issued. Therefore, patent owner's September 18, 2017 request for reconsideration would have been dismissed, even if the petition were timely filed.

Furthermore, as a second alternate basis for dismissal, patent owner's September 18, 2017 request for reconsideration would have been dismissed, even if it were timely filed, in view of the arguments presented in the request, as set forth in this decision.

Accordingly, patent owner's September 18, 2017 request for reconsideration, including patent owner's request that the Office vacate the order and "terminate" reexamination, i.e., vacate all subsequently-mailed Office actions and issue an order denying reexamination on the basis set forth in 35 U.S.C. 325(d) that the request is limited to the same or substantially the same prior art or arguments previously presented to the Office, is dismissed as untimely.

The September 27, 2016 order granting reexamination, and all subsequently-mailed Office actions, <u>will not be vacated</u>. Prosecution in the present reexamination proceeding <u>will</u> continue.

Because any exercising of the Director's authority pursuant to 35 U.S.C. 325(d) is purely discretionary, any further papers requesting the Office to take any action, or to refrain from taking any action, in view of the provisions of 35 U.S.C. 325(d) will not be entertained, and will be expunged.

CONCLUSION

- Patent owner's September 18, 2017 petition under 37 CFR 1.183 to waive the provisions of 37 CFR 1.181(f) is **dismissed**.
- Patent owner's September 18, 2017 request for reconsideration, including patent owner's request that the Office vacate the order and "terminate" reexamination, i.e., vacate all subsequently-mailed Office actions and issue an order denying reexamination on the basis set forth in 35 U.S.C. 325(d) that the request is limited to the same or substantially the same prior art or arguments previously presented to the Office, is <u>dismissed as untimely</u>.
- Even if patent owner's September 18, 2017 request for reconsideration were timely filed, the request for reconsideration would have been dismissed (two alternate bases for dismissal).
- The September 27, 2016 order granting reexamination, and all subsequently-mailed Office actions, <u>will not be vacated</u>. Prosecution in the present reexamination proceeding will continue.
- The present proceeding is being forwarded to the Central Reexamination Unit to continue prosecution.
- Any inquiry concerning this communication should be directed to the undersigned at (571) 272-7724.

/Cynthia L. Nessler/

Cynthia L. Nessler Senior Legal Advisor Office of Patent Legal Administration

June 15, 2018

Exhibit 1019



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE



Commissioner for Patents United States Patents and Trademark Office P.O.Box 1450 Alexandria, VA 22313-1450 www.uspto.gov

Date: NOV 1 3 2018

THIRD PARTY REQUESTER'S CORRESPONDENCE ADDRESS FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 2001-4413

EX PARTE REEXAMINATION COMMUNICATION TRANSMITTAL FORM

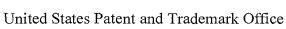
REEXAMINATION CONTROL NO.: 90014071

PATENT NO.: 8494581

ART UNIT: 3992

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified ex parte reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the ex parte reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).





Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.uspto.gov

Sterne, Kessler, Goldstein & Fox P.L.L.C.

(For Patent Owner)

1100 New York Avenue, N.W. Washington, DC 20005

NOV 1 3 2018

Finnegan, Henderson, Farabow, Garrett, &

(For Requester)

Dunner

901 New York Avenue, N.W. Washington, DC 20001-4413

In re Sandelman et al.

Ex Parte Reexamination Proceeding : DECISION

Control No. 90/014,071 : **ON**

Filed: January 19, 2018 : **PETITIONS**

For: U.S. Patent No.: 8,494,581

This decision addresses the following papers:

• Patent owner's May 7, 2018 petition entitled "Petition under 37 C.F.R. §§ 1.181(a)(3) and 1.182 to Vacate or Suspend the Reexamination Order", which is taken as a combined petition (patent owner's May 7, 2018 petition) including:

- a petition under 37 CFR 1.183 requesting waiver of the provisions of 37 CFR 1.540 (second sentence), and entry and consideration of patent owner's May 7, 2018 combined petition (patent owner's May 7, 2018 petition under 37 CFR 1.183 to waive the provisions of 37 CFR 1.540); and
- 2) a petition under 37 CFR 1.182 to stay, suspend, or consolidate the present reexamination proceeding with a copending *inter partes* review pursuant to 35 U.S.C. 315(d); and
- 3) a petition under 37 CFR 1.182 to vacate the order granting reexamination mailed on March 5, 2018 and to "terminate" reexamination on the basis that the requester is estopped from maintaining the present reexamination proceeding pursuant to 35 U.S.C. 315(e)(1) (patent owner's May 7, 2018 petition under 37 CFR 1.182 to vacate the order pursuant to the estoppel provisions of 35 U.S.C. 315(e)(1)); and
- 4) a petition under 37 CFR 1.182 to vacate the order granting reexamination mailed on March 5, 2018 and to "terminate" reexamination, i.e., issue an order denying reexamination, on the basis set forth in 35 U.S.C. 325(d) that the request is limited to the same or substantially the same prior art or arguments previously

presented to the Office (patent owner's March 5, 2018 petition under 37 CFR 1.182 to vacate the order on the basis set forth in 35 U.S.C. 325(d)); and

- Requester's May 31, 2018 opposition paper entitled "Requester's Reply under 37 C.F.R. § 1.535 to Patent Owner's Statement" (requester's May 31, 2018 opposition paper); and
- Patent owner's July 11, 2018 petition entitled "Petition under 37 C.F.R. § 1.59(b) to Expunge Requester's Reply", which is taken as a petition to expunge requester's May 31, 2018 opposition paper.

Patent owner's May 7, 2018 combined petition, requester's May 31, 2018 opposition paper, patent owner's July 11, 2018 petition, and the record as a whole, are before the Office of Patent Legal Administration for consideration.

SUMMARY

Reexamination of claims 18-19 and 24 based on Rappaport alone, and reexamination of claim 20 based on Rappaport in view of Khalessi, **is sua sponte withdrawn** in the present reexamination proceeding.

Patent owner's July 11, 2018 petition to expunge requester's May 31, 2018 opposition paper is dismissed.

Patent owner's May 7, 2018 petition under 37 CFR 1.183 requesting waiver of the provisions of 37 CFR 1.540 (second sentence) is **granted**. Patent owner's May 7, 2018 combined petition has been **entered and considered**.

The provisions set forth in the second sentence of 37 CFR 1.540 <u>are also waived with respect to requester's May 31, 2018 opposition paper</u>. Requester's May 31, 2018 opposition paper has been entered and considered.

Patent owner's May 7, 2018 petition under 37 CFR 1.182 to stay, suspend, or consolidate the present reexamination proceeding with a copending *inter partes* review pursuant to 35 U.S.C. 315(d) is <u>dismissed</u>.

Patent owner's May 7, 2018 petition under 37 CFR 1.182 to vacate the order and "terminate" reexamination pursuant to the estoppel provisions of 35 U.S.C. 315(e)(1) is **dismissed**.

Patent owner's May 7, 2018 petition under 37 CFR 1.182 to vacate the order granting reexamination mailed on March 5, 2018 and to "terminate" reexamination, i.e., issue an order denying reexamination, on the basis set forth in 35 U.S.C. 325(d) that the request is limited to the same or substantially the same prior art or arguments previously presented to the Office, is **dismissed**.

The March 5, 2018 order granting reexamination <u>will not be vacated</u>, since the order was proper at the time of mailing. Prosecution in the present reexamination proceeding <u>will continue in accordance with this decision</u>.

REVIEW OF THE RELEVANT FACTS

- On July 23, 2013, U.S. Patent No. 8,494,581 (the '581 patent) issued to Barbosa et al.
- On January 19, 2017, the third party requester, FedEx Corporation (FedEx), filed a petition for *inter partes* review of claims 1-24 of the '581 patent. With respect to claims 1-15, 18, 19, 21, 23, and 24, the petition was based on Rappaport¹. With respect to claim 16, the petition was based on Rappaport and DeLorme.² With respect to claims 17 and 22, the petition was based on Rappaport and Wright.³ With respect to claim 20, the petition was based on Rappaport and Khalessi.⁴ The *inter partes* review was assigned case number IPR2017-00729 (the '729 IPR).
- On July 25, 2017, the PTAB mailed a decision in the '729 IPR instituting *inter partes* review of claims 1-17 of the '581 patent, and denying institution with respect to claims 18-24 of the '581 patent. Specifically, *inter partes* review was instituted with respect to claims 1-15 based on Rappaport; with respect to claim 16 based on Rappaport and DeLorme, and with respect to claim 17 based on Rappaport and Wright. The PTAB held that the requester had not sufficiently shown that Rappaport teaches a "means for managing data collected at the field using the at least one handheld device responsive to the program" (i.e., a program that prompts the user to input data) as recited in independent claim 18. For this reason, institution was denied with respect to independent claim 18 and dependent claims 19-24 because the requester had not sufficiently shown a reasonable likelihood of prevailing on the grounds asserted (no RLP). With respect to claims 18-24, no further analysis of Rappaport or of any other reference (including DeLorme, Wright and Khalessi), and no further analysis of any other claim limitation, was made by the PTAB.
- On August 31, 2017, the same third party requester, FedEx, filed a second petition for *inter partes* review of claims 18-20 and 24 of the '581 patent. The petition was based on Brockman and Bernard with respect to claims 18-19 and 24, and Brockman, Bernard and Khalessi with respect to claim 20. The *inter partes* review was assigned case number IPR2017-02030 (the '2030 IPR).
- On January 19, 2018, the same third party requester, FedEx, filed a request for *ex parte* reexamination of claims 18-20 and 24 of the '581 patent. The reexamination proceeding was assigned control number 90/014,071 (the present reexamination proceeding) and was accorded a filing date of January 19, 2018.
- On February 20, 2018, the PTAB mailed a decision in the '2030 IPR, in which the PTAB exercised its discretion under 35 U.S.C. 314(a) to deny institution of *inter partes* review of claims 18-20 and 24 of the '581 patent. In summarizing its analysis of the factors used

¹ U.S. Patent No. 6,971,063 to Rappaport.

² U.S. Patent No. 6,321,158 to DeLorme.

³ U.S. Patent No. 5,857,201 to Wright.

⁴ U.S. Patent No. 6,633,900 to Khalessi.

when determining whether to exercise its discretion under 35 U.S.C. 314(a) as set forth in *General Plastic Indus. Co. v. Canon Kabushiki Kaisha*, Case IPR 2016-01357 (Paper No. 19) (PTAB Sept. 6, 2017) (*General Plastic*), the PTAB stated that "Petitioner used Patent Owner's preliminary response and our previous Decision on Institution in the 729 IPR as a 'roadmap' to modify the grounds asserted and the arguments made in the Petition."

- Also on February 20, 2018, a conference call attended by the parties to the '729 and '2030 IPRs was held at the PTAB, during which the patent owner sought authorization to file a motion to terminate the present reexamination proceeding pursuant to 35 U.S.C. 325(d).
- On February 22, 2018, the PTAB issued an order in the '729 and '2030 IPRs denying patent owner's request for authorization to file a motion to terminate the present reexamination proceeding pursuant to 35 U.S.C. 325(d), stating, *inter alia*, that the present reexamination proceeding involves prior art references (such as Brockman and Bernard) that are not at issue in the pending '729 inter partes review proceeding.
- On March 5, 2018, reexamination of claims 18-20 and 24 was ordered in the present reexamination proceeding.
- On May 7, 2018, the patent owner, Intellectual Ventures II LLC (IV), filed a combined petition in the present reexamination proceeding entitled "Petition under 37 C.F.R. §§ 1.181(a)(3) and 1.182 to Vacate or Suspend the Reexamination Order" (patent owner's May 7, 2018 combined petition).
- On May 10, 2018, the PTAB issued an order in the '729 IPR modifying the PTAB's July 25, 2017 Decision on Institution "to institute on all the challenged claims and all the grounds presented in the IPR2017-00729 Petition (Paper 2)," pursuant to the opinion of the Supreme Court of the United States (Supreme Court) in SAS Inst., Inc. v. Iancu, 138 S.Ct. 1348 (decided April 24, 2018).
- On May 31, 2018, the third party requester, FedEx, filed in the present reexamination proceeding, an opposition paper to patent owner's May 7, 2018 combined petition, entitled "Requester's Reply under 37 C.F.R. § 1.535 to Patent Owner's Statement" (requester's May 31, 2018 opposition paper).
- On July 11, 2018, the patent owner filed, in the present reexamination proceeding, a petition entitled "Petition under 37 C.F.R. § 1.59(b) to Expunge Requester's Reply", which is taken as a petition under 37 CFR 1.181 to expunge requester's May 31, 2018 opposition paper.
- On July 20, 2018, the PTAB issued a final written decision pursuant to 35 U.S.C. 318(a) in the '729 IPR, in which the PTAB held that claims 1-17 of the '581 patent are unpatentable, and that claims 18-24 of the '581 patent were not shown to be unpatentable.

- On September 20, 2018, the patent owner filed a notice of appeal from the PTAB's July 20, 2018 final written decision in the '729 IPR to the United States Court of Appeals for the Federal Circuit (CAFC).
- Also on September 20, 2018, the third party requester, FedEx, filed a notice of appeal from the PTAB's July 20, 2018 final written decision in the '729 IPR to the CAFC.

DECISION

I. Reexamination of Claims 18-19 and 24 Based on Rappaport alone, and Reexamination of Claim 20 Based on Rappaport and Khalessi, Is Sua Sponte Withdrawn

As an initial matter, the requester requests reexamination of claims 18-20 and 24 of the '581 patent in the present reexamination proceeding over a variety of separate grounds, including:

- Reexamination of claims 18-19 and 24 over Rappaport alone; and
- Reexamination of claim 20 over Rappaport in view of Khalessi.

The Office, however, will not revisit, in a reexamination proceeding, a challenge to the same claims based on the same grounds in the absence of a sufficient showing that the proposed grounds are "being presented in a new light, or a different way, as compared with its use in an earlier examination [or review], in view of a material new argument or interpretation presented in the request". See MPEP 2216 and, particularly, MPEP 2242, subsection II.A.

The requester argues, in the present request for reexamination, that Rappaport is presented in "a new light and a different way" as compared with its use in the '729 IPR because the "teachings of Rappaport and the related arguments made in this Request were not considered by the Office during prosecution of the '581 patent or during the Board's review of Requester's IPR petition."

In the '729 IPR, however, the PTAB ultimately considered the teachings of Rappaport in detail with respect to the limitations of independent claim 18 of the '581 patent.⁶ In the '729 IPR, all claims (1-24) of the '581 patent were requested to be reviewed, including claims 18-20 and 24. With respect to claims 18, 19, and 24, the requester proposed rejections in the '729 IPR based on

means for establishing a two-way communication channel between a server and at least one handheld device located at a field geographically distant from the server;

means for accessing a program stored at the server to enable an assessment at the field using the at least one handheld device;

means for managing data collected at the field using the at least one handheld device responsive to a program;

means for determining a geographic location of the at least one handheld device; and means for enabling communicating [sic] the data collected at the field and the geographic location of the at least one handheld device between the at least one handheld device and other devices or the server.

⁵ See page 20 of the present request.

⁶ Claim 18 recites (the limitation at issue is highlighted in bold):

^{18.} An apparatus, comprising:

the Rappaport reference alone. With respect to claim 20, the requester proposed a rejection in the '729 IPR based on Rappaport in view of Khalessi.

The PTAB initially determined in the '729 IPR that the requester had not sufficiently shown that Rappaport teaches a "means for managing data collected at the field using the at least one handheld device responsive to the program" as recited in independent claim 18. For this reason, institution was denied with respect to independent claim 18 and dependent claims 19-24.

After institution was denied in the '729 IPR, the requester filed the present request for reexamination. Reexamination was ordered on March 5, 2018.

The PTAB subsequently issued an order in the '729 IPR modifying its earlier decision on institution, and deciding "to institute on all the challenged claims and all the grounds presented in the IPR2017-00729 Petition (Paper 2)," pursuant to the opinion of the Supreme Court of the United States (Supreme Court) in SAS Inst., Inc. v. Iancu, 138 S.Ct. 1348 (decided April, 24, 2018).

The final written decision in the '729 IPR, which issued on July 20, 2018, included an analysis not only of claims 1-17 of the '581 patent, but also of claims 18-24. In its final written decision, the PTAB determined that "Petitioner has not provided persuasive contentions identifying in Rappaport teachings for the 'means for managing data collected at the field using the at least one handheld device responsive to the program,' as recited in claim 18." Regarding dependent claims 19-24, the PTAB stated that "Petitioner does not provide for these claims any argument or evidence overcoming the deficiency noted . . . for claim 18." For these reasons, the PTAB held that claims 18-19 and 24 were not sufficiently shown to be unpatentable over Rappaport, and that claim 20 was not sufficiently shown to be unpatentable over Rappaport in view of Khalessi. Both parties filed separate notices of appeal from the PTAB's July 20, 2018 final written decision to the CAFC.

The Office, therefore, has already fully considered and rendered a decision on the patentability of claims 18-19 and 24 based on Rappaport alone, and on the patentability of claim 20 based on Rappaport in view of Khalessi.

Furthermore, the record does not show that the Rappaport reference, alone, is presented in the present request in a new light, or a different way, as compared to its presentation in the '729 IPR with respect to claims 18-20 and 24 of the patent. The record also does not show that, with respect to claim 20, the proposed ground of Rappaport in view of Khalessi has been presented in a new light, or a different way, as compared to its presentation in the '729 IPR.

For example, the requester states in the present request that "*Rappaport* is at least viewed in a new light and in a different way" when it is "considered in view of the **proper** construction of the '581 patent claim term 'means for managing data collected at the field using the at least one

⁷ See Fedex Corporation v. Intellectual Ventures II, LLC, IPR2017-00729 (the '729 IPR), Paper No. 41 (PTAB July 20, 2018).

⁸ *Id.*, page 46.

⁹ *Id.*, page 47; see also pages 62-63.

handheld device responsive to program" as recited in independent claim 18 (emphasis in bold added). However, if the requester believes that the construction of this claim term as applied by the PTAB in the '729 IPR is improper, or otherwise disagrees with the PTAB's claim construction, the requester has the opportunity to raise that issue in its appeal to the CAFC of the PTAB's final written decision.

Furthermore, the requester states that Rappaport teaches that "the handheld-executed program may 'prompt the user for input of data related to the problem'." The requester argues that, contrary to the Board's findings in the '729 IPR, Rappaport discloses this feature, pointing to various specific locations that are purportedly in the Rappaport reference. The specific teachings relied upon by the requester to disclose this feature, however, cannot be found in the Rappaport reference. Page 12

For these reasons, the record does not sufficiently show that the teachings of Rappaport, alone, with respect to claims 18-19 and 24, or the teachings of Rappaport and Khalessi, with respect to claim 20, are presented in the request in a new light or a different way, as compared with their presentation in an earlier examination or review, in view of a material new argument or interpretation presented in the request.

Accordingly, reexamination of claims 18-19 and 24 based on Rappaport alone, and reexamination of claim 20 based on Rappaport in view of Khalessi, is *sua sponte* withdrawn.

II. Requester's May 31, 2018 Opposition Paper

Requester's May 31, 2018 paper is entitled "Requester's Reply under 37 C.F.R. § 1.535 to Patent Owner's Statement" (requester's May 31, 2018 opposition paper). The patent owner, however, filed a petition, not a patent owner's statement. Patent owner's combined petition is not directed to why the patent claims are believed to be patentable, which is a requirement of a patent owner's statement. See MPEP 2249. Furthermore, patent owner's May 7, 2018 combined petition is primarily directed to issues involving 35 U.S.C. 325(d), which is outside the scope of a patent owner's statement.

Patent owner's May 7, 2018 combined petition requests the Office to vacate the order granting reexamination and "terminate" the reexamination proceeding based on several separate statutory grounds. The requester is permitted to file a paper in opposition to patent owner's present combined petition to vacate the order, in the same manner that the requester is permitted to file a

¹⁰ See page 20 of the request.

¹¹ See page 44 of the request.

¹² Rather, these teachings are found in the Brockman reference at locations corresponding to the reference numbers provided on page 44 of the request, also as pointed out by the patent owner on page 19 of its present petition. For this reason, the reference to Rappaport in the first full paragraph of page 44 of the request appears to be in error.

¹³ See page 1 of patent owner's May 7, 2018 combined petition, which states: "This Petition is being filed in lieu of a Patent Owner's Statement under 37 C.F.R. § 1.530 because it raises issues outside the scope of a Patent Owner's Statement."

¹⁴ MPEP 2249 states: "Any [patent owner] statement filed must clearly point out why the patent claims are believed to be patentable, considering the cited prior art patents or printed publications alone or in any reasonable combination."

paper in opposition to a petition to vacate the order on the basis that the order is an *ultra vires* action on the part of the Office. See, e.g., MPEP 2246, subsection II. Requester's May 31, 2018 paper is solely directed to opposing patent owner's petition to vacate the order, and does not include arguments regarding the unpatentability of the claims.

For this reason, requester's May 31, 2018 paper is taken as a paper filed in opposition to patent owner's May 7, 2018 combined petition, and has a right of entry.

III. Patent Owner's July 11, 2018 Petition to Expunge

The patent owner requests the Office to expunge requester's May 31, 2018 paper, entitled "Requester's Reply under 37 C.F.R. § 1.535 to Patent Owner's Statement."

Requester's May 31, 2018 paper, however, is taken as a paper opposing patent owner's May 7, 2018 combined petition, as discussed immediately above. As a consequence, patent owner's July 11, 2018 petition entitled "Petition under 37 C.F.R. § 1.59(b) to Expunge Requester's Reply" is taken as a petition to expunge requester's May 31, 2018 opposition paper.

Requester's May 31, 2018 opposition paper, however, has a right of entry, also as discussed immediately above. For this reason, patent owner's July 11, 2018 petition to expunge is **dismissed**.

IV. Patent Owner's May 7, 2018 Combined Petition

Reexamination of claims 18-19 and 24 based on Rappaport alone, and reexamination of claim 20 based on Rappaport in view of Khalessi, is withdrawn, as discussed above in section I of this decision. The remainder of this decision is directed to patent owner's combined petition, specifically with respect to the remaining grounds of rejection raised in the present request for reexamination.

The patent owner requests the Office to vacate the March 5, 2018 order for reexamination and to "terminate" reexamination, i.e., issue an order denying reexamination, and asserts several separate statutory grounds on which, the patent owner argues, the Office should do so. As a result, the present petition is taken as a combined petition including:

- A. a petition under 37 CFR 1.183 requesting waiver of 37 CFR 1.540, and entry and consideration of patent owner's May 7, 2018 combined petition (patent owner's May 7, 2018 petition under 37 CFR 1.183 to waive the provisions of 37 CFR 1.540); and
- B. a petition under 37 CFR 1.182 to stay, suspend, or consolidate the present reexamination proceeding with a copending inter partes review pursuant to 35 U.S.C. 315(d); and
- C. a petition under 37 CFR 1.182 to vacate the order granting reexamination mailed on March 5, 2018 and to "terminate" reexamination on the basis that the requester is estopped from maintaining the present reexamination proceeding pursuant to 35 U.S.C.

- 315(e)(1) (patent owner's May 7, 2018 petition under 37 CFR 1.182 to vacate the order pursuant to the estoppel provisions of 35 U.S.C. 315(e)(1)); and
- D. a petition under 37 CFR 1.182 to vacate the order granting reexamination mailed on March 5, 2018 and to "terminate reexamination, i.e., issue an order denying reexamination, on the basis set forth in 35 U.S.C. 325(d) that the request is limited to the same or substantially the same prior art or arguments previously presented to the Office (patent owner's May 7, 2018 petition under 37 CFR 1.182 to vacate the order).

A. Patent Owner's May 7, 2018 Petition under 37 CFR 1.183 to Waive the Provisions of 37 CFR 1.540

Patent owner's May 7, 2018 petition under 37 CFR 1.183 is taken as a petition to waive the provisions of 37 CFR 1.540 and enter and consider patent owner's May 7, 2018 combined petition prior to the issuance of a non-final action on the merits. 37 CFR 1.540 provides, in pertinent part:

No submissions other than the statement pursuant to $\S 1.530$ and the reply by the *ex parte* reexamination requester pursuant to $\S 1.535$ will be considered prior to examination.

In view of the specific facts and circumstances of the present case, patent owner's petition under 37 CFR 1.183 is **granted**. The provisions set forth in the second sentence of 37 CFR 1.540 are **hereby waived**. Patent owner's May 7, 2018 combined petition **has been entered and considered**.

The provisions set forth in the second sentence of 37 CFR 1.540 <u>are also waived with respect</u> to requester's May 31, 2018 opposition paper. Requester's May 31, 2018 opposition paper has been entered and considered.

B. Patent Owner's May 7, 2018 Petition under 37 CFR 1.182 to Stay, Suspend or Consolidate the Present Proceeding with a Copending *Inter Partes* Review pursuant to 35 U.S.C. 315(d)

The patent owner requests the Office to stay, suspend, or consolidate the present proceeding with the '729 IPR, pursuant to 35 U.S.C. 315(d).¹⁵

The PTAB, however, issued a final written decision in the '729 IPR on July 20, 2018. In view of the issuance of the final written decision, ¹⁶ patent owner's May 7, 2018 petition under 37 CFR 1.182 to stay, suspend or consolidate the present proceeding with the '729 IPR is **dismissed**.

¹⁵ 35 U.S.C. 315(d) provides, in relevant part:

⁽d) MULTIPLE PROCEEDINGS.—Notwithstanding . . . chapter 30, during the pendency of an inter partes review, if another proceeding or matter involving the patent is before the Office, the Director may determine the manner in which the inter partes review or other proceeding or matter may proceed, including providing for stay, transfer, consolidation, or termination of any such matter or proceeding.

C. Patent Owner's May 7, 2018 Petition under 37 CFR 1.182 to Vacate the Order and "Terminate" Reexamination on the Basis that the Requester is Estopped from Maintaining the Present Proceeding Pursuant to 35 U.S.C. 315(e)(1)

The patent owner argues that the Office must vacate the order in the present proceeding and "terminate" the reexamination on the basis that the requester is estopped from maintaining the present proceeding pursuant to 35 U.S.C. 315(e)(1). Pecifically, the patent owner argues that "a final written decision on claims 18-24 in the '729 IPR . . . render[s] FedEx [the requester] estopped from maintaining the '071 Reexam."

In the present case, however, the reexamination was ordered on March 5, 2018, *before* the PTAB issued its final written decision on July 20, 2018.

Once reexamination is ordered, it is the Office, not the requester, who maintains the reexamination proceeding. There is nothing in the language of 35 U.S.C. 315(e)(1) that would estop *the Office* from maintaining the present reexamination proceeding. See MPEP 2210, which expressly states (emphasis in bold added):

The estoppel provisions of AIA 35 U.S.C. 315(e)(1) or 35 U.S.C. 325(e)(1) are based on *inter partes* review and post grant review, respectively, and they only prohibit the filing of a subsequent request for *ex parte* reexamination, once estoppel attaches; there is no estoppel as to the Office maintaining an existing *ex parte* reexamination proceeding.

Accordingly, patent owner's May 7, 2018 petition under 37 CFR 1.182 to vacate the order and "terminate" reexamination on the basis that the requester is estopped from maintaining the present reexamination proceeding is <u>dismissed</u>.

D. Patent Owner's May 7, 2018 Petition under 37 CFR 1.182 to Vacate the Order and "Terminate" Reexamination on the Basis Set Forth in 35 U.S.C. 325(d)

The patent owner requests the Office to vacate the order granting reexamination mailed on March 5, 2018 and to "terminate" reexamination, i.e., issue an order denying reexamination, on the basis set forth in 35 U.S.C. 325(d) that the present request is limited to the same or substantially the same prior art or arguments previously presented to the Office.

¹⁶ The Office also notes that both the patent owner and the requester have filed separate notices of appeal from the PTAB's July 20, 2018 final written decision to the CAFC.

¹⁷ 35 U.S.C. 315(e)(1) provides (emphasis added):

⁽e) ESTOPPEL.—

⁽¹⁾ PROCEEDINGS BEFORE THE OFFICE.—The petitioner in an inter partes review of a claim in a patent under this chapter that results in a final written decision under section 318(a), or the real party in interest or privy of the petitioner, may not request or maintain a proceeding before the Office with respect to that claim on any ground that the petitioner raised or reasonably could have raised during that inter partes review.

¹⁸ See the present petition, page 24.

The present petition, however, was not filed until May 7, 2018, *after* the order granting reexamination was mailed on March 5, 2018. 35 U.S.C. 325(d) provides the Office with the discretion to "reject" a request for reexamination *prior to* the order. It does not, however, provide the Office with the discretion to terminate an ongoing reexamination proceeding on the basis set forth in 35 U.S.C. 325(d) if no petition requesting such relief is filed until *after* reexamination has been ordered. ¹⁹

35 U.S.C. 325(d) provides, in pertinent part (emphasis added):

In determining whether to ... order a proceeding under ... chapter 30, ... the Director may take into account whether, and reject the ... request because, the same or substantially the same prior art or arguments previously were presented to the Office.

As an initial matter, the provisions of 35 U.S.C. 325(d) are *discretionary*, not mandatory. The statute states that "the Director **may** take into account whether, and reject the . . . request because . . ." The statute does not require the Director to make a determination whether to reject a request for *ex parte* reexamination pursuant to 35 U.S.C. 325(d).

The provisions of 35 U.S.C. 325(d) clearly refer to the determination whether to order a reexamination proceeding or whether to reject the request, which occurs *prior* to the order. In addition, 35 U.S.C. 305 *requires* the Office to conduct reexamination *once the order has been issued* pursuant to 35 U.S.C. 304. See 35 U.S.C. 305, which provides, in pertinent part:

After the times for filing the statement and reply provided for by section 304 have expired, **reexamination will be conducted** . . .

Therefore, once an order granting reexamination has issued, the Office is required to conduct reexamination pursuant to 35 U.S.C. 305.

In summary, pursuant to provisions of 35 U.S.C. 304, 305, and 325(d), the Office does not have the discretion to terminate an ongoing reexamination on the basis set forth in 35 U.S.C. 325(d) if no petition requesting such relief is filed until *after* reexamination has been ordered. For these reasons, the *discretionary* determination by the Office under 35 U.S.C. 325(d) whether to reject the request is not petitionable once the order granting reexamination has issued.²⁰

¹⁹ In two unrelated reexamination proceedings, the Office stated that a petition requesting the Office to exercise its discretion under 35 U.S.C. 325(d) and "reject" the request, which was filed prior to the order granting or denying reexamination, was "not timely filed"; and that such a petition, if filed after the order granting reexamination, would be "timely". See the petition decisions mailed on November 28, 2016 in *ex parte* reexamination proceeding control nos. 90/013,809 and 90/013,808, respectively. These statements were in error, and have not been followed. See, *e.g.*, the petition decisions in *ex parte* reexamination proceeding control nos. 90/013,811; 90/013,812; and 90/013,813, which were mailed on March 27, 2017, well before the present petition was filed.

²⁰ In contrast, a petition requesting the Office to vacate an order granting reexamination on the basis that the request does not raise a substantial new question of patentability may be entertained by the Office after the order has issued. The basis for such a petition is that, because no substantial new question of patentability is raised by the request, the Office was not authorized under 35 U.S.C. 304 to order reexamination, i.e., the issuance of the order was an *ultra vires* action on the part of the Office.

For all of the reasons discussed above, a petition limited to issues involving 35 U.S.C. 325(d) must be filed before an order for reexamination has issued in order to be considered. Because the petition is filed before the order, the petition must be limited to issues involving 35 U.S.C. 325(d), and must not involve any other issues. The petition should also request waiver under 37 CFR 1.183 of the provisions of 37 CFR 1.530(a) and the second sentence of 37 CFR 1.540, on the basis that the petition is limited to issues involving 35 U.S.C. 325(d).

Accordingly, patent owner's May 7, 2018 petition under 37 CFR 1.182 to vacate the order granting reexamination mailed on March 5, 2018 and to "terminate" reexamination, i.e., issue an order denying reexamination, on the basis set forth in 35 U.S.C. 325(d) that the request is limited to the same or substantially the same prior art or arguments previously presented to the Office, is **dismissed**.

In view of the specific facts and circumstances of the present case, however, the Office provides additional comments below in order to clarify Office policy.

V. Clarification of Office Policy

35 U.S.C. 304 requires the Office to issue an order granting reexamination in an *ex parte* reexamination proceeding if the Office determines that a substantial new question of patentability affecting any claim of the patent is raised by the reexamination request.
35 U.S.C. 325(d), however, was promulgated after the enactment of 35 U.S.C. 304. It is a rule of statutory construction that, where possible, statutory provisions should not be construed to conflict. See *La. Pub. Serv. Comm'n v. FCC*, 476 U.S. 355, 370 (1986); *Washington Market Co. v. Hoffman*, 101 U.S. 112 (1879). For this reason, the Office considers the provisions of 35 U.S.C. 325(d), taken together with the provisions of 35 U.S.C. 304, as permitting the Office to exercise its discretion and issue an order denying reexamination on the basis that the same or substantially the same prior art or arguments previously were presented to the Office, even if a substantial new question of patentability is determined to be raised by the request.

When determining whether to order reexamination, the Office reviews the provisions of 35 U.S.C. 325(d) in addition to all other applicable statutes. There is no requirement for a requester in an *ex parte* reexamination proceeding to specifically address the provisions of 35 U.S.C. 325(d) in the request. There is also no requirement for the examiner to discuss, in an order granting reexamination, why the Office did not exercise its discretion pursuant 35 U.S.C. 325(d) and "reject" the request.

When drafting an order or an Office action, the Office generally refers only to those statutes that the Office finds necessary to discuss in that order or Office action. For example, the issuance of an Office action that only includes rejections under 35 U.S.C. 103 does not mean that the provisions of 35 U.S.C. 102 were not also considered. Similarly, the issuance of an order that refers only to 35 U.S.C. 303 and 35 U.S.C. 304 does not mean that the provisions of 35 U.S.C. 301, 35 U.S.C. 302, and 35 U.S.C. 325(d) were not also considered.

In the present case, the Office reviewed the provisions of 35 U.S.C. 325(d) in addition to the provisions of all other applicable statutes when determining whether to order reexamination.

The Office, in its discretion, determined not to reject the request under 35 U.S.C. 325(d). Instead, reexamination was ordered on March 5, 2018.

VI. As an Alternate Basis for Dismissal, Patent Owner's May 7, 2018 Petition Would Have Been Dismissed with Respect to the Remaining Grounds, Even If Timely Filed, in View of the Prior Art and Arguments Presented in the Request for Reexamination

Reexamination of claims 18-19 and 24 based on Rappaport alone, and reexamination of claim 20 based on Rappaport in view of Khalessi, is withdrawn, as discussed above. The remaining grounds proposed in the present request are:

- Reexamination of claims 18-19 and 24 over Brockman and Bernard; and
- Reexamination of claim 20 over Brockman, Bernard and Khalessi

The patent owner asserts, in its present petition, that the Brockman, Bernard, and Khalessi references, and the arguments presented in the request for reexamination with respect to those references, are substantially the same as those previously presented to the Office. The patent owner provides a detailed discussion explaining why the patent owner believes that these references, and the arguments presented in the request for reexamination with respect to these references, are substantially the same prior art and arguments that were presented in the '729 and '2030 IPR petitions.²¹

The record shows, however, that the Brockman, Bernard, and Khalessi references were not specifically analyzed by the PTAB, in either the '729 or the '2030 IPRs, with respect to the limitations recited in claims 18-20 and 24 of the '581 patent, as explained in detail below. The teachings of these references present evidence of unpatentability that was not previously evaluated by the Office.

A. The Determinations by the PTAB in Previous IPRs with Respect to Claims 18-20 and 24

Claims 18-20 and 24 of the '581 patent were challenged by the requester in two previous petitions for *inter partes* review: i) the '729 IPR, filed on January 19, 2017; and ii) the '2030 IPR, filed on August 31, 2017.

1. The '729 IPR

The Brockman and Bernard references were not raised in the '729 IPR.²² The Khalessi reference was raised in the '729 IPR as a secondary reference with respect to dependent claim 20, as discussed in section I of this decision. The PTAB found, however, with respect to the dependent claims including claim 20, that "Petitioner does not provide for these claims any argument or

²¹ See pages 6-14 of the present petition.

²² A more detailed discussion of the '729 IPR proceeding is provided in Section I, above.

evidence overcoming the deficiency noted . . . for claim 18 [with respect to the primary reference, Rappaport]."²³ No specific analysis of the Khalessi reference was made by the PTAB.

2. The '2030 IPR

In the '2030 IPR, claims 18-20 and 24 of the '581 patent were requested to be reviewed, which are the same claims requested to be reexamined in the present proceeding. With respect to claims 18, 19, and 24, the requester proposed rejections in the '2030 IPR based on Brockman and Bernard. With respect to claim 20, the requester proposed a rejection in the '2030 IPR based on Brockman, Bernard and Khalessi.

The PTAB denied institution on February 20, 2018 as to all of the challenged claims, pursuant to 35 U.S.C. 314(a). In making its determination not to institute *inter partes* review, the PTAB applied factors relevant to its determination under 35 U.S.C. 314(a) as set forth in *General Plastic Industrial Co. v Canon Kabushiki Kaisha*, IPR2016-01357, Paper No. 19 (PTAB September 6, 2017). The Brockman, Bernard, and Khalessi references were not analyzed on the merits by the PTAB.

B. The Remaining Grounds Were Not Analyzed on the Merits by the PTAB

In summary, the record shows that the Brockman, Bernard, and Khalessi references were not specifically analyzed on the merits by the PTAB, in either the '729 or the '2030 IPRs, with respect to the limitations recited in claims 18-20 and 24 of the '581 patent.

In fact, the PTAB issued an order on February 22, 2018 in the '729 and '2030 IPRs, denying patent owner's request for authorization to file a motion to terminate the present reexamination proceeding pursuant to 35 U.S.C. 325(d), stating, *inter alia*, that the present reexamination proceeding involves prior art references, such as Brockman and Bernard, that are not at issue in the pending '729 *inter partes* review proceeding.

C. The Office Balances the Protection of the Patent Owner Against Harassment with the Public Interest in Ensuring the Validity of Patent Claims

When determining whether to exercise its discretion under 35 U.S.C. 325(d) in an *ex parte* reexamination proceeding, the Office reviews the entire record of the patent requested to be reexamined, including the original prosecution of the patent and any post grant Office proceedings involving the patent, including reexamination proceedings, reissue applications, and PTAB trial proceedings such as *inter partes* reviews. The Office balances the protection of the patent owner against harassment with the public interest in ensuring the validity of patent claims.²⁴

²³ See Fedex Corporation v. Intellectual Ventures II, LLC, IPR2017-00729 (the '729 IPR), Paper No. 41 (PTAB July 20, 2018), page 47; see also pages 62-63.

²⁴ See, e.g., *In re Etter*, 225 USPQ 1 (Fed. Cir. 1985), in which the Federal Circuit, when discussing whether the § 282 presumption of validity has application in reexamination proceedings, stated: "Reexamination is thus neutral, the patentee and the public having an equal interest in the issuance and maintenance of valid patents."

As evidence of harassment by the requester, the patent owner points to the two previous *inter* partes reviews filed by the requester. In the first IPR, the '729 IPR, the PTAB determined that the requester had not sufficiently shown that the Rappaport reference teaches one of the limitations recited in independent claim 18: "means for managing data collected at the field using the at least one handheld device responsive to a program." In the second IPR, the '2030 IPR, the requester newly raised the Brockman and Bernard references, arguing, *inter alia*, that the combination of these references teach all the limitations of independent claim 18, including the limitation "means for managing data collected at the field using the at least one handheld device responsive to program." The PTAB denied institution pursuant to 35 U.S.C. 314(a). The Brockman and Bernard references, which are raised in the present reexamination proceeding with respect to claim 18, were not analyzed on the merits by the PTAB.

35 U.S.C. 314(a), however, does not apply to reexamination proceedings. In addition, the remaining grounds raised in the present request for reexamination, involving the Brockman, Bernard, and Khalessi references, were not previously evaluated by the Office. Furthermore, this is not a case where the requester's previous challenges to the '581 patent claims have been unsuccessful. In its final written decision in the '729 IPR, the PTAB held that the requester had sufficiently shown that claims 1-17 of the '581 patent are unpatentable. For these reasons, the prosecution history of the two previous IPRs, alone, do not provide sufficient evidence that the present request for reexamination was filed for the purposes of harassment.

The patent owner also argues that several misstatements made by the requester in the request are further evidence of harassment. In the present request, the requester attributed several teachings to Rappaport, when these teachings, in fact, are disclosed in the Brockman reference, not in the Rappaport reference.²⁵ The patent owner has provided no evidence, however, that these misstatements were made for the purposes of harassment. Rather, these misstatements appear to have been made in error.

For all of these reasons, there is insufficient evidence in the record of harassment, such that this evidence would outweigh the interests of the public in maintaining valid patent claims.

D. The Office Reviewed the Record and Declined to Exercise its Discretion under 35 U.S.C. 325(d)

The patent owner quotes the legislative history of 35 U.S.C. 325(d)²⁶ to show that previous *inter* partes review proceedings should be considered when deciding whether to order an ex parte reexamination of a patent:²⁷

The Office has generally declined to apply estoppel . . . to an issue that is raised in a request for inter partes reexamination if the request was not granted with respect to that issue. Under section 325(d), second sentence, however, the Office could nevertheless refuse a subsequent request for ex parte reexamination with respect to such an issue,

²⁵ See page 44 of the request.

²⁶ See page 5 of the present petition.

²⁷ 157 Cong. Rec. S1376 (daily ed. March 8, 2011) (statement of Sen. Kyl).

even if it raises a substantial new question of patentability, because the issue previously was presented to the Office in the petition for inter partes or post-grant review.

The patent owner correctly points out that these statements in the legislative history show that the provisions of 35 U.S.C. 325(d) are intended to provide discretion to the Office to deny a request for *ex parte* reexamination pursuant to 35 U.S.C. 325(d), even when the Office has determined that a substantial new question of patentability exits.

These statements in the legislative history of 35 U.S.C. 325(d), however, *specifically* show that the provisions set forth in the second sentence of 35 U.S.C. 325(d) apply to reexaminations because Congress intended to provide the Office with the option to reject a request for *ex parte* reexamination *in the particular case where* an issue raised in the request was previously raised, for example, in an earlier-filed request for reexamination or petition for *inter partes* review, and reexamination was not ordered, or review was not instituted, with respect to that issue.

The patent owner may argue that the present case is one which the second sentence of 35 U.S.C. 325(d) is designed to address, i.e., the request in the present case proposes a rejection of claim 18-19 and 24 based on Brockman and Bernard, and a rejection of claim 20 based on Brockman, Bernard, and Khalessi, and these rejections were also proposed in a previous *inter partes* review (the '2030 IPR), but review was not instituted with respect to those claims.

The provisions of 35 U.S.C. 325(d), however, are discretionary, not mandatory. The statute states that "the Director may take into account whether, and reject the . . . request because . . ." (emphasis added). The statute does not require the Director to reject a request for ex parte reexamination. Even if the prior art and/or arguments presented in the request are considered to be substantially the same as the prior art and arguments presented in the '2030 IPR, the Office is not required to reject the request under 35 U.S.C. 325(d), particularly where, as here, the prior art, i.e., Brockman, Bernard, and Khalessi, and the arguments related to that prior art, were not previously evaluated by the Office.

In the present case, the Office carefully reviewed the record, and declined to exercise its discretion and reject the request under 35 U.S.C. 325(d) in the present reexamination proceeding.

The patent owner further argues that the PTAB has, in the past, exercised its discretion to terminate reexamination proceedings pursuant to 35 U.S.C. 325(d), citing *Ariosa Diagnostics, Inc. v. Illumina, Inc.*, IPR2014-01093, Paper 81 (PTAB May 24, 2016); *Ariosa Diagnostics, Inc. v. Verinata Health, Inc.*, IPR2013-00276 and IPR2013-00277, Paper 63 (PTAB May 24, 2016). In the present case, however, the PTAB issued an order on February 22, 2018 in the '729 and '2030 IPRs, denying patent owner's request to file a motion to terminate the present reexamination proceeding pursuant to 35 U.S.C. 325(d), stating, *inter alia*, that the present reexamination proceeding involves prior art references, such as Brockman and Bernard, that are not at issue in the pending *inter partes* review proceeding.

²⁸ See pages 5 and 6 of the present petition.

For all of the reasons discussed above, patent owner's May 7, 2018 petition would have been dismissed with respect to the remaining grounds, even if timely filed, in view of the prior art and arguments presented in the request for reexamination.

VII. The Determination by the Office Not to Exercise its Discretion under 35 U.S.C. 325(d) in the Present Proceeding is Not Inconsistent with Inter Partes Review Practice

The patent owner argues that the Office's determination not to exercise its discretion under 35 U.S.C. 325(d) in the present *ex parte* reexamination proceeding is inconsistent with *inter partes* review practice. Specifically, the patent owner states that the present request for reexamination includes arguments that are "identical" to arguments included in the petition filed in the '2030 IPR.³⁰

The determination by the Office not to exercise is discretion under 35 U.S.C. 325(d) in the present *ex parte* reexamination proceeding, however, is not inconsistent with *inter partes* review practice.

In fact, the PTAB issued an order on February 22, 2018 in the '729 and '2030 IPRs, denying patent owner's request to file a motion to terminate the present reexamination proceeding pursuant to 35 U.S.C. 325(d), stating, *inter alia*, that the present reexamination proceeding involves prior art references, such as Brockman and Bernard, that are not at issue in the pending '729 *inter partes* review proceeding, as previously discussed.

Furthermore, the Patent Trial and Appeals Board (PTAB) denied review in the '2030 IPR, pursuant to its discretion under 35 U.S.C. 314(a), not 35 U.S.C. 325(d). 35 U.S.C. 314(a) does not apply to *ex parte* reexamination proceedings.

When determining whether to institute *inter partes* review, the PTAB may apply factors relevant to its determination under 35 U.S.C. 314(a) *in addition to* analyzing whether the same or substantially the same prior art or arguments previously were presented to the Office pursuant to 35 U.S.C. 325(d). See the PTAB's precedential opinion in *General Plastic Industrial Co. v*

²⁹ See paragraph bridging pages 14 and 15 of the present petition.

³⁰ The patent owner also argues that the Administrative Procedures Act (APA) "compels" the Director to "dismiss this reexamination in view of General Plastic and under § 325(d)", i.e., to vacate the order and issue an order denying reexamination. The APA, however, applies to final agency actions. An order for reexamination is not a final agency action. Furthermore, the Federal Circuit has expressly held that the Office's denial of a petition to terminate an ongoing reexamination proceeding does not constitute a final agency action within the meaning of 5 U.S.C. 704 of the APA. See Automated Merchandising Systems, Inc. v. Lee, 782 F.3d 1376 (CAFC 2015). While Automated Merchandising Systems involved an inter partes (rather than an ex parte) reexamination proceeding, the Federal Circuit's reasoning equally applies to a decision dismissing a petition to terminate an ex parte reexamination proceeding. In determining that a denial of a petition to terminate an ongoing reexamination proceeding was not a final agency action, the Federal Circuit reasoned that "[a]n ultimate merits determination regarding the validity of any of the patent claims at issue has not yet been reached . . . [t]he reexaminations could end with decisions in [patent owner's] favor . . . [t]he PTO's refusal to terminate simply permits each reexamination to reach such a final disposition—nothing more. . . [and that] [a]ny loss of patent rights for the patents at issue will not occur until completion of the relevant reexamination." For the same reasons, the Office's dismissal of patent owner's present petition to terminate the ongoing reexamination proceeding in the present case is not a final agency action, pursuant to Automated Merchandising Systems.

Canon Kabushiki Kaisha, IPR2016-01357, Paper No. 19 (PTAB September 6, 2017). The present proceeding, however, is an *ex parte* reexamination proceeding, not an *inter partes* review. 35 U.S.C. 314(a) governs the institution of *inter partes* review, and does not apply to *ex parte* reexamination proceedings.

In General Plastic, the PTAB stated (citations omitted) (emphasis added):³¹

The Director has discretion to institute an *inter partes* review under 35 U.S.C. § 314(a) . . . The Board consistently has considered a number of factors in determining whether to exercise that discretion . . . To reiterate, those factors are as follows:

- 1. Whether the same petitioner previously filed a petition directed to the same claims of the same patent;
- 2. Whether at the time of filing of the first petition, the petitioner knew of the prior art asserted in the second petition or should have known of it;
- 3. Whether at the time of filing the second petition, the petitioner already received the patent owner's preliminary response to the first petition or received the Board's decision on whether to institute review in the first petition;
- 4. The length of time that elapsed between the time the petitioner learned of the prior art asserted in the second petition and the filing of the second petition;
- 5. Whether the petitioner provides adequate explanation for the time elapsed between the filings of multiple petitions directed to the same claims of the same patent;
- 6. The finite resources of the Board; and
- 7. The requirement under 35 U.S.C. § 316(a)(11) to issue a final determination not later than 1 year after the date on which the Director notices institution of review.

The PTAB further stated: 32

[T]he factors set forth above . . . serve to act as a baseline of factors to be considered in our future evaluation of follow-on petitions.

When determining whether to exercise its discretion under 35 U.S.C. 314(a) in an *inter partes* review proceeding, the PTAB may evaluate the factors identified above. The PTAB may also separately perform an analysis pursuant to 35 U.S.C. 325(d), where appropriate. An analysis pursuant to 35 U.S.C. 325(d) is *another factor* that may be *additionally* considered by the PTAB

³¹ See General Plastic, Paper No. 19, pages 15-16.

³² *Id.*, page 18.

when determining whether to exercise its discretion under 35 U.S.C. 314(a). See *General Plastic*, in which the PTAB explained (emphasis added):³³

§ 325(d) is not intended to be the **sole factor** in the exercise of discretion **under** § 314(a).

In other words, an analysis pursuant to 35 U.S.C. 325(d) is a factor that may be considered by the PTAB in addition to the § 314(a) factors identified in General Plastic. ³⁴

The patent owner argues that the Office, in the present reexamination proceeding, declined to consider factors used by the PTAB when denying institution. The factors considered by the PTAB in the '2030 IPR, however, were factors identified by the PTAB in *General Plastic* to be considered when exercising its discretion under 35 U.S.C. 314(a), not 35 U.S.C. 325(d).

Pursuant to *General Plastic*, an analysis pursuant to 35 U.S.C. 325(d) in an *inter partes* review does not include an analysis pursuant to 35 U.S.C. 314(a). In *General Plastic*, the PTAB explained that its discretion under 35 U.S.C. 314(a) is not "subordinate to or *encompassed by* § 325(d)" (emphasis added).³⁵ Rather, an analysis under 35 U.S.C. 325(d), i.e., whether the prior art or arguments previously were presented to the Office, is a factor considered by the PTAB *in addition to* the § 314(a) factors when determining whether to institute *inter partes* review.

The PTAB's decision in the '2030 IPR shows that the PTAB used factors relevant to a determination pursuant to 35 U.S.C. 314(a), not 35 U.S.C. 325(d), when determining whether to institute *inter partes* review. 35 U.S.C. 314(a), however, does not apply to *ex parte* reexamination proceedings. It is not inconsistent for the Office, in an *ex parte* reexamination proceeding, to decline to consider factors relevant to an analysis under 35 U.S.C. 314(a), since that statute that does not apply to *ex parte* reexamination proceedings.

The patent owner asserts that permitting reexamination in the present proceeding to proceed "would impermissibly depart" from the PTAB's intent in formulating the *General Plastic* factors, i.e., "to take undue inequities and prejudices to Patent Owner into account."³⁶

However, 35 U.S.C. 314(a) governs the institution of *inter partes* review, and the factors identified in *General Plastic* were specifically formulated to apply to those proceedings:³⁷

The factors set forth above, in our view, represent a formulation of relevant considerations that permit the Board to assess the potential impacts on . . . the efficiency of the *inter* partes review process . . .

³³ *Id*.

³⁴ The factors identified in *General Plastic* were first set forth in *NVIDIA Corp. v. Samsung Elec. Co.*, IPR2016-00134, Paper No. 9 (PTAB May 4, 2016).

³⁵ General Plastic, Paper No. 19, page 19.

³⁶ See page 22 of the present petition.

³⁷ General Plastic, Paper No. 19, page 18.

The efficiency of the *inter partes* review process, however, is not relevant to an *ex parte* reexamination proceeding. The legislative history of the America Invents Act (AIA) distinguishes a reexamination proceeding from an *inter partes* review by describing an *inter partes* review as an adjudicative proceeding:³⁸

The Act converts inter partes reexamination from an examinational to an adjudicative proceeding, and renames the proceeding "inter partes review".

In an adjudicative proceeding, the judge is concerned not only with the interests of the parties and the interests of the public, but also with the efficiency of the judicial process, or, in this case, the efficiency of the *inter partes* review process. An *ex parte* reexamination proceeding, however, is not an adjudicative proceeding, let alone a trial proceeding such as an *inter partes* review. The efficiency of the *inter partes* review process is not relevant to an *ex parte* reexamination proceeding.

In fact, the Supreme Court distinguishes *ex parte* reexamination proceedings from *inter partes* review proceedings by describing an *ex parte* reexamination proceeding as "an agency-led, inquisitorial process" for reconsidering patents, in contrast to an *inter partes* review, which is "a party-directed, adversarial process". *SAS Institute v. Iancu*, 138 S.Ct. 1348 (decided April, 24, 2018), slip op., page 6.

Therefore, it is not inconsistent for the Office, in an *ex parte* reexamination proceeding, to decline to consider factors that were formulated not with respect to an *ex parte* reexamination proceeding, but with respect to an entirely different type of proceeding.

This is not to say that some of the factors that happen to be relevant to a determination under 35 U.S.C. 314(a) in an *inter partes* review may never be considered in an *ex parte* reexamination proceeding. While some of the factors (such as, e.g., the first factor) may be considered in an *ex parte* reexamination proceeding, it is not *inconsistent* for the Office to decline to use these factors in an *ex parte* reexamination proceeding for all of the reasons set forth above. The determination pursuant to 35 U.S.C. 325(d) in an *ex parte* reexamination proceeding is conducted on a case-by-case basis.

The patent owner argues that the PTAB rejected the requester's second challenge (in the '2030 IPR) to claims 18-20 and 24 of the '581 patent "as unfair to [the patent owner]." However, in summarizing its decision denying institution in the '2030 IPR, the PTAB stated that: 40

... we determine that Petitioner used Patent Owner's preliminary response and our previous Decision on Institution in the '729 IPR as a "roadmap" to modify the grounds asserted and the arguments made in the Petition, which is unfair to the Patent Owner, and is an inefficient use of the Board's time and resources.

³⁸ See H.R. Report No. 112-98, part 1, pages 46-47.

³⁹ See page 22 of the present petition.

⁴⁰ See Fedex Corporation v. Intellectual Ventures II, LLC, IPR2017-02030 (the '02030 IPR), Paper No. 12 (PTAB February 20, 2018), pages 11-12.

In other words, the PTAB determined that it would be unfair to the patent owner if the PTAB were to allow the requester, who had the benefit of patent owner's preliminary response and the PTAB's decision on institution in a previous IPR, to use the reasoning in those papers as a "roadmap" in order to file a second inter partes review. It is not "an inefficient use of the Board's time and resources" to file an ex parte reexamination request, since the PTAB does not review requests for reexamination. Furthermore, unlike an ex parte reexamination proceeding, a second inter partes review would provide the requester with a second chance to fully participate in a review of the patent, including a right to appeal the PTAB's decision to the CAFC. In an ex parte reexamination proceeding, however, this is not the case. The statutory framework of inter partes review proceedings differs significantly from the statutory framework for ex parte reexamination proceedings. As a result, the application of 35 U.S.C. 325(d) to the facts with respect to a request for reexamination may result in a different outcome than when applied to a petition for inter partes review, due to the different nature of the two proceedings, as discussed later in this decision.

For all of the reasons set forth above, the determination by the Office not to exercise its discretion under 35 U.S.C. 325(d) in the present *ex parte* reexamination proceeding is not inconsistent with *inter partes* review practice.

This is not to say, however, that a request for reexamination filed subsequent to multiple concluded *inter partes* reviews of the same claims of the same patent, and filed by the same party, is always permitted. The determination whether to exercise the Office's discretion under 35 U.S.C. 325(d) in an *ex parte* reexamination proceeding is performed on a case-by-case basis.

VIII. The Determination Whether to Reject a Reexamination Request Pursuant to 35 U.S.C. 325(d) Differs from the Analysis under 35 U.S.C. 325(d) Used by the PTAB to Deny Institution in an Inter Partes Review

The patent owner argues that the analysis pursuant to 35 U.S.C. 325(d), when conducted in an *inter partes* review, should not differ from the analysis performed in an *ex parte* reexamination proceeding with respect to 35 U.S.C. 325(d).

The statutory framework of *inter partes* review proceedings differs significantly from the statutory framework for *ex parte* reexamination proceedings, and as a result, the considerations with respect to issues involving 35 U.S.C. 325(d) are not identical. The application of 35 U.S.C. 325(d) to the facts with respect to a request for reexamination may result in a different outcome than when applied to a petition for a trial proceeding. It is the nature of the proceedings and the facts and circumstances surrounding these different proceedings that can result in different outcomes.

In an *inter partes* review proceeding, both parties have a full right of participation throughout the entire procedure. Both parties also have a right to appeal the PTAB's final decision to the Court of Appeals for the Federal Circuit (Federal Circuit). In an *ex parte* reexamination proceeding, however, the right of participation of a third party requester is limited. The active participation of the third party requester ends with the reply pursuant to 37 CFR 1.535, and no further submissions on behalf of the reexamination requester is acknowledged or considered. See 35 U.S.C. 305 and 37 CFR 1.550(g). **The third party requester in an** *ex parte* **reexamination**

proceeding does not have a right to appeal the examiner's decision to the PTAB, or the resulting PTAB decision to the Federal Circuit. See 35 U.S.C. 141. As a result, unlike *inter partes* review practice, the determination by the Office whether to exercise its discretion and deny *ex parte* reexamination pursuant to 35 U.S.C. 325(d) takes into account the fact that a third party requester does not have a full right of participation in the proceeding, including a right to appeal.

In addition, the *ex parte* reexamination statute "allows the Director to institute proceedings on a claim-by-claim and ground-by-ground basis". *SAS*, slip op., page 7. In contrast, the language of the *inter partes* review statute does not permit institution on a claim-by-claim basis. Rather, the language of the statute "anticipates a regime where a reasonable prospect of success on a single claim justifies review of all." *Id.* The Supreme Court distinguished *ex parte* reexamination proceedings from *inter partes* review proceedings by describing an *ex parte* reexamination proceeding as "an agency-led, inquisitorial process" for reconsidering patents, in contrast to an *inter partes* review, which is "a party-directed, adversarial process." *Id.*, page 6.

Furthermore, the standard used for ordering *ex parte* reexamination differs from the standard used for instituting *inter partes* review. The standard for determining whether to institute *inter partes* review is whether there is a reasonable likelihood that the petitioner would prevail with respect to at least one of the claims challenged in the petition (RLP standard). See 35 U.S.C. 314(a). The standard for determining whether to order *ex parte* reexamination is whether a substantial new question of patentability affecting any claim of the patent concerned is raised by the request (SNQ standard). See 35 U.S.C. 303(a). For example, **there is no requirement in the RLP standard that the issue, or question, be "new"**. The SNQ standard, however, requires a substantial **new** question of patentability. **There is no such element in the RLP standard used in** *inter partes* **review proceedings. Thus, 35 U.S.C. 325(d) introduces to trial proceedings the protection already substantially afforded in** *ex parte* **reexamination against harassment based on repetitive arguments. As another example, a substantial new question of patentability may be raised merely because a reasonable examiner would consider the teaching of a reference** *important* **in determining the patentability of the claims. See MPEP 2242. In contrast, the RLP standard requires a reasonable likelihood that the petitioner would** *prevail***.**

In addition, the *inter partes* review statute is permissive. It does not *require* institution of *inter partes* review even if the PTAB finds that there is a reasonable likelihood that the petitioner would prevail with respect to at least one of the claims challenged in the petition (RLP).⁴¹ In contrast, absent the provisions of 35 U.S.C. 325(d), the *ex parte* reexamination statute *requires* the Office to order reexamination if the request is found to raise a substantial new question of patentability (SNQ).⁴² In other words, if the Office does not find that the same or substantially the same prior art or arguments previously were presented to the Office, or if the Office declines

^{41 35} U.S.C. 314(a) provides, in pertinent part (emphasis added):

The Director may not authorize an inter partes review to be instituted unless the Director determines that the information presented in the petition . . . shows that there is a reasonable likelihood that the petition would prevail with respect to at least 1 of the claims challenged in the petition.

⁴² 35 U.S.C. 304 provides, in pertinent part (emphasis added):

If . . . the Director finds that a substantial new question of patentability is raised, the determination will include an order for reexamination of the patent for resolution of the question.

to exercise its discretion under 35 U.S.C. 325(d) in view of, for example, evidence of unpatentability that was not previously evaluated by the Office, the Office is *required* to order reexamination if the request is found to raise a substantial new question of patentability, unlike *inter partes* review.

Furthermore, once an order granting *ex parte* reexamination has been issued, the Office is *required* to conduct reexamination. See 35 U.S.C. 305. There is no such statutory requirement for *inter partes* review proceedings. In fact, an *inter partes* review proceeding may be terminated upon the joint request of the petitioner and the patent owner pursuant to 35 U.S.C. 317.

In addition, unlike the *inter partes* review statute, the *ex parte* reexamination statute does not provide for the filing of a response by the patent owner *prior to* an order granting reexamination. Instead, 35 U.S.C. 304 specifies that a response by the patent owner may be filed *after* the order has issued.

For all of the reasons discussed above, the determination whether to exercise the Office's discretion and deny *ex parte* reexamination under 35 U.S.C. 325(d) differs from the analysis used by the PTAB to refuse to institute *inter partes* review, due to the significant differences in the statutory framework of the two proceedings. The application of 35 U.S.C. 325(d) to the facts with respect to a request for reexamination may result in a different outcome than when applied to a petition for a trial proceeding.

IX. Allowing Reexamination in the Present Proceeding to Proceed Would Not Depart from the PTAB's Intent to Prevent AIA Trial Proceedings From Being Used as Tools for Harassment

The patent owner argues that allowing reexamination to proceed after the PTAB denied institution of review on the same claims in the '2030 IPR, would "depart from the Office's stated policy of preventing abuse to patent owners." The patent owner quotes *General Plastic* as evidence of this policy: "Our intent in formulating these factors was to take undue inequities and prejudices to Patent Owner into account." The PTAB's intent in formulating the *General Plastic* factors, however, reflects Congress's specific intent to prevent *AIA trial proceedings*, such as *inter partes* reviews, to be used as tools for harassment. See, e.g., H.R. Rep. No. 112-98, part 1 (June 1, 2011) (the House report), at page 48 (emphasis added):

... the *changes made by* [the amendment establishing AIA proceedings] are not to be used as tools for harassment.

In other words, the AIA proceedings themselves are not to be used as tools for harassment. The safeguards reflected in the factors enumerated in General Plastic specifically pertain to AIA trial proceedings.

⁴³ See page 22 of the present petition.

Furthermore, there is nothing in the legislative history that states that previously established Office proceedings, such as reexamination proceedings, do not prevent abuse. In fact, the legislative history expressly states (emphasis in bold added):⁴⁴

... However, we have significant concerns about the limitations that H.R. 1249 imposes on *inter partes* review ... The limitations imposed by H.R. 1249 and the managers [sic] amendment are motivated by assertions that the *inter partes* procedure may be abused to harass patent owners and interfere with the enforcement of valid patents. However, no empirical evidence, even anecdotally, was proffered to the Committee to demonstrate such abuses occur in the current reexamination system. On the contrary, of the 253 *inter partes* reexaminations decided since the procedure was created in 1999, 224 (89%) resulted in the modification or nullification of at least one patent claim, which means that the challenges were ultimately found meritorious. This suggests that further limitations and deterrents against *inter partes* petitions, beyond those already in place in current law, are unnecessary and counterproductive. (Footnotes omitted).

Congress expressly stated that there was no empirical evidence that abuses occur in the current reexamination system. ⁴⁵ For this reason, allowing reexamination in the present proceeding to proceed would not "depart" from the PTAB's intent to prevent AIA trial proceedings, such as *inter partes* reviews, to be used as tools for harassment.

A. The Provisions of 35 U.S.C. 325(d) Complement the Protections Provided by the Substantial New Question of Patentability Standard

In fact, the record also shows that the provisions of 35 U.S.C. 325(d) were intended to *complement* the protections already provided by the substantial new question of patentability standard set forth in 35 U.S.C. 303(a).

Congress did not amend the provisions of 35 U.S.C. 303(a) when promulgating the provisions of 35 U.S.C. 325(d). The fact that Congress left the provisions of 35 U.S.C. 303(a) intact shows that Congress intended to *complement* the protections *already provided* by the substantial new question of patentability standard. For example, the legislative history of the *ex parte* reexamination statute reflects an intent by Congress that the *ex parte* reexamination process would not create new opportunities to harass the patent owner. See, e.g., H.R. Rep. No. 1307 (part I), 96th Cong., 2d Sess. 7 (Statement of Congressman Kastenmeier, September 9, 1980):

This "substantial new question" requirement would protect patentees from having to respond to, or participate in unjustified reexaminations.

⁴⁴ See H.R. Rep. No. 112-98, part 1 (June 1, 2011) (the House report), at page 164.

⁴⁵ The standard for *inter partes* reexaminations which was in effect at the time of H.R. Rep. 112-98, part I, *prior to* the effective date of the relevant provisions of the AIA, was the same standard used in *ex parte* reexamination proceedings, i.e., the SNQ standard. The standard used in *inter partes* reexaminations, however, was later amended by the AIA, effective September 15, 2011, which was *after the June* 1, 2011 date of H.R. Rep. 112-98, part 1. The standard for *inter partes* reexamination proceedings filed on or after September 16, 2011 and before September 16, 2012 is similar to the standard used in *inter partes* review proceedings, i.e., whether "the information presented in the request shows that there is a reasonable likelihood that the requester would prevail with respect to at least one of the claims challenged in the request" (RLP). See 35 U.S.C. 312 (transitional provision).

The legislative history of the 2002 amendment to the reexamination statute also states that the amendment "preserves the 'substantial new question standard' that is an important safeguard to protect all inventors against frivolous action and against harassment," and "also preserves the discretion of the Patent and Trademark Office in evaluating these cases." See also *Industrial Innovation & Patent & Copyright Law Amendments: Hearings on H.R. 6933, 6934, 3806, & 214 Before the Subcommittee on Courts, Civil Liberties and the Administration of Justice of the House Committee on the Judiciary, 96th Cong., 2nd Sess. 594 (1980) (statement of Sidney Diamond, Commissioner of Patents & Trademarks, April 24, 1980):*

[The proposed *ex parte* reexamination statute] carefully protects patent owners from reexamination proceedings brought for harassment or spite. The possibility of harassing patent holders is a classic criticism of some foreign reexamination systems and we made sure it would not happen here.

To prevent the use of the reexamination process to harass the patent owner, Congress included the requirement that a substantial new question of patentability based on patents and printed publications must be raised by the request. See also *Patlex v. Mossinghoff*, 771 F.2d 480, 483-484 (Fed. Cir. 1985)(italics in original), where the Federal Circuit, in quoting the statement of Commissioner Diamond immediately above, stated:

Study of the genesis of the reexamination statute leaves no doubt that the major purpose of the threshold determination whether or not to reexamine is to provide a safeguard to the patent holder... That is the only purpose of the procedure established by 35 $U.S.C. \$ 303: "carefully" to protect holders of issued patents from being subjected to unwarranted reexaminations.

In addition, the purpose of *ex parte* reexamination is to permit the Office to reexamine the patent on the basis of prior art which was not previously considered, or was not fully considered with respect to the specific claims of the patent, during an earlier examination or review of the patent. There is a strong public interest that all of the prior art be considered. See *In re Etter*, 225 USPQ 1 (Fed. Cir. 1985), in which the Federal Circuit, when discussing whether the § 282 presumption of validity has application in reexamination proceedings, stated:

Reexamination is thus neutral, the patentee and the public having an equal interest in the issuance and maintenance of valid patents.

For all of the reasons set forth above, the record shows that Congress intended the provisions of 35 U.S.C. 325(d) to *complement* the protections provided by the substantial new question of patentability standard.

In the present case, the Office carefully reviewed the record, but declined to exercise its discretion to reject the request pursuant to 35 U.S.C. 325(d), for the reasons set forth in this decision. See, for example, section VI of this decision.

⁴⁶ 147 Cong. Rec H 5358, 107th Congress, (September 5, 2001).

X. Patent Owner's May 7, 2018 Petition under 37 CFR 1.182 to Vacate the Order and "Terminate" Reexamination is Dismissed

For all of the reasons set forth in this decision, the Office carefully reviewed the record in the present case, and declined to exercise its discretion and reject the request under 35 U.S.C. 325(d) in the present reexamination proceeding.

In any event, the present petition was filed after reexamination in the present case was ordered on March 5, 2018. The Office does not have the discretion to terminate an ongoing reexamination on the basis set forth in 35 U.S.C. 325(d) if no petition requesting such relief is filed until *after* reexamination has been ordered, as discussed previously. For this reason, the *discretionary* determination by the Office under 35 U.S.C. 325(d) whether to reject the request is not petitionable once the order granting reexamination has issued.

Accordingly, patent owner's May 7, 2018 petition to vacate the order granting reexamination mailed on March 5, 2018, and to "terminate" reexamination, i.e., issue an order denying reexamination, on the basis set forth in 35 U.S.C. 325(d) that the request is limited to the same or substantially the same prior art or arguments previously presented to the Office, is dismissed.

Because any exercising of the Director's authority pursuant to 35 U.S.C. 325(d) is purely discretionary, any further papers requesting the Office to take any action, or to refrain from taking any action, in view of the provisions of 35 U.S.C. 325(d) will not be entertained, and will be expunged.

CONCLUSION

- Reexamination of claims 18-19 and 24 based on Rappaport alone, and reexamination of claim 20 based on Rappaport in view of Khalessi, <u>is sua sponte withdrawn</u> in the present reexamination proceeding.
- Patent owner's July 11, 2018 petition to expunge requester's May 31, 2018 opposition paper is **dismissed**.
- Patent owner's May 7, 2018 petition under 37 CFR 1.183 requesting waiver of the provisions of 37 CFR 1.540 (second sentence) is **granted**. Patent owner's May 7, 2018 combined petition has been **entered and considered**.
- The provisions set forth in the second sentence of 37 CFR 1.540 <u>are also waived with respect to requester's May 31, 2018 opposition paper</u>. Requester's May 31, 2018 opposition paper has been <u>entered and considered</u>.
- Patent owner's May 7, 2018 petition under 37 CFR 1.182 to stay, suspend, or consolidate the present reexamination proceeding with a copending *inter partes* review pursuant to 35 U.S.C. 315(d) is **dismissed**.

- Patent owner's May 7, 2018 petition under 37 CFR 1.182 to vacate the order and "terminate" reexamination pursuant to the estoppel provisions of 35 U.S.C. 315(e)(1) is dismissed.
- Patent owner's May 7, 2018 petition under 37 CFR 1.182 to vacate the order granting reexamination mailed on March 5, 2018 and to "terminate" reexamination, i.e., issue an order denying reexamination, on the basis set forth in 35 U.S.C. 325(d) that the request is limited to the same or substantially the same prior art or arguments previously presented to the Office, is <u>dismissed</u>.
- The March 5, 2018 order granting reexamination <u>will not be vacated</u>, since the order was proper at the time of its mailing. Prosecution in the present reexamination proceeding <u>will continue in accordance with this decision</u>.
- The present proceeding is being forwarded to the Central Reexamination Unit to continue prosecution in accordance with this decision.
- Any inquiry concerning this communication should be directed to the undersigned at (571) 272-7724.

/Cynthia L. Nessler/

Cynthia L. Nessler Senior Legal Advisor Office of Patent Legal Administration

November 9, 2018

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
95/000,185	12/04/2006	6357193	1915.68REX01	1303		
24113 7	590 08/22/2008		EXAM	INER		
PATTERSON 4800 IDS CEN	•	AR & CHRISTENSEN, P.A.				
80 SOUTH 8T			ART UNIT	PAPER NUMBER		
MINNEAPOL	IS, MN 55402-2100					

DATE MAILED: 08/22/2008

Please find below and/or attached an Office communication concerning this application or proceeding.

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Patterson, Thuente, Skaar & Christensen, PA 4800 IDS Center 80 South 8TH Street Minneapolis, MN 55402-2100

(For Patent Owner)

MAILED AUG 22 2008

CENTRAL REEXAMINATION UNIT

Carl J. Schwedler McDonough Holland & Allen 555 Capitol Mall, 9TH Floor Sacramento, CA 94814 (For Third Party Requester)

In re Diversi-Plast Products, Inc.

Inter Partes Reexamination Proceeding: DECISIONControl No. 95/000,185: DENYINGFiled: December 4, 2006: PETITION

For: U.S. Patent No. RE 39,825

This is a decision on the February 29, 2008 patent owner petition entitled "Petition For Supervisory Review And Final Agency Decision Concerning The Denial Of Patent Owner's Petition Under 37 C.F.R § 1.181(a)(1)." This decision also addresses the third party requester paper filed on March 27, 2008 entitled "Third Party Requester's Opposition To Patent Owner's Petition Under 37 C.F.R 1.181 For Supervisory Review And Final Agency Decision Concerning The Denial Of Patent Owner's Petition Under 37 C.F.R § 1.181(a)(1)."

The petition, the opposition paper and the 95/000,185 *inter partes* reexamination proceeding are before the Office of Patent Legal Administration for decision.

<u>Summary</u>: The patent owner petition for reconsideration is granted to the extent that the "Decision Dismissing Petition" dated January 4, 2008 has been reconsidered. The renewed petition is <u>denied</u> to the extent of granting the relief requested by patent owner (*i.e.*, vacatur of the Order granting reexamination in *inter partes* reexamination control number 95/000,185). The third party requester opposition paper has not been considered because it was not timely filed. ¹

The present decision is designated as a final agency action under 5 U.S.C. § 704.

¹ MPEP § 2646 provides that "[W]hen a petition under 37 CFR 1.181 is filed to vacate a reexamination order, the third party requester may file a single submission in opposition to the petition. Because reexamination proceedings are conducted with special dispatch, 35 U.S.C. 314(c), any such opposition by the third party requester must be filed within two weeks of the date upon which a copy of the original 37 CFR 1.181 petition was served on the third party requester to ensure consideration."

FEES

The patent owner petition has been filed under 37 CFR 1.181, and no fee is required. The third party requester opposition petition is also taken as a paper under 37 CFR 1.181, for which no fee is required.

BACKGROUND

- 1. U.S Patent number 6,357,193 B1 ("the '193 patent") issued to Richard J. Morris on March 19, 2002, from an application filed on December 16, 1999, and was assigned to Diversi-Plast Products, Inc.
- 2. On March 19, 2004, an application was filed to reissue the '193 patent and was assigned application number 10/805,686 ("the '686 reissue application").
- 3. On March 29, 2005, a request for *ex parte* reexamination of the '193 patent was filed and assigned control number 90/007,487 ("the '487 *ex parte* reexamination proceeding").
- 4. On June 2, 2005, an Order Granting Ex Parte Reexamination was mailed in the '487 ex parte reexamination proceeding.
- 5. On July 19, 2005, the Office issued a decision, *sua sponte*, merging the '686 reissue application and the '487 *ex parte* reexamination into a single merged proceeding ("the merged proceeding"), to be conducted under the reissue application examination practice, which is broader than that of reexamination proceedings.
- 6. On September 15, 2006, a Notice of Allowance and a Notice of Allowability were mailed in the merged proceeding.
- 7. On October 12, 2006, a request for *inter partes* reexamination of the '193 patent was deposited by a third party requester, and assigned control number 95/000,185 ("the '185 *inter partes* reexamination proceeding").
- 8. On October 19, 2006, patent owner filed an Information Disclosure Statement ("IDS") in the merged proceeding in which Japanese Patent Publication No. JP9-117198 and Cora-Vent S-400 Publication-Cold Roof Application Using S-400 Strip Vent on a Roof Deck were cited for the first time. ²
- 9. The issue fee for the '686 reissue application in the merged proceeding was paid on October 26, 2006.
- 10. On November 30, 2006, a continuation reissue application for the '193 patent was filed as a continuation of the '686 reissue application, and the continuation reissue application was assigned application number 11/607,079 ("the '079 continuation reissue application".)

² These documents will hereinafter be referred to in the present decision as the "JP9-117198 Publication" and the "S-400 Strip Vent Publication," respectively, except when quoting from the examiner's Interview Summary form of March 9, 2007 in the merged reexamination proceeding or when quoting the Order granting reexamination in the '185 inter partes reexamination proceeding.

Control No. 95/000,185

11. Following corrections to the originally deposited request papers, the '185 *inter partes* reexamination proceeding was accorded a filing date of December 4, 2006. ³

- 12. On February 23, 2007, an Order Granting *Inter Partes* Reexamination was mailed for the '185 *inter partes* reexamination proceeding.
- 13. On March 9, 2007, an interview was conducted in the merged proceeding, and the examiner's Interview Summary form for the interview indicates that the examiner and the patent owner discussed the JP9-117198 Publication and the S-400 Strip Vent Publication that had been cited by patent owner in the October 19, 2006 IDS.
- 14. On May 7, 2007, patent owner filed a petition to stay the 95/000,185 *inter partes* reexamination proceeding, and to vacate the February 23, 2007 Order granting *inter partes* reexamination.
- 15. On June 8, 2007, the patent owner petition to stay was granted in order to permit the reissue patent in the merged proceeding to issue, but the patent owner petition to vacate was dismissed as not having been presented in a separately filed paper, 4 and to permit the reissue patent to issue.
- 16. On September 11, 2007, reissue patent RE 39,825 E (hereinafter the '825 reissue patent) issued in the merged proceeding. The reissue patent replaced the original '193 patent which has been surrendered, and also effectively serves as the reexamination certificate for the '193 patent. ⁵
- 17. On September 27, 2007, patent owner filed a petition to vacate the Order Granting *Inter Partes* Reexamination.
- 18. On November 1, 2007, third party requester filed an opposition to the September 27, 2007 patent owner petition.
- 19. On January 14, 2008, the Office mailed a Decision dismissing the patent owner petition filed on September 27, 2007 (hereinafter "the January 14, 2008 decision").
- 20. On February 29, 2008, the present patent owner petition was filed.
- 21. On March 27, 2008, the third party requester filed an opposition to the February 29, 2008 petition, which, as explained in footnote 1, *supra*, was untimely filed and will not be considered.
- 22. Although reexamination has been ordered in the '185 inter partes reexamination proceeding based upon a determination that the request for inter partes reexamination raised one or more substantial new questions of patentability, examination as to the patentability of the claims of the '185 inter partes reexamination proceeding (which are the claims in the '825 reissue patent) has not yet commenced.

⁵ <u>See</u>: 35 U.S.C. §§ 251 and 252. <u>See also</u>: 37 CFR 1.565 and MPEP § 2285.

³ See the Office communication mailed November 27, 2006, the third party requester's response received December 4, 2006, and the Notice of Assignment mailed on February 7, 2007.

⁴ 37 CFR 1.4(c) provides that "[S]ince different matters may be considered by different branches or sections of the United States Patent and Trademark Office, each distinct subject, inquiry or order must be contained in a separate paper to avoid confusion and delay in answering papers dealing with different subjects."

Control No. 95/000,185 -4-

23. The '079 continuation reissue application has been docketed to an examiner, but has examination has not yet commenced.

RELEVANT AUTHORITY

35 U.S.C. § 312 provides:

- (a) REEXAMINATION. Not later than 3 months after the filing of a request for inter partes reexamination under section 311, the Director shall determine whether a substantial new question of patentability affecting any claim of the patent concerned is raised by the request, with or without consideration of other patents or printed publications. The existence of a substantial new question of patentability is not precluded by the fact that a patent or printed publication was previously cited by or to the Office or considered by the Office.
- (b) RECORD. A record of the Director's determination under subsection (a) shall be placed in the official file of the patent, and a copy shall be promptly given or mailed to the owner of record of the patent and to the third-party requester.
- (c) FINAL DECISION. A determination by the Director under subsection (a) shall be final and non-appealable. Upon a determination that no substantial new question of patentability has been raised, the Director may refund a portion of the inter partes reexamination fee required under section 311. [Emphasis added.]

MPEP § 609.05(b) provides, in part:

The information contained in information disclosure statements which comply with both the content requirements of 37 CFR 1.98 and the requirements, based on the time of filing the statement, of 37 CFR 1.97 will be considered by the examiner. Consideration by the examiner of the information submitted in an IDS means that the examiner will consider the documents in the same manner as other documents in Office search files are considered by the examiner while conducting a search of the prior art in a proper field of search. The initials of the examiner placed adjacent to the citations on the PTO/SB/08A and 08B or its equivalent mean that the information has been considered by the examiner to the extent noted above.

MPEP 2642(II) provides:

A "substantial new question of patentability" is <u>not</u> raised by the prior art if the Office has previously considered (in an earlier examination of the patent) the same question of patentability as to a patent claim favorable to the patent owner based on the same prior art patents or printed publications. *In re Recreative Technologies*, 83 F.3d 1394, 38 USPQ2d 1776 (Fed. Cir. 1996).

In deciding whether to grant a request for reexamination of a patent, the examiner should check the patent's file history to ascertain whether any of the prior art now advanced by requester was previously cited/considered in an earlier Office examination of the patent (e.g., in the examination of the application for the patent, or in a concluded or pending reexamination proceeding). For the sake of expediency, such art is referred to as "old art" throughout, since the term "old art" was coined by the Federal Circuit in its decision of *In re Hiniker Co.*, 150 F.3d 1362, 1365-66, 47 USPQ2d 1523, 1526 (Fed. Cir. 1998).

In a decision to order reexamination made on or after November 2, 2002, reliance on old art does not necessarily preclude the existence of a substantial new question of patentability (SNQ) that is based exclusively on that old art. See Public Law 107-273, 116 Stat. 1758, 1899-1906 (2002), which expanded the scope of what qualifies for a substantial new question of patentability upon which a reexamination may be based. Determinations on whether a SNQ exists in such an instance shall be based upon a fact-specific inquiry done on a case-by-case basis. For example, a SNQ may be based solely on old art where the old art is being presented/viewed in a new light, or in a different way, as compared with its use in the earlier concluded examination(s), in view of a material new argument or interpretation presented in the request.

When it is determined that a SNQ based solely on old art is raised, form paragraph 22.01.01 should be included in the order for reexamination.

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MPEP 2646(II) provides:

A substantive determination by the Director of the Office to institute reexamination pursuant to a finding that the prior art patents or printed publications raise a substantial new question of patentability is not subject to review by petition or otherwise. ...

A petition under 37 CFR 1.181 may, however, be filed to vacate an *ultra vires* reexamination order, such as where the order for reexamination is not based on prior art patents and printed publications. In cases where <u>no discretion</u> to grant a request for reexamination exists, a petition to vacate the decision to grant, or a request for reconsideration, will be entertained. "Appropriate circumstances" under 37 CFR 1.181(a)(3) exist to vacate the order granting reexamination where, for example:

- (A) the reexamination order is not based on prior art patents or printed publications;
- (B) reexamination is prohibited under 37 CFR 1.907;
- (C) all claims of the patent were held to be invalid by a final decision of a Federal Court after all appeals;
 - (D) reexamination was ordered for the wrong patent;
 - (E) reexamination was ordered based on a duplicate copy of the request; or
- (F) the reexamination order was based wholly on the same question of patentability raised by the prior art previously considered in an earlier concluded examination of the patent by the Office (e.g., the application which matured into the patent, a prior reexamination, an interference proceeding).

As to (F), the decision of *In re Recreative Technologies Corp.*, 83 F.3d 1394, 38 USPQ2d 1776 (Fed. Cir. 1996) is to be noted. See the discussion in MPEP § 2642, subsection II.A. as to the criteria for vacating a reexamination order in view of the decision.

When a petition under 37 CFR 1.181 is filed to vacate a reexamination order, the third party requester may file a single submission in opposition to the petition. Because reexamination proceedings are conducted with special dispatch, 35 U.S.C. 314(c), any such opposition by the third party requester must be filed within two weeks of the date upon which a copy of the original 37 CFR 1.181 petition was served on the third party requester to ensure consideration. It is advisable that, upon receipt and review of the served copy of such a 37 CFR 1.181 petition which the third party requester intends to oppose, the requester should immediately place a courtesy telephone call to the Special Program Examiner (SPRE) in the Central Reexamination Unit (CRU) to notify the Office that an opposition to the 37 CFR 1.181 petition will be filed. Whenever possible, filing of the opposition should be submitted by facsimile transmission.

The filing of a 37 CFR 1.181 petition to vacate an *ultra vires* reexamination order is limited to a single submission, even if an opposition thereto is filed by a third party requester.

DECISION

<u>I. The September 27, 2007 Patent Owner Petition</u>

A. Patent Owner's Argument for Vacatur of the Order

In the September 27, 2007 petition, patent owner alleged that the *Order Granting Inter Partes Reexamination* in the '185 *inter partes* reexamination proceeding was based wholly on the same question of patentability raised by the prior art previously considered by the Office in the merged proceeding. Patent owner supported that conclusion by arguing that each of the references found to raise an SNQ in that Order, (including the JP9-117198 Publication and the S-400 Strip Vent Publication), was fully considered and examined in the merged proceeding. Patent owner cited MPEP § 2642(II)(A), (which, in turn, cites *In re Recreative Technologies Corp.*, F.3d 1394, 38 USPQ2d 1776 (Fed. Cir. 1996)), to support patent owner's position that a proper SNQ has not been raised by the request for reexamination in the '185

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inter partes reexamination proceeding because the Order was based solely on previously considered "old art."

B. The January 14, 2008 Decision

The January 14, 2008 decision that dismissed patent owner's September 27, 2007 petition was based on the factual findings obtained from a review of the record of the '185 *inter partes* reexamination proceeding and a review of the records of the prior proceedings involving the '193 patent, (which has now been surrendered and replaced by the '825 reissue patent). These prior proceedings were the application that matured into the '193 patent, and the merged proceeding, (in which the '487 *ex parte* reexamination proceeding was merged with the '686 reissue application), that resulted in the grant of the '825 reissue patent. These factual findings, and the basis therefor, were:

- (1) A review of the prosecution history of the application that matured into the '193 patent showed that neither the JP9-117198 Publication nor the S-400 Strip Vent Publication was of record in that proceeding.
- (2) A review of the record of the merged proceeding showed that the JP9-117198 Publication and the S-400 Strip Vent publication were first submitted to the Office in the IDS filed on October 19, 2006, (after a Notice of Allowance and a Notice of Allowability had been mailed on September 15, 2006), and that these documents were not considered or discussed in detail on the record at that time.
- (3) The review of the record of the merged proceeding also showed that:
 - (a) On March 9, 2007, an interview was conducted in the merged proceeding between patent owner's representative and a newly assigned examiner. The examiner's Interview Summary form for that interview, (a copy of which was given to patent owner's representative on March 9, 2007), showed that:
 - (i) The "SO ET AL Japanese Patent Application Publication No. H09-177198" and the "COR-A-Vent" publication" were listed on the IDS form filed on October 19, 2006,6 and that the IDS also stated that "[N]o agreement was reached." 7;
 - (ii) The "SO ET AL Japanese Patent Application Publication No. H09-177198" and the "Cor-a-Vent Publication" had been "discussed" (along with a third document) 8;
 - (iii) Claims 2, 3, 8 and 9 had been "discussed," and that "agreement with respect to the claims was not reached" 9;

⁶ These documents are the JP9-117198 Publication and the S-400 Strip Vent Publication, respectively, *i.e.*, the same documents relied upon in the Order granting reexamination in '185 *inter partes* reexamination proceeding that are referred to in the present decision in the manner set forth in footnote 2, *supra*.

⁷ Interview Summary, March 9, 2007 at page 3. Again, these documents are the JP9-117198 Publication and the S-400 Strip Vent Publication, respectively.

⁸ Interview Summary, March 9, 2007, at page 1.

⁹ Id.

(iv) Patent owner's representative "briefly explained" the prosecution history of the case to the newly assigned examiner, that the three documents mentioned on the first page of the Interview Summary form were "discussed" ¹⁰; and

- (v) There are <u>absolutely no details of the discussion</u> set forth in the Interview Summary form with respect to which technical teachings of the JP9-117198 Publication and S-400 Strip Vent Publication were discussed, or of how such technical teachings might apply to claims that had been allowed prior to the citation of these documents.
- (b) The examiner's Interview Summary form required that patent owner file, within thirty days of the date of the interview, a statement of the substance of the interview if a reply to the last Office action had already been filed, or to incorporate such a statement in a reply if a reply was to be filed. However the record of the merged proceeding did <u>not</u> show that any such statement was filed by patent owner; ¹¹ and
- (4) The examiner's Order granting reexamination in the '185 *inter partes* reexamination, in which it was determined that an SNQ exists for every claim of the '193 patent based, was based either in whole or in part on specific technical teachings of one or both of the JP9-117198 Publication and S-400 Strip Vent Publication.

Accordingly, the it was held that petitioner patent owner had not established any basis for vacatur of the Order Granting *Inter Partes* Reexamination in the '185 *inter partes* reexamination proceeding, because the prior proceedings for the '193 patent contained no evidence that the <u>specific</u> technical teachings relied on to establish the SNQs in the '185 *inter partes* reexamination proceeding had ever been considered in those prior proceedings.

II. The Petition for Supervisory Review

A. Patent Owner's Argument for Vacatur of the Order

In the present petition for supervisory review, patent owner argues that:

[C]ontrary to Legal Advisor Marcus' conclusions, the totality of the written record from the merged reexamination and reissue proceeding that led to the issuance of U.S. RE39,825 indicates that the examiner's were fully aware of both JP9-117198 and the S-400 Strip Vent (1997) and both references were discussed on the record before final allowance of the claims. Further the examiners in the merged proceeding ... had notice of, and access to, Third Party Requester's contentions and arguments regarding the references cited in the request for the instant *inter partes* reexamination. Since both references and all the same underlying questions of patentability have been previously considered in the merged proceeding, vacating the Order granting the instant *inter partes* reexamination as *ultra vires* is proper and required under the circumstances. ¹²

Patent owner expands on this argument, arguing that even though the JP9-117198 Publication and the S-440 Strip Vent Publication were cited in the merged proceeding only after allowance of the claims, "to imply" that these references could not have been fully

¹⁰ Id., at page 3. A third document (MORRIS U.S. Patent No. 5,304,095 was "discussed" at the interview, but that document is not relevant to the present petition.

[&]quot;Id., at page 2.

^{12 &}quot;Petition for Supervisory Review and Final Agency Decision ...", February 29, 2008, pages 6-7.

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considered is contrary to reason and is belied by volumes of evidence in the written record, even though there is no "blow-by-blow" transcript of the discussion. ¹³ Patent owner further argues that "it defies common sense to conclude that the discussion of these references could have centered around something other than their teachings relative to the claims," or that the examiner "would make a record that the references had been discussed if they were not." ¹⁴ Patent owner makes further arguments based upon these facts gleaned from papers of record in the merged proceeding, copies of which are appended to the verified statement of Bradley J. Thorson that is attached to the present patent owner petition:

- (1) The examiners were required to consider the JP9-117198 Publication and the S-400 Strip Vent Publication because they were listed on a properly formatted IDS and filed on October 16,2006, prior to payment of the issue fee;
- (2) The Office "officially took notice in the merged proceeding of the filing of the request for the instant *inter partes* reexamination on October 30, 2006";
- (3) The Office issued a supplemental Notice of Allowability in the merged proceeding on November 18, 2006;
- (4) There was a personal interview held with the examiner on March 9, 2007 addressing the JP9-117198 Publication and the S-400 Strip Vent Publication ... and how those references related to claims 2, 3, 8 and 9 pending in the merged proceeding;
- (5) The examiner conducted additional searches in March and April of 2007;
- (6) On April 19, 2007, after the additional searching, a new supplemental Notice of Allowability was mailed signed by the examiner's supervisor, which had attached thereto a copy of the IDS filed on October 16, 2006, with initials by the examiner showing that the JP9-117198 Publication and the S-400 Strip Vent Publication "were considered";
- (7) The examiner conducted another search on May 17, 2007; and
- (8) The examiner and another supervisor issued yet another Supplemental Notice of Allowability on June 27, 2007. 15

At pages 9-10 of the present petition, patent owner argues that in light of the examiner having conducted several additional searches over a period of time after the first Notice of Allowability was mailed, it "is not credible" that the examiner and her superiors would have undertaken these searches to locate additional prior art, while simultaneously ignoring the JP9-117198 Publication and the S-400 Strip Vent Publication. In this line of argument, patent owner relies on language quoted from the decision in *In re Portola Packaging*, 110 F.3d 786, 790, 42 USPQ2d 1295, 1982 (Fed. Cir. 1997) ("Portola Packaging") as follows:

[G]overnment officials are presumed to have "properly discharged their official duties." United States v. Chemical Found., Inc., 272, U.S. 1, 15 (1926). If the references were in front of the examiner, it must be assumed that he or she reviewed them. Accordingly, we reject the

¹³ Id., at page 7.

¹⁴ Id., at pages 7-8.

¹⁵ Id., at pages 8-9.

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Commissioner's suggestion that the PTO is entitled to conclude during reexamination that an earlier examination was not conducted properly and to do it again.

Patent owner concludes his argument by quoting language from MPEP § 2642(II)(A) that originally appeared in the decision in *In re Recreative Technologies*, 83 F.3d 1394, USPQ2d 1776:

A "substantial new question of patentability" is <u>not</u> raised by the prior art if the Office has previously considered ... the same question of patentability as to a patent claim favorable to the patent owner based on the same prior art patents or printed publications."

B. Patent Owner's Position is Not Persuasive

1. Citation of Documents on an IDS and Conducting Additional Searches Subsequent to Mailing a Notice of Allowability are Not Dispositive

Initially, it should be noted that with respect to patent owner's observation that the examiners were required to consider the JP9-117198 Publication and the S-400 Strip Vent Publication because those documents were cited on a properly filed IDS, patent owner has failed to establish the nature of the consideration actually given to those documents, and whether any part of either document was particularly brought to the examiners' attention or was actually discussed with the examiners. As noted in MPEP § 609.05(b), the examiner is required to consider a document cited on an IDS only to the extent that the examiner would otherwise consider a group of documents that is being reviewed as part of a search. Stated differently, an examiner does not necessarily give special or detailed consideration to a particular teaching contained in a document merely because the document was cited as part of an IDS. There is no assurance that any particular teaching will necessarily be focused on by the examiner, absent an indication in the record that the particular teaching has been brought to the examiner's attention. Indeed, it is to be noted that with respect to the IDS filed on October 19, 2006, which first cited the JP9-117198 Publication and the S-400 Strip Vent Publication after allowance, patent owner declined to admit that the cited documents constituted prior art, and patent owner also specifically declined to admit that any of the cited documents were "material to patentability."

Further, the mere fact that the additional searches were conducted after the mailing of the first Notice of Allowability has nothing to do with the issue the extent of examiners' consideration of the technical teachings of the JP9-117198 Publication and the S-400 Strip Vent Publication. For reasons set forth in detail, *infra*, the key fact is that the record of the prior merged proceeding contains no identification of precisely which specific teaching(s) of those documents were considered in, and to what extent such specific teachings appreciated. The record of the merged proceeding is <u>silent</u> on that matter. While silence in the record does not mean that the examiners ignored the JP9-117198 Publication and the S-400 Strip Vent Publication teachings, it does mean that for the reasons discussed in detail, *infra*, the record of the merged proceeding does <u>not</u> support patent owner's position that the SNQs based on those documents were not proper.

2. The Portion of Portola Packaging Relied on by Patent Owner is Dicta

Although patent owner has quoted MPEP § 2646(II)(A) and the Recreative Technologies decision cited therein, and has also quoted and relied on the Portola Packaging decision, patent owner has misconstrued the information set forth in MPEP § 2646(II)(A). Patent

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owner has also neglected the fact that the portion of the *Portola Packaging* decision relied on by patent owner has been overruled by Congress, so as to return the state of the law regarding an SNQ in reexamination to its position as set forth in the earlier *Recreative Technologies* decision. Analysis of the *Recreative Technologies* and *Portola Packaging* decisions, and an understanding of the effect that The Patent and Trademark Office Authorization Act of 2002, enacted in Public Law 107-273, 21st Century Department of Justice Appropriations Authorization Act, 116 Stat. 1758 (2002) ("the 2002 amendment") had on the *Portola Packaging* decision demonstrates that patent owner's position in the present petition is not persuasive.

a. Recreative Technologies

In the reexamination proceeding that was the subject of the *Recreative Technologies* decision, the prosecution of the original patent for which reexamination had been requested and ordered showed that the reexamination proceeding was ordered based on five patents and three publications that were deemed to raise at least one SNQ. However, the proceeding reached a point at which the examiner's <u>sole</u> rejection for obviousness under 35 U.S.C. § 103 was not based on any of those documents. Rather, the examiner applied "Ota", a document that had been cited in the original examination and over which the claims had been held to be patentable for obviousness. On appeal, the Board of Patent Appeals and Interferences ("BPAI") reversed the obviousness rejection based on Ota, but then applied Ota to certain of the claims in a new ground of rejection for anticipation under 35 U.S.C. § 102. On appeal, the Federal Circuit considered an argument by patent owner that "anticipation is the epitome of obviousness," and therefore, the original examiner had necessarily considered novelty when examining the claims for obviousness. However, the Federal Circuit stated that they need not comment on that argument. Rather, the court's opinion included the following comment regarding the meaning and purpose of the SNQ test:

"The statute authorizes reexamination only when there is a substantial new question of patentability. A second examination, on the identical ground that had been previously raised and overcome, is barred. Thus, once it becomes apparent that there is no new question of patentability, it is improper to conduct reexamination on an old question that had been finally resolved during the initial examination." *Recreative Technologies*, 83 F.3d at 1396, 38 USPQ2d at 1777. [Emphasis added.]

The Federal Circuit then concluded that when the only rejection of record in the reexamination proceeding was the same Section 103 rejection view of the Ota document that had been applied in a Section 103 during the prosecution of the original patent:

"... reexamination should not have been granted or <u>should have been dismissed at the examination stage when no new grounds of rejection were raised</u>. Id., 83 F.3d at 1398, 38 USPQ2d at 1799. [Emphasis added.]

b. Portola Packaging

The subsequent *Portola Packaging* decision presented facts significantly different from the facts in the earlier *Recreative Technologies* decision. In *Portola Packaging*, during examination of the original application that matured into the patent that was the subject of the appealed reexamination proceeding, application claims 1 and 2 had been rejected under 35 U.S.C. § 102 as being anticipated by a patent to <u>Hunter</u>. Application claims 3-6 and 8-11 had been rejected under 35 U.S.C. § 103 as being obvious based on the combined teachings of a patent to <u>Faulstich</u> and two other references. In response to these rejections, the existing

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application claims were amended and several new claims were added. Eight of these claims issued in the patent. Subsequently, reexamination was requested for the patent, and during that reexamination, the examiner initially rejected all of the patent claims as being anticipated by, *inter alia*, a patent to Von Hagel. In response, patent owner amended the claims in the reexamination proceeding. The examiner then rejected the amended claims as obvious over the combined teachings of the <u>Faulstich</u> and <u>Hunter</u> patents. The BPAI affirmed that rejection. ¹⁶

On appeal from the decision of the BPAI, patent owner argued that it was improper to reject the claims in the reexamination proceeding over the combined teachings of the Faulstich and Hunter patents, because it was improper to reject solely over the combined teachings of patents that had been before the Office in an earlier examination. Id., 110 F.3d at 787, 42 USPQ2d at 1296-97. ¹⁷ The Office argued that the claims of the original application had never been rejected for obviousness under 35 U.S.C. § 103 over the specific combination of the Faulstich and Hunter patents, that the rejection was a new rejection and, therefore, was proper under the reexamination statute. The Office noted that there was no evidence that the examiner had ever considered an obviousness rejection over the specific teachings of the Faulstich and Hunter patents relied on in the prior proceeding. The Office also argued that because patent owner had amended the claims during the reexamination proceeding, all of the post-amendment reexamination proceedings were authorized by the reexamination statute, and that those proceedings necessarily concerned questions of patentability distinct from those addressed during the original examination. Id. 110 F.3d at 787-8, 42 USPQ2d at 1297.

As it considered these issues, the court referenced the following guidance in MPEP § 2258, (6th ed. Rev.2, July 1996) that had been promulgated after the holding in *Recreative Technologies*:

Once reexamination is ordered based on a proper substantial new question of patentability, grounds of rejection previously considered by the [PTO] may not be raised by the examiner. For this purpose, a ground of rejection was 'previously considered' if it:

- 1. is applied to the same claimed subject matter as a previous rejection in the examination of the original patent or earlier concluded reexamination;
- 2. relies on the same combination of patents and printed publications as the previous rejection; and
 - 3. applies the same statutory basis as the previous rejection.

The court noted that if such guidance were followed, the rejections before the court would be permitted by the reexamination statute. However, the court reversed the rejections, stating that the reexamination statutes did not countenance a rejection based <u>only</u> on the technical teachings of previously considered prior art, <u>even if those same teachings were applied on a statutory basis other than the basis upon which they had been considered in a prior examination of those claims.</u> The court expressed its position in this way:

Congress did not authorize the PTO to evaluate patentability anew whenever there existed doubt as to a patent's validity. Rather, the PTO was authorized to reexamine an issued patent only within strictly defined limits. Congress recognized that holdings of patent invalidity by courts were mostly based on prior art that was not before the PTO. Patent Reexamination:

¹⁶ Portola Packaging, 110 F.3d at 787, 42 USPQ2d at 1296.

¹⁷ It should be noted that specific teaching of the Faulstich and Hunter patents had necessarily been considered in formulating rejections in the prior proceeding.

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Hearings on S. 1679 Before the Senate Comm. on the Judiciary, 96th Cong. 2 (1980) (opening statement of Senator Birch Bayh) ('All too often, patent holders find themselves in lengthy court proceedings where valuable patents are challenged on the grounds that the patent examiner missed pertinent data during the initial patent search.); id. at 14 (testimony of Sydney Diamond, Commissioner, U.S. Patent and Trademark Office) (referring to Gloria K. Koenig, Patent Validity-A Statistical and Substantive Analysis at § 5.05[4] (1974) in which the author found that from 1953 through 1967 'the proportion of invalid patents wherein uncited prior art [i.e., prior art not before the PTO] figured into the result is between 66 and 80 percent'). Congress also was aware that newly-discovered prior art often is identified only after a patent is issued because a potential infringer generally has greater resources and incentives to search for and find prior art than does the PTO. Hearings on S. 1679, at 21-22 (testimony of Donald R. Dunner, President of the American Patent Law Association) ('It is inevitable . . . that all of the prior art will not be uncovered [by the PTO]. A determined advocate, desiring to do in a patent, spending tens of thousands of dollars in litigation situations, can often, if not always, find something that has not been considered by the [PTO].').

Thus, Congress provided for reexamination of patents, but it was also concerned about subjecting patentees to repeated examinations on the same prior art. It therefore limited the scope of reexamination. As the Federal Circuit stated in *Recreative Technologies*:

Congress recognized that [the] broad purpose [of reexamination] must be balanced against the potential for abuse, whereby unwarranted reexaminations can harass the patentee and waste the patent life. The legislative record and the record of the interested public reflect a serious concern that reexamination not create new opportunities for abusive tactics and burdensome procedures. Thus, reexamination as enacted was carefully limited to new prior art, that is, 'new information about pre-existing technology which may have escaped review at the time of the initial examination of the patent application." H.R. Rep. No. 96-1307, [at] 3 (1980) reprinted in 1980 U.S.C.C.A.N. 6460, 6462. No grounds of reexamination were to be permitted other than on new prior art and sections 102 and 103. As explained in the legislative history, matters that were decided in the original examination would be barred from reexamination: "This 'substantial new question' requirement would protect patentees from having to respond to, or participate in unjustified reexaminations. Further, it would act to bar reconsideration of any argument already decided by the [PTO], whether during the original examination or an earlier reexamination." Id. at 7, reprinted [in] 1980 U.S.C.C.A.N. at 6466.

83 F.3d at 1397, 38 U.S.P.Q.2D (BNA) at 1778 (emphasis added); see also *In re Etter*, 756 F.2d 852, 856, 225 U.S.P.Q. (BNA) 1, 4 (Fed. Cir. 1985) (in banc) (citing the first quoted passage from H.R. Rep. 96-1307 and emphasizing the phrase 'escaped review at the time of the initial examination'). Accordingly, reexamination was only intended for those instances in which the examiner did not have all of the relevant prior art at his disposal when he originally considered the patentability of an invention. [Emphasis in bold added.] Id. at 110 F.3d at 789-90, 42 USPQ2d at 1298.

On this reasoning, the *Portola Packaging* court stated that a reexamination proceeding could not be ordered or maintained based only on technical teachings in prior patents or printed publications that the examiner had at his or her disposal in a prior Office proceeding for that patent (e.g., during the examination of the original application for patent or during a prior reexamination of that patent). However, that statement went well beyond the facts of *Portola Packaging*. The facts presented the much narrower issue of whether reexamination could be conducted based on specific technical teachings in a prior patent or publication "A" that had been considered in a prior proceeding involving the patent, but only with respect to anticipation of the claims in that prior proceeding, if those teachings were to be combined with specific technical teachings of a prior patent or publication "B" that had

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<u>been previously considered</u> in that prior proceeding, but <u>only</u> together with technical teachings other than those of "A" in the prior proceeding.

The language relied on by patent owner in the present petition to the effect that the examiners (i.e. "government employees") must be presumed to "have done their duty" and "if the references were in front of the examiner, it must be assumed that he or she reviewed them" is part of the *Portola Packaging* dicta, since it is quite clear from the record that in *Portola Packaging*, the facts in the appeal showed that that the examiner had indeed previously considered specific technical teachings contained in the Faulstich and Hunter patents during the prior examination of the application that matured into the patent that was the subject of the appealed reexamination proceeding. The facts in *Portola Packaging* had nothing to do with the legal effect of any presumed consideration of all documents cited in a prior proceeding which the examiner had at his or her disposal, where the record of the prior proceeding does not expressly indicate consideration of the teachings of those documents.

3. The 2002 Amendment Overruled the *Portola Packaging* Dicta Relied on by Patent Owner

The 2002 amendment added the following language to the patent statute as the last sentence of 35 U.S.C. §§ 303(a) and 312(a):

"The existence of a substantial new question of patentability is not precluded by the fact that a patent or printed publication was previously cited by or to the Office or considered by the Office."

The legislative history and floor discussion of the 2002 amendment clearly indicate that the language added was expressly directed at overruling the dicta in the *Portola Packaging* decision. For example, it is stated in the legislative history of the 2002 amendment that:

"Section 13105 modifies the sections of Title 35 of the U.S. Code that instruct the Director to determine whether substantial new questions of patentability are raised by requests for prior art citations to the Office, ex parte reexaminations of patents, or inter partes reexaminations of patents. In each of these cases, language is added to the Title to clarify that the existence of a substantial new question of patentability is not necessarily precluded by the fact that a patent or printed publication has been previously cited by the Office or considered by the Office. This section states that these amendments to the U.S. Code will be effective for any determinations made by the Director on or after the enactment of this bill." (H.R. CONF. REP. 107-685, H.R. Conf. Rep. No. 685, 107TH Cong., 2ND Sess. 2002, 2002 U.S.C.C.A.N. 1120, 2002 WL 31163881 (Leg.Hist.)) [Emphasis added.]

As a further guidance on the purpose of the clarifying language, note the following remarks of Congressman Sensenbrenner directed to the language added be added to 35 U.S.C. §§ 303(a) and 312(a):

Madam Speaker, Congress established the patent reexamination system in 1980. The 1980 reexamination statute was enacted with the intent reexamination of patents by the Patent and Trademark Office would achieve three principal benefits, first, to settle validity disputes more quickly and less expensively than litigation; second, to allow courts to refer patent validity questions to an agency with expertise in both the patent law and technology; and third, to reinforce investor confidence in the certainty of patent rights by affording an opportunity to review patents of doubtful validity.

More than 20 years after the original enactment of the reexamination statute, the Committee on the Judiciary still endorses these goals and encourages third parties to pursue reexamination as an efficient way of settling patent disputes.

Reexamination worked well until recently when it was severely limited by a Federal Court of Appeals decision. H.R. 1866 is intended to overturn the 1997 In re Portola Packaging case by the United States Court of Appeals for the Federal circuit. That decision severely impairs the patent reexamination process. Reexamination was intended to be an important quality check on defective patents. Unfortunately, this decision severely limits its use.

The Portola case is criticized for establishing an illogical and overly strict bar concerning the scope of reexamination requests. The bill permits a broader range of cases to be the subject of a request, as was the case for the first 16 years since the law was enacted. The bill that we consider today preserves the "substantial new question standard" that is an important safeguard to protect all inventors against frivolous action and against harassment, while allowing the process to continue as originally intended. It also preserves the discretion of the Patent and Trademark Office in evaluating these cases.

The bill has been amended since its introduction by the full committee. I wish to take a moment to explain this to my colleagues.

Since its introduction, we heard from the public members of the bar and critics of the Portola decision who have recommended that we make an additional change to ensure the result that we seek. The text is clarified to permit the use of relevant evidence that was "considered" by the PTO, but not necessarily "cited." Some would say this is redundant, but I prefer to clarify precisely when reexamination is an available procedure. This will ensure that the system is flexible and efficient. While many believe the base text is satisfactory to meet that goal, I hope that the amendment removes any doubt.

I believe that adding this one sentence to the Patent Act will help prevent the misuse of defective patents in all fields, especially those concerning business methods. An efficient patent system is important for inventors, investors and consumers. I urge Members to support H.R. 1866. ¹⁸ [Emphasis added.]

Additional confirmation that the amendments to 35 U.S.C. §§ 303(a) and 312(a) were directed to overturning the *Portola Packaging* dicta is provided in the concurrent remarks of Congressman Berman:

Madam Speaker, I rise in support of H.R. 1866, and I urge my colleagues to vote for it.

The Committee on the Judiciary favorably reported this legislation by voice vote on June 20. Prior to that, the Subcommittee on Courts, the Internet and Intellectual Property passed the bill by a voice vote on May 22. It is a good step forward on the road of making reexamination a more attractive and effective option for challenging a patent's validity.

The bill overturns, as the gentleman from Wisconsin mentioned, the 1997 Federal circuit decision In Re Portola Packaging. In that case, the Federal circuit narrowly construed the term "substantial new question of patentability" to mean prior art that was not before the examiner during an earlier examination. Because the PTO director can only order a reexamination if a "substantial new question of patentability" exists, the Federal court's decision in Portola effectively bars the PTO from conducting a reexamination based on prior art that was cited in the patent application.

¹⁸ 147 Cong. Rec. H5358-01

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The Portola decision is troublesome because it prevents reexaminations from correcting mistakes made by examiners. <u>Ideally, a reexamination could be requested based on prior art cited by an applicant that the examiner failed to adequately consider. However, after Portola, such prior art could not be the basis of the reexamination.</u>

By overturning the Portola decision, H.R. 1866 will allow reexamination to correct some examiner errors. Thus, this bill will accomplish an important, if narrow, objective.

Madam Speaker, as far as I know, H.R. 1866 has not engendered any controversy, and I urge my colleagues to support it. ¹⁹ [Emphasis added.]

Note should also be taken of the decision of the following comment by the Federal Circuit in *In re Bass*, 314 F.3d 57565 USPQ2d 1156 (Fed. Cir. 2002):

"[O]n November 2, 2002, 35 USC § 303(a) was amended by the passage of Pub. L. No. 107- 273, § 13105, (116 Stat.) 1758, 1900, to add "the existence of a substantial new question of patentability is not precluded by the fact that a patent or printed publication was previously cited by or to the Office or considered by the Office," thereby overruling *Portola Packaging*. Because the change only applies to decisions made by the PTO on or after its enactment, this case is not affected." ²⁰

315 F.3d at 576, 65 USPQ2d at 1157.

Thus, it is clear from legislative history of the 2002 amendment, and the floor comments thereon, as well as from the cited *Bass* decision, that the purpose of the 2002 amendment to Sections 303(a) and 312(a) was to clarify, with respect to the *Portola Packaging* decision, that finding an SNQ "is not necessarily precluded" by the fact that a patent or printed publication was previously cited or considered by the Office. As discussed, *infra*, to the extent that patent owner relies on the dicta in *Portola Packaging*, by arguing that the examiners had the JP9-117198 Publication and the S-400 Strip Vent Publication "before them" and so, must necessarily have considered them in their entirety, it is clear that after the 2002 amendment to the reexamination statute, such reliance is misplaced because that dicta in *Portola Packaging* was expressly abrogated by Congress.

4. The Record of the Merged Proceeding Does Not Identify Which Specific Technical Teachings of the JP9-117198 Publication and the S-400 Strip Vent Publication, If Any, Were Considered by the Examiner or Her Supervisors

Patent owner has argued at length that the examiner involved in the allowance of the merged proceeding:

- 1. Had the teachings of the JP9-117198 Publication and the S-400 Strip Vent Publication before her for an extended period of time after the mailing of the first Notice of Allowability on October 19, 2006;
- 2. Conducted an interview on March 9, 2007 following patent owner's citation of the two publications in question on October 19, 2006;
- 3. Mailed additional Notices of Allowability on November 18, 2006, and April 19, 2007; and

¹⁹ Id.

Note that the 2002 amendments added the identical language to 35 U.S.C § 312(a), for the identical reasons.

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4. Continued searching even after those Notices of Allowability until a last Notice of Allowability was mailed on June 27, 2007.

However, in all of patent owner's arguments, and in all of the exhibits referenced in the Thorson verified statement that is attached to the present petition, patent owner has <u>not</u> pointed to any specific technical teaching in the JP9-117198 Publication or in the S-400 Strip Vent Publication that was considered and discussed on the record by those examiners. In fact, in the Interview Summary form for the March 9, 2007 interview, it is merely stated by the examiner that those two documents (and one other cited document) were "discussed" with respect to claims 2, 3, 8 and 9. ²¹ It is also stated by the examiner in the Interview Summary form for the March 9, 2007 that "[N]o agreement was reached." ²² Further although it was required that patent owner file a "Statement of the Substance of the Interview" within one month or 30 days from the interview date, ²³ patent owner did not do so. Thus the record of the prior merged proceeding clearly does <u>not</u> identify a single specific teaching of either the Japanese Patent Application or the S-400 Strip Vent Publication that was discussed at the March 9, 2007 interview. Additional interviews were conducted on May 2, 2007 and May 10, 2007, but <u>no</u> prior art is identified as having been discussed at such interviews. ²⁴

As discussed in Sections II(B)(3), *supra*, after the *Portola Packaging* decision, Congress enacted an amendment to the reexamination statute in 2002, which amended 35 U.S.C. §§ 303(a) and 312(a) by adding to each of those Sections this language:

"The existence of a substantial new question of patentability is not precluded by the fact that a patent or printed publication was previously cited by or to the Office or considered by the Office."

As demonstrated in Section II(B)(2)(b), supra, the addition of that sentence to 35 U.S.C §§ 303(a) and 312(a) specifically abrogated the dicta in the Portola Packaging decision, thereby permitting the Office to find that a request for reexamination establishes an SNQ based upon the specific technical teachings of prior patents or printed publications that had been merely cited by or to the Office, but had not been considered and discussed by the Office on the record, and to then properly order reexamination of patent claims based solely on that SNQ. Thus, identification of the <u>specific</u> technical teachings in the JP9-117198 Publication and in the S-400 Strip Vent Publication that were considered and discussed on the record in the prior proceedings for the '193 patent is critical to patent owner's position in light of the 2002 amendment to 35 U.S.C § 312(a). However, the records in the prior Office proceedings for the '193 patent that is the subject of the subsequent '185 inter partes reexamination do not evidence consideration of any specific technical teachings contained in either the JP9-117198 Publication or the S-400 Strip Vent Publication. Those documents were not of record in the application that issued as the '193 patent. Those documents were cited after allowance in the prior merged proceeding, but the "discussion" of those documents did not indicate consideration of any specific technical teaching(s) in those documents.

²¹ At the time of the interview the record contained claims 2-13.

²² IFW of application number 10,805,686, now U.S. Reissue Patent No. RE 39,825, Interview Summary form dated March 9, 2007 (hand delivered), at pages 1 and 3.

²³ Id., at pages 1 and 2.

²⁴ IFW of application number 10,805,686, (now U.S. Reissue Patent No. RE 39,825), Interview Summary form mailed May 21, 2007, at page 1. It appears from page 2 of the Interview Summary form, that the interviews of May 2, 2007 and May 10, 2007 concerned the correction of formal matters.

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Due to the absence of any "discussion" of the specific technical teachings of the JP9-117198 Publication and of the S-400 Strip Vent Publication that was considered and discussed on the record in the merged proceeding, it is impossible to ascertain in the present '185 inter partes reexamination proceeding, precisely which specific technical teachings of the JP9-117198 Publication and the S-400 Strip Vent Publication were considered by the examiner, if any. It is, therefore, impossible to state that the technical teachings of those two documents that are now relied upon in the '185 inter partes reexamination proceeding to establish SNQs are technical teachings that were previously considered by the Office in the merged proceeding. Even assuming, arguendo, that specific technical teachings of those two documents relied on to establish the SNQs in the '185 inter partes reexamination proceeding were previously considered to some extent in the prior merged proceeding, it is equally impossible to ascertain that those teachings were not properly considered "in a new light" with respect to the manner in which they had been considered in the prior merged proceeding. A technical teaching that had been previously considered and discussed on the record in a prior proceeding for a patent that is now the subject of a request for reexamination may properly establish an SNQ in the reexamination proceeding if the teaching is viewed "in a new light."

4. Patent Owner Has Not Established That the Order Granting Inter Partes Reexamination in the '185 Inter Partes Reexamination Proceeding is an Ultra Vires Action

With respect to the JP9-117198 Publication and the S-400 Strip Vent Publication, the record in the prior proceedings for the '193 patent is limited to the record in the prior merged proceeding that resulted in the '825 reissue patent. However, the record in the prior merged proceeding shows that consideration of those documents consisted of (1) acknowledging receipt of an IDS that included a listing of those documents, wherein the IDS does not concede that those documents are prior art or that those documents are even material to patentability, and (2) a statement in the examiner's Interview Summary form of March 9, 2007 that those documents "were considered." Thus, the record in the prior merged proceeding clearly falls far short of establishing that the SNQs in the '185 inter partes reexamination proceeding that are deemed to have been raised by specific technical teachings of the JP9-117198 Publication and the S-400 Strip Vent Publication are not proper SNQs.

Rather, each SNQ found to exist in the '185 inter partes reexamination proceeding is based on specifically identified technical teachings set forth in the JP9-117198 Publication and/or the S-400 Strip Vent Publication. On the records of the prior proceedings for the '193 patent, those specifically identified teachings qualify as being new technical teachings that were not previously considered and discussed in the record of a prior proceeding for the '193 patent. Even if the JP9-117198 Publication and the S-400 Strip Vent Publication are considered to be "old art," the examiner was not precluded from establishing an SNQ in the '185 inter partes reexamination proceeding based on the teachings in such "old art," because the records of the prior proceedings involving the '193 patent do not contain a discussion of any specific technical teaching(s) in those documents that had been discussed and considered by the examiners and/or supervisors in the prior proceedings for the '193 patent. Thus, the examiner in the '185 inter partes proceeding could consider such "old art" "in a new light" to find one or more SNQs.

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Stated differently, to the extent that patent owner considers that the examiners' Interview Summary form dated March 9, 2007 in the prior merged proceeding is evidence that the technical teachings of the Japanese patent publication and the S-400 Strip Vent publication were "discussed" with the examiner (or a supervisor) with respect to the '193 patent claims, the absence in the record of the prior merged proceeding (and in any prior proceeding involving the '193 patent) of any <u>specifics</u> of the technical teaching(s) that was/were "discussed" means that the specific discussion of these references in the Order granting reexamination in the '185 *inter partes* reexamination proceeding <u>necessarily</u> reflects a consideration of the technical teachings of those documents "in a new light," or in a different way from how they were viewed in the prior merged proceeding.

Accordingly, because patent owner has <u>not</u> established that the order granting reexamination in the '185 *inter partes* reexamination was not properly based on one or more SNQs, patent owner has not established that the *Order Granting Inter Partes Reexamination* in the '185 *inter partes* reexamination proceeding is an *ultra vires* action by the examiner such that the '185 *inter partes* reexamination must be vacated.

ADDITIONAL DISCUSSION

The decision to dismiss the patent owner's petition to vacate the '185 inter partes reexamination proceeding is based only upon a consideration of the arguments presented therein, without detailed consideration of the third party requester opposition paper that was untimely filed on March 27, 2008. As the third party opposition paper was not timely filed, it will be sealed. ²⁵

CONCLUSION

- 1. The February 29, 2008 patent owner petition to vacate the '185 *inter partes* reexamination proceeding is granted to the extent that the decision on petition dated January 14, 2008 has been fully reconsidered. However, the February 29, 2008 is <u>denied</u> with respect to the relief requested therein.
- 2. The March 27, 20087 third party requester opposition paper was untimely filed and is <u>dismissed</u> without consideration.
- 3. Jurisdiction of the '185 *inter partes* reexamination proceeding is being returned to the Central Reexamination Unit for action as may be appropriate.
- 4. This decision is designated as a final agency action under 5 U.S.C. § 704.
- 5. Telephone inquires related to this decision should be directed to the undersigned, at (571) 272-7735, or in his absence, to Stephen Marcus, Senior Legal Advisor, at (571) 272 7743.

Robert A. Clarke, Director

Office of Patent Legal Administration

²⁵ Papers cannot be physically removed from an Image File Wrapper, and so technically cannot be "expunged." Instead papers are "sealed" by being marked "closed" and "non-public." Papers that are sealed do not form any part of the official record of the '185 *inter partes* reexamination proceeding.

Exhibit 1021

<u>Trials@uspto.gov</u> Paper 36 Tel: 571-272-7822 Entered: November 7, 2014

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SDI TECHNOLOGIES, INC., Petitioner,

v.

BOSE CORP., Patent Owner.

Case IPR2013-00350 Patent 8,401,682 B2

Before KARL D. EASTHOM, MICHAEL J. FITZPATRICK, and DAVID C. McKONE, *Administrative Patent Judges*.

McKONE, Administrative Patent Judge.

FINAL WRITTEN DECISION 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

A. Background

SDI Technologies, Inc. ("Petitioner") filed a Petition (Paper 2, "Pet.") requesting *inter partes* review of claims 1–21, 24, 27, 28, 30–48, 51, 54, 62, 63, 67–70, 73, 74, and 76 of U.S. Patent 8,401,682 B2 (Ex. 1001, "the '682 patent"). Bose Corporation ("Patent Owner") filed a Preliminary Response (Paper 10, "Prelim. Resp."). Pursuant to 35 U.S.C. § 314, in our Decision to Institute, we instituted this proceeding as to all of the challenged claims of the '682 patent. Paper 11 ("Dec.").

After the Decision to Institute, Patent Owner timely filed a Patent Owner Response (Paper 20, "PO Resp."), and Petitioner timely filed a Reply to the Patent Owner Response (Paper 24, "Reply"). An oral hearing was held on September 4, 2014. Paper 35 ("Tr.").

We have jurisdiction under 35 U.S.C. § 6(c). This Decision is a final written decision under 35 U.S.C. § 318(a) as to the patentability of the challenged claims. Based on the record before us, Petitioner has demonstrated by a preponderance of the evidence that all of the challenged claims, claims 1–21, 24, 27, 28, 30–48, 51, 54, 62, 63, 67–70, 73, 74, and 76, are unpatentable.

B. Related Proceedings

Patent Owner asserted the '682 patent and U.S. Patent No. 8,364,295 ("the '295 patent") against Petitioner in *Bose Corp. v. SDI Technologies*, *Inc.*, Case No. 13-cv-10277-WGY (D. Mass.) ("the '682/'295 patent litigation"). Pet. 1. The '682 patent matured from a continuation of the

application that gave rise to the '295 patent. The '682/'295 patent litigation has been administratively closed pending the outcome of this *inter partes* review. *See Bose Corp. v. SDI Techs., Inc.*, Order for Closure (Jan. 24, 2014) (Ex. 2018).

Petitioner filed a second petition for *inter partes* review of the '682 patent, *SDI Technologies, Inc. v. Bose Corp.*, Case IPR2014-00343 (PTAB Jan. 10, 2014). Petitioner also filed two petitions for *inter partes* review of the '295 patent, *SDI Technologies, Inc. v. Bose Corp.*, Case IPR2013-00465 (PTAB July 25, 2013), and *SDI Technologies, Inc. v. Bose Corp.*, Case IPR2014-00346 (PTAB Jan. 13, 2014).

C. References Relied Upon

Petitioner relies upon the following prior art references:

- ZS-D7 Personal Audio System Operating Instructions, Sony Corp., 3-860-694-33(1) (1998) (Ex. 1002, "SMS");
- Creative NOMAD® Digital Audio Player User Guide, On-line Version, v. 1.0, Creative Tech. Ltd. (June 1999) (Ex. 1005, "Nomad Manual");
- Guy Hart-Davis & Rhonda Holmes, MP3!, I DIDN'T KNOW YOU COULD DO THAT ... TM 65-83 (Sybex, Inc. 1999) (Ex. 1009, "WinAmp");
- Remote control WinAmp and more, downloaded at web.archive.org/web/19990508121919/http://www.evation.com/irman/index.html (archived May 8, 1999) (Ex. 1010, "Irman Web Pages");
- ADA310W Altec Lansing Computer Speaker System User Guide, Altec Lansing Techs., Inc., (1998) (Ex. 1011, "Altec Lansing Manual"); and

U.S. Patent No. 5,969,283, issued Oct. 19, 1999 (Ex. 1013, "Looney").

D. Grounds of Unpatentability

We instituted this proceeding based on the grounds of unpatentability set forth in the table below. Dec. 27–28.

References	Basis	Claims challenged
SMS and Nomad Manual	§ 103	1–11, 18–21, 24, 27, 28, 30–38, 45–48, 51, 54, 73, 74
SMS, Nomad Manual, and Looney	§ 103	12–17, 39–44, 62, 63, 67– 70, 76
WinAmp, Irman Web Pages, and Altec Lansing Manual	§ 103	1–11, 18–21, 24, 27, 28, 30–38, 45–48, 51, 54, 73, 74
WinAmp, Irman Web Pages, Altec Lansing Manual, and Looney	§ 103	12–17, 39–44, 62, 63, 67– 70, 76

E. The '682 Patent

The '682 patent generally relates to audio systems for reproducing sound from computer files and computer network radio stations. Ex. 1001, col. 1, ll. 16–19. Figure 1 of the '682 patent is reproduced below.

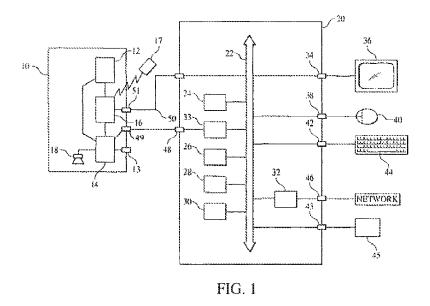


Figure 1 shows sound reproduction device 10 (such as a Bose Wave® radio) that includes AM/FM tuner 12, audio signal processing circuitry 14, control electronics circuitry 16 for controlling the tuner and the signal processing circuitry, remote control device 17 for controlling the control electronics circuitry, and speaker 18. *Id.* at col. 3, ll. 30–35; col. 4, ll. 49–52. Sound reproduction device 10 is connected to computer 20 through control connector 50, which connects control electronics circuitry 16 to the computer's bus 22, and through a connector between the audio system's analog input terminal 49 and the computer's stereo jack 48. *Id.* at col. 3, ll. 54–58. Stereo jack 48 connects the computer's sound card 33 to the sound reproduction device's audio signal processing circuitry 14. *Id.* at Fig. 1. The computer includes hard disk drive 30 that can store digital music files. *Id.* at col. 3, ll. 41–44; col. 6, l. 52 – col. 7, l. 3. The computer also is connected to a network, such as the Internet. *Id.* at col. 3, ll. 49–53. The computer can access web radio stations through the network. *Id.* at col. 6,

ll. 40–48. Signals from remote control 17, received by sound reproduction device 10, can control functions of computer 20. *Id.* at col. 10, ll. 31–56.

The '682 patent also describes organizing music files into "assemblages." *Id.* at col. 7, 1l. 18–43. The assemblages are based on metadata contained in the music files. *Id.* "Metadata' values are typically in file header information of music files in many popular music file formats. Metadata values may include the artist, the composer, the type of music, and others." *Id.* at col. 7, 1l. 20–23.

Claim 1, reproduced below, is illustrative of the claimed subject matter:

- 1. An audio system configured to connect to a separate computer that is configured to provide audio information from any one of a plurality of sources, including digital music files stored on the computer and a network accessible by the computer, the audio system comprising:
- (a) a sound reproduction system comprising:
- a housing;
- control circuitry located within the housing for receiving control commands;
- audio signal processing circuitry located within the housing for processing audio signals for reproduction;
- one or more speakers for reproducing audio signals processed by the audio signal processing circuitry; and
- a connector configured to provide a physical and electrical connection exclusively between the sound reproduction system and the computer, wherein the connection includes one or more signal paths configured to
 - (i) receive audio information from the computer corresponding to the digital music files stored on

the computer and audio information from the network via the computer, and

- (ii) transmit to the computer signals for controlling the computer; and
- (b) a remote control device configured to transmit signals representing at least a first type of command from a user and a second type of command from a user to the control circuitry of the sound reproduction system, wherein the first type of command is a command to control a user function of the sound reproduction system and the second type of command is a command to control a user function of the computer,
- wherein the control circuitry is configured to receive the signals from the remote control and, in response to receiving such signals:
 - (i) control the user function of the sound reproduction system when the user issues a command of the first type, and
 - (ii) transmit to the computer, via a signal path of the connector, a signal for controlling the user function of the computer when the user issues a command of the second type.

II. ANALYSIS

A. Claim Construction

The Board interprets claims using the broadest reasonable construction. *See* 37 C.F.R. § 42.100(b). Claim terms generally are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *See In re Translogic Tech.*, *Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007).

1. Claim Terms Previously Construed

In the Petition, Petitioner proposed a construction for the term "computer," appearing in independent claims 1, 28, and 62. Pet. 10–11. Patent Owner, in its Preliminary Response, proposed constructions for the terms "network," "configured to provide audio information from any one of a plurality of sources," and "audio information from the network via the computer," recited in claim 1. Prelim. Resp. 5–15. In the Decision to Institute (Dec. 9–16, 21), we construed claim terms as reproduced in the table below:

Claim Phrase	Claim Construction in the Decision to Institute	
"computer" (claims 1, 28, 62)	any machine capable of receiving input, processing, storing, and outputting data	
"network" (claim 1)	an interactive computer network, such as the internet	
"computer that is configured to provide audio information from any one of a plurality of sources, including digital music files stored on the computer and a network accessible by the computer" (claim 1)	requires a computer configured to provide audio information from either one or more of digital music files stored on a computer, or one or more of different networks accessible by a computer, but, does not preclude providing the information from both types of sources	
"audio information from the network via the computer" (claim 1)	audio information received from the computer that the computer has downloaded from the network	
"a connector between the sound reproduction system and the computer, wherein the connection is configured to receive audio information from the computer corresponding to the digital music files stored on the computer and audio information from the network via the computer" (claim 1)	This claim limitation does not require a connection that actually receives audio information from a network. Instead, it requires a connection that is configured to do so.	

During trial, Patent Owner disputed our constructions of "computer that is configured to provide audio information from any one of a plurality of sources, including digital music files stored on the computer and a network accessible by the computer" and "a connector . . . between the sound reproduction system and the computer, wherein the connection is configured to . . . receive audio information from the computer corresponding to the digital music files stored on the computer and audio information from the

network via the computer." PO Resp. 5–9. Because we do not reach the issue whether SMS and Nomad Manual render obvious the challenged claims—the only ground in which it is disputed whether these terms are met by the asserted prior art—we also do not reach Patent Owner's challenge to our preliminary constructions of these terms.

Patent Owner also proposed a construction for "audio signal processing circuitry," recited in claims 1 and 28, and constructions of terms related to "assemblages" and "metadata," recited in claims 12–17, 39–44, 62, 63, 67–70, and 76. *Id.* at 10–13. Petitioner opposes Patent Owner's constructions of these terms. Reply 3.

2. "audio signal processing circuitry"

In the '682/'295 patent litigation, the district court construed "audio signal processing circuitry," recited in claims 1 and 28, as meaning "circuitry that modifies an audio signal." Ex. 2016, at 33–34. Patent Owner asks us to construe this term to exclude circuitry for amplification, PO Resp. 10, an issue the district court expressly declined to decide, see '682/'295 patent litigation, *Markman* Hearing Tr. (Ex. 2016), at 33–34.

Patent Owner argues that claim 1 of the related '295 patent (which is otherwise similar to claim 1 of the '682 patent) recites "an amplifier located within the housing for powering the one or more speakers" rather than "audio signal processing circuitry located within the housing for processing audio signals for reproduction," as recited in claim 1 of the '682 patent. PO Resp. 10. Patent Owner argues that, per the doctrine of claim differentiation, we should presume that claim 1 of the '682 patent excludes an amplifier. *Id.* at 10–11. Patent Owner's argument assumes that

construing "audio signal processing circuitry" to include amplifiers would render these two claims identical in scope. Petitioner points out, however, that, if audio signal processing circuitry includes amplifiers, it would be broader in scope than amplifiers, rather than commensurate in scope, rendering claim differentiation inapplicable. Reply 3. We agree with Petitioner; the doctrine of claim differentiation is not applicable here. Thus, we are persuaded that the claimed audio signal processing circuitry may include amplifiers.

Further, Patent Owner's additional arguments are unavailing. Patent Owner argues that the specification of the '682 patent describes audio signal processing circuitry separately from powered speakers and that the specification uses the term audio signal processing circuitry to refer to techniques, such as bass and treble adjustments, used to modify an audio signal. PO Resp. 11–12 (citing the testimony of its declarant, Dr. Robert Stevenson, Ex. 2026 ¶¶ 78–81). The specification, however, does not distinguish between audio signal processing circuitry and powered speakers. Rather, the patent refers to a powered speaker as an abstract logical unit, while providing a more detailed description of a powered speaker that includes such features as audio signal processing circuitry 14, control electronics circuitry 16, and electroacoustical transducer 18. Ex. 1001, col. 3, 11. 28–35. In any event, Patent Owner has pointed to no disclosure that distinguishes amplifiers from audio signal processing circuitry.

Dr. Stevenson further testifies that Figure 9J of the '682 patent depicts an amplifier connected to speakers directly, arguing that a skilled artisan would distinguish it from other circuitry in Figures 9I and 9J that performs filtering prior to amplification. Ex. 2026 ¶ 81. Figure 9J, however,

describes items 12, 14, and 16 of Figure 1, which correspond to the AM/FM tuner 12, audio signal processing circuitry 14, and control electronics circuitry 16, respectively. Ex. 1001, col. 3, ll. 20–21; col. 3, ll. 30–32. The amplifier Dr. Stevenson points to most naturally aligns with the audio signal processing circuitry. In any case, Dr. Stevenson points to nothing in the specification that treats this amplifier separately from the other signal-modifying circuitry in Figure 9J.

In sum, Patent Owner has not persuaded us that, under a broadest reasonable construction, "audio signal processing circuitry" excludes amplifiers. Accordingly, we adopt the district court's construction, i.e., "circuitry that modifies an audio signal," which is broad, but reasonable, and is consistent with the specification.

3. "an assemblage of music files based on a first type of metadata included in the music files" ¹

Claims 12 and 39 recite "an assemblage of music files based on a first type of metadata included in the music files." Patent Owner contends that the court in the '682/'295 patent litigation construed this limitation to mean "a first group of music files that is based on a first type of metadata that is located in the music file, which may be in the file header or elsewhere in the file" and urges us to adopt that construction here. PO Resp. 12–13. As Patent Owner points out (*id.* at 13), Petitioner agreed to this construction in the '682/'295 patent litigation. *See* Ex. 2016, at 34–38.

In the Reply, Petitioner contends that no express construction of this term is necessary. Reply 3. Nevertheless, Petitioner argues that "[t]he claims . . . mean that the assemblages are based on types of metadata (for example, artist, album, genre, etc.), *not* the metadata ('The Beatles,' 'Abby Road,' 'Here Comes the Sun,' 'Rock') itself." *Id.* at 11. In essence, Petitioner argues that the claims are directed to assemblages of files based

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¹ Claim 62 recites a storage device configured to store music files, "each music file including within the music file at least a first and second type of metadata that characterizes the music file," and a display for displaying a user interface configured to "present a first assemblage of the plurality of music files in a first set of groups according to the first type of metadata associated with the music files." This language is similar to, but not the same as, the language in claims 12 and 39. Neither Patent Owner nor Petitioner addresses the particular language of claim 62 or the differences between it and the language of claims 12 and 39. *See* PO Resp. 12–13; Reply 3, 11–12. We conclude that this language in claim 62 does not require express construction. We note, however, that claim 62 explicitly requires that each music file include metadata. This is consistent with our construction of "an assemblage of music files based on a first type of metadata included in the music files."

on categories that might be included in metadata, although the files themselves might not include metadata. Petitioner's position is contrary to the plain language of the claims, which recites that an assemblage is "based on . . . a first type of metadata *included in the music files*."

Moreover, consistent with the claim language, the '682 patent describes creating assemblages from metadata contained within the files that store the audio data:

A second type of assemblage includes recorded units with common identifying characteristics, sometimes referred to as common "metadata" values. "Metadata" values are typically in file header information of music files in many popular music file formats. Metadata values may include the artist, the composer, the type of music, and others. . . .

For example, if an assemblage contains music files having a common composer metadata value of "Beethoven", each time the assemblage is requested, a computer database program may search all the music files for the metadata value of "Beethoven" as the composer. In this manner, each time a new music file is recorded with "Beethoven" as the composer, it is automatically added to the assemblage.

Ex. 1001, col. 7, ll. 18-41.

In light of the claim language and the description in the specification, and consistent with the district court in the '682/'295 patent litigation, we construe "an assemblage of music files based on a first type of metadata included in the music files" to mean "a first group of music files that is based on a first type of metadata that is located in the music file, which may be in the file header or elsewhere in the file." We recognize the differences in the claim construction framework employed by district courts, but

nevertheless are persuaded that the district court's construction is the broadest reasonable interpretation.

B. The Level of Ordinary Skill in the Art

The declarants for Petitioner and Patent Owner essentially agree that a person of ordinary skill in the art would have had a bachelor's degree in electrical engineering and several years (e.g., three years) of experience with audio systems. *Compare* Declaration of Andrew B. Lippman (Ex. 1017, "Lippman Decl.") ¶ 19, *with* Stevenson Decl., Ex. 2026 ¶ 20.

C. Obviousness Over WinAmp, Irman Web Pages, and Altec Lansing Manual

Petitioner asserts that claims 1–11, 18-21, 24, 27, 28, 30–38, 45–48, 51, 54, 73, and 74 of the '682 patent would have been obvious over WinAmp, Irman Web Pages, and Altec Lansing Manual. Pet. 39–52.

1. WinAmp

WinAmp describes a software package for playing MP3 digital audio files on a computer. Ex. 1009, at 12. According to WinAmp, the software plays MP3 files stored on the computer and also streams music from the Internet. *Id.* at 17–19. WinAmp describes storing "ID3" tag information, such as title, artist, album, and genre, in each MP3 file. *Id.* at 28.

2. Irman Web Pages

Irman Web Pages describes an infrared receiver that connects to a computer. Ex. 1010, at 1. The receiver receives signals from various remote

controls and converts the signals into computer commands for controlling software executing on the computer. *Id.* Irman Web Pages lists the WinAmp software package as an example of software that can be controlled by a remote control through the receiver. *Id.*

3. Motion to Exclude Irman Web Pages

Patent Owner has moved to exclude Irman Web Pages as hearsay (under Federal Rule of Evidence 802) and lacking authentication (under Federal Rule of Evidence 901). Patent Owner Bose Corporation's Motion to Exclude Evidence (Paper 28, "PO Mot. to Exclude") 6–9. Irman Web Pages is a collection of web pages obtained from the Internet Archive, or Wayback Machine. Patent Owner contends that Petitioner has failed to authenticate the reference "by one who has relevant knowledge." PO Mot. to Exclude 6. According to Patent Owner, at least one district court, in *Novak v. Tucows, Inc.*, 2007 WL 922306 (E.D.N.Y. Mar. 26, 2007), excluded printouts from the Wayback Machine as lacking authentication. PO Mot. to Exclude 6–7.

Petitioner responds that Irman Web Pages includes distinctive characteristics, such as a unique Wayback Machine logo, header, and uniform resource locator ("URL"), indicating that Irman Web Pages is authentic. Petitioner's Opposition to Patent Owner's Motion to Exclude Evidence (Paper 30, "Pet. Opp. to Mot. to Exclude") 5–6; *see also* FED. R. EVID. 901(b)(4) ("The appearance, contents, substance, internal patterns, or other distinctive characteristics of the item, taken together with all the circumstances" is evidence that may satisfy the authentication requirement.). Petitioner further points to several district court cases in which printouts

from the Wayback Machine have been found admissible. Pet. Opp. to Mot. to Exclude 8–9 (citing *Keystone Retaining Wall Sys., Inc. v. Basalite Concrete Prods., LLC*, 2011 WL 6436210 (D. Minn. Dec. 19, 2011); *Web Tracking Solutions, L.L.C. v. Wexler*, 2010 U.S. Dist. LEXIS 143519 (E.D.N.Y. July 27, 2010); *Market-Alerts Pty. Ltd. v. Bloomberg Finance L.P.*, 922 F. Supp. 2d 486, 494 n.12 (D. Del. 2013)). Petitioner also points out that "Bose does not argue that Exhibit 1010 does not accurately represent archive pages . . . captured on May 8, 1999," and points to indicia that show that the date is self-authenticating. *See* Pet. Opp. to Mot. to Exclude, 6, 7, 8 n.3 (footnote providing a "clickable version" of the website).

Patent Owner contends that, in those cited cases in which printouts from the Wayback Machine were found to be authenticated and not hearsay, the party proffering the printouts also offered proof of its accessibility. PO Mot. to Exclude 8–9. At the hearing, Patent Owner clarified that a standard affidavit from the Internet Archive would have provided sufficient authentication. *See* Tr. 87:4–21. The Internet Archive's standard affidavit, however, merely attests to the general procedures of the Internet Archive and the general characteristics of archived web pages on the Wayback Machine and states that the particular web page is part of its records. Ex. 3004. As Petitioner points out, however, we can follow the URL reproduced in Irman Web Pages and verify that Irman Web Pages is part of the Internet Archive's records. Pet. Opp. to Mot. to Exclude 8. Thus, Patent Owner's argument reduces to the contention that Petitioner has not provided an affidavit from Internet Archive attesting to its general procedures. As the *Keystone* case explains, "Ithe Internet Archive has existed since 1996, and

federal courts have regularly accepted evidence from the Internet Archive." 2011 WL 6436210, at *9 n.9. At the hearing, counsel for Patent Owner was asked to explain why we should consider Irman Web Pages unreliable, and, specifically, why we should consider unreliable the indication that Irman Web Pages was archived on May 8, 1999. Tr. 81:13–22; 82:21–83:9; 85:13–86:9; *see also* Fed. R. Evid. 807. Patent Owner did not articulate anything about the document itself that would indicate unreliability.

Instead, as indicated above, Patent Owner essentially contends that Petitioner committed a technical violation of the Rules of Evidence by not obtaining a standard affidavit from Internet Archive to show that "the web contents [were] available on that particular date." *See* Tr. 83:1–2; 85:13–86:9. Such an affidavit would not have added materially to the record for the reasons outlined above. Petitioner shows that the date on the Irman Web Pages facially appears authentic and is authenticated further by accessing the website. Patent Owner has not carried the burden on its motion to show that Irman Web Pages is not authentic. Therefore, we deny Patent Owner's Motion to Exclude, with respect to Irman Web Pages.

4. Altec Lansing Manual

Altec Lansing Manual describes a powered speaker system, the ADA310W, that is plugged into an audio card of a personal computer, either through a universal serial bus ("USB") cable or through a stereo audio cable connecting the computer's analog output to the speaker system's analog input. Ex. 1011, at 3–5. According to Altec Lansing Manual, the speaker system accepts digital and analog audio data. *Id.* at 6. If the computer and the ADA310W are connected using a USB cable, the computer can control

all of the speaker functions. *Id.* at 3. The ADA310W includes a subwoofer and two separate satellite speakers. *Id.* at 4–5. The computer connects to the subwoofer, which connects to the satellite speakers. *Id.* The speaker system also includes a remote control. *Id.* at 6. The signal from the remote control is received at an IR receiver on one of the satellite speakers. *Id.*

5. Motion to Exclude Altec Lansing Manual

Patent Owner moves to exclude page seven of the Altec Lansing Manual. PO Mot. to Exclude 4–6.² While the majority of the Altec Lansing Manual describes the ADA310W product, page seven describes an ADA104 product. *Id.* at 4–5; Ex. 1011, at 7. As Patent Owner points out (PO Mot. to Exclude 4), page seven is in a landscape orientation while the remaining pages of the exhibit are in a portrait orientation. Petitioner argues its declarant, Dr. Lippman, testified that page seven might be a part of the manual for the ADA310W product because the ADA104 and ADA310W products might use the same remote control discussed at page seven. Pet. Opp. to Mot. to Exclude 4 (citing Ex. 2015, 92:8–14; 96:3–9³). However, every indication is that page seven is from a different document than the remainder of Exhibit 1011. Petitioner has not offered persuasive evidence to

² Earlier in the Motion, Patent Owner stated that it "moves to exclude the Altec Lansing Manual (Ex. 1011) or at least page seven in that exhibit." PO Mot. to Exclude 2. Patent Owner's argument, however, is directed to excluding page seven only. *Id.* at 4–6. Patent Owner confirmed at the hearing that it only seeks to exclude page seven. Tr. 84:17–19.

³ Pages 92 and 96 are not included in the excerpts of Dr. Lippman's deposition comprising Exhibit 2015. Petitioner did not supplement the record with the portions of testimony it cites.

the contrary. Accordingly, we grant Patent Owner's Motion to Exclude with respect to page seven of Exhibit 1011.

6. Claims 1–4, 6–8, 10, 11, 18, 19, 24, 27, 28, 30–32, 34, 35, 37, 38, 45, 46, 51, 54, 73, and 74 Would Have Been Obvious Over WinAmp, Irman Web Pages, and Altec Lansing Manual

According to Petitioner, the Altec Lansing ADA310W speaker system could be connected to a computer equipped with WinAmp software. Pet. 7–8. The ADA310W, then, would receive, process, and play audio information from the computer, such as stored MP3 files and music streamed from the Internet. *Id.* Petitioner further argues that the computer could be equipped with an Irman receiver, which would convert remote control signals into commands that would control the WinAmp software. *Id.* This would result in a system with two remote controls: one for the computer, through the Irman receiver, and one for the ADA310W. *Id.* Petitioner proposes that a person of ordinary skill in the art would consolidate the functions of the two remote controls into one remote control, which would interface with the ADA310W. *Id.* at 40, 46. According to Petitioner, a person of ordinary skill would do this "in order to, for example, reduce clutter and duplication." *Id.* Petitioner's proposed combination is supported by the testimony of Dr. Lippman. Ex. 1017 ¶¶ 38–41.

Regarding claims 1 and 28, in addition to findings elsewhere, we make the following findings: Altec Lansing Manual's speaker system is an audio system that is configured to be connected to a computer. Ex. 1011, at 4. This speaker system is a sound reproduction system that includes a housing. *Id.* The housing includes speakers, a connector configured to

provide a physical and electrical connection to the computer, control circuitry (the IR receiver and corresponding circuitry that converts the IR signals into computer commands), and audio signal processing circuitry (including amplifiers and Dolby Digital processing circuitry). *Id.* at 6. Altec Lansing Manual also describes a receiver for receiving information from a remote control device. *Id.* Irman Web Pages describes controlling user functions of music reproduction software on a computer, such as that described in WinAmp, using a remote control. Ex. 1010, at 1.

We conclude that receiving a remote control signal at a receiver located in a speaker system, as taught in Altec Lansing Manual, transmitting that signal to an attached computer, and controlling a function of sound reproduction software (such as WinAmp) on the computer, as taught in Irman Web Pages, would have been no more than an obvious rearrangement of old elements, used for their intended purposes, yielding no more than predictable results. *See KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 416–17 (2007). For these reasons, we conclude that Petitioner has proved by a preponderance of the evidence that claims 1 and 28 would have been obvious over WinAmp, Irman Web Pages, and Altec Lansing Manual.

Claims 2–4, 6–8, 10, 11, 18, 19, 24, 27, and 73 depend from claim 1. Claims 30–32, 34, 35, 37, 38, 45, 46, 51, 54, and 74 depend from claim 28. Having reviewed Petitioner's evidence of unpatentability for these dependent claims, we conclude that Petitioner also has proved by a preponderance of the evidence that claims 2–4, 6–8, 10, 11, 18, 19, 24, 27,

⁴ Patent Owner did not challenge Petitioner's assertion of unpatentability with regard to the additional limitations found in these claims.

30–32, 34, 35, 37, 38, 45, 46, 51, 54, 73, and 74 would have been obvious over WinAmp, Irman Web Pages, and Altec Lansing Manual. *See* Pet. 42–52.

a. The references do not teach away from Petitioner's proposed combination

Patent Owner contends that the references teach away from
Petitioner's proposed combination by teaching two other combinations of
the references that are not within the scope of the claims. PO Resp. 33–41.
With respect to the first alternative combination, Patent Owner argues that
Altec Lansing Manual teaches that a computer can control all functions of a
speaker system and that Irman Web Pages teaches that it could be extended
to support other remote control devices (presumably including the one
described in Altec Lansing Manual). *Id.* at 34. According to Patent Owner,
these teachings would lead a person of ordinary skill in the art to configure
the computer to accept the remote control signal (using an Irman receiver)
and use the remote control to control all functions of the ADA310W
speakers through the computer (per Altec Lansing Manual). *Id.* at 34–35. In
this first Patent Owner-proposed combination, contrary to the claims, the
speaker system would not control the computer.

With respect to the second of its proposed combinations, Patent Owner contends that a skilled artisan would use a single universal remote control that would have communicated with both the Irman receiver and the receiver on the Altec Lansing satellite speaker. *Id.* at 36. In this combination, Patent Owner argues, no modifications to software or circuitry

would have been required. *Id.* In this combination, also, the speaker system would not control the computer.

According to Patent Owner, by leading a skilled artisan to one of these two combinations, the references as a whole would have led the skilled artisan in a direction divergent from the claims and, thus, would have taught away from them. *Id.* at 36–37. Patent Owner further argues that Petitioner's proposed combination would be counterintuitive because the simpler device (the speaker system) would control the more complex device (the computer). *id.* at 40–41.

As the United States Court of Appeals for the Federal Circuit has counseled:

A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant. . . . [I]n general, a reference will teach away if it suggests that the line of development flowing from the reference's disclosure is unlikely to be productive of the result sought by the applicant.

In re Gurley, 27 F.3d 551, 553 (Fed. Cir. 1994). Patent Owner has not persuaded us that a skilled artisan would have been discouraged from using the remote control from Altec Lansing Manual's speaker system rather than a remote control interfacing with a computer connected to the speaker system, nor has Patent Owner persuaded us that such a combination would have been unlikely to be productive of the result achieved by the claims.

We also are not persuaded that the prior art would have led a skilled artisan in a direction divergent from that of the '682 patent. Rather, Patent Owner's evidence suggests that a skilled artisan may have had reasons to

pursue one or the other of its two proposed combinations in certain circumstances. However, "the 'mere disclosure of alternative designs does not teach away." *In re Mouttet*, 686 F.3d 1332, 1334 (Fed. Cir. 2013) (quoting *In re Fulton*, 391 F.3d 1195, 1201 (Fed. Cir. 2004)). We are not persuaded that the prior art implicitly teaches that Patent Owner's proposed combinations would have been superior to that proposed by Petitioner. Cf. Spectralytics, Inc. v. Cordis Corp., 649 F.3d 1336, 1343 (Fed. Cir. 2011) (a jury was permitted to find that "prior Swiss-style machines taught away from embracing vibrations to improve cutting accuracy because all prior machines improved accuracy by dampening vibrations"). Moreover, even if the combinations proposed by Patent Owner would have been preferable to that proposed by Petitioner, "just because better alternatives exist in the prior art does not mean that an inferior combination is inapt for obviousness purposes." *Mouttet*, 686 F.3d. at 1334. Thus, we are not persuaded that WinAmp, Irman Web Pages, and Altec Lansing Manual teach away from a combination in which the remote control interfaces with a speaker system and controls a function of a computer.

Patent Owner further contends that Dr. Lippman's testimony was driven by hindsight because it did not include descriptions of the two combinations proposed by Patent Owner. *Id.* at 37–40. Indeed, Patent Owner moves to exclude ¶¶ 39–44 of Dr. Lippman's testimony because he does not specifically address Patent Owner's proposed combinations.

PO Mot. to Exclude 9–15.⁵ Dr. Lippman testified in deposition that he did not opine about Patent Owner's combinations because, as combinations that would not render the claims obvious, they were not relevant to the case. Ex. 2015, 157:6–159:15. Patent Owner has not shown that focusing one's testimony on an allegedly invalidating combination to the exclusion of other, non-invalidating combinations, evidences hindsight bias. Rather,

[t]o reach a non-hindsight driven conclusion as to whether a person having ordinary skill in the art at the time of the invention would have viewed the subject matter as a whole to have been obvious in view of multiple references, the Board must provide some rationale, articulation, or reasoned basis to explain why the conclusion of obviousness is correct.

In re Kahn, 441 F.3d 977, 987 (Fed. Cir. 2006). Thus, the issue is not whether Dr. Lippman described combinations of the references that would not have rendered the claims obvious; instead, the issue is whether Dr. Lippman provided a reason, with rational underpinning, for combining the references in the way he proposes. *Cf. id* at 988 ("[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.").

Dr. Lippman testified that a skilled artisan would have made the proposed combination "in order to reduce duplication and clutter, such that one remote would control both the speaker and the computer and using the

⁵ For the reasons stated below, we disagree with Patent Owner's argument. Moreover, Patent Owner has not persuaded us that testimony suffering from hindsight bias should be excluded as inadmissible. Rather, that would go to the weight we give to the testimony. Thus, we deny Patent Owner's Motion to Exclude with respect to ¶¶ 39–44 of Dr. Lippman's testimony.

IR receiver positioned in the speaker." Ex. 1017 ¶ 41. We conclude that this reason has rational underpinning. Moreover, as explained in the Decision to Institute (Dec. 24–25), adding Patent Owner's proposed combinations to Petitioner's proposed combination renders the latter no more than an obvious selection from a finite number (here, three) of predictable solutions. The Federal Circuit has distinguished between circumstances where the challenger of a patent "merely throws metaphorical darts at a board filled with combinatorial prior art possibilities," which is vulnerable to hindsight bias, and circumstances "where a skilled artisan merely pursues 'known options' from a 'finite number of identified, predictable solutions," which evidences obviousness. In re Kubin, 561 F.3d 1351, 1359 (Fed. Cir. 2009) (quoting KSR, 550 U.S. at 421). We conclude that this case falls into the latter category. Patent Owner's two combinations and Petitioner's combination together constitute three rearrangements of the same elements, where each of those combinations is a predictable use of the elements for their intended purposes. Precisely how to arrange these known elements would have been an obvious matter of design choice. See also Perfect Web Techs., Inc. v. InfoUSA, Inc., 587 F.3d 1324, 1331 (Fed. Cir. 2009) ("As the Supreme Court explained, if trying such a limited number of solutions 'leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense." (quoting KSR, 550) U.S. at 421)).

b. Altec Lansing Manual teaches audio signal processing circuitry located within the housing

Patent Owner argues that Altec Lansing Manual does not describe audio signal processing circuitry located within the same housing as control circuitry for receiving control commands. PO Resp. 22–25. Petitioner contends that the speakers described in Altec Lansing Manual included amplifiers located in the satellite speakers and the subwoofer for processing audio signals. Pet. 40. Petitioner also contends that the IR receiver shown at page 6 of Altec Lansing Manual constitutes "control circuitry . . . for receiving control commands." *Id.*

Patent Owner first argues that an amplifier is not audio signal processing circuitry. For the reasons given in Section II.A.2, we disagree with Patent Owner. Moreover, Patent Owner admits that Altec Lansing Manual discloses additional audio signal processing circuitry in the subwoofer. PO Resp. 44 ("The Altec Lansing Manual describes various operating modes, and Exhibit 1012 to SDI's Petition indicates that at least the audio signal processing circuitry for the Dolby Digital mode is included in the subwoofer.").

Patent Owner next argues that Altec Lansing Manual's control circuitry would have been located in a satellite speaker while the amplifiers more likely would have been located only in the subwoofer. PO Resp. 41–42. Thus, Patent Owner argues, in Petitioner's proposed combination, the audio signal processing circuitry and the control circuitry would not have been included in the same housing. *Id.* Moving that audio signal processing circuitry to a satellite speaker, Patent Owner contends, would have required

the interconnection of several wires and would have detracted from the Altec Lansing Manual system's simple design. *Id.* at 44.

In response, Petitioner argues that "[t]he 'control circuitry,' however, extends from the satellite th[r]ough the cable that connects to the subwoofer, and into the subwoofer, which is the only way that the remote control signals received by the IR receiver can get to the amplifier that Bose says is in the subwoofer." Reply 14. Petitioner further argues that the claimed housing can include each of the three speakers (the two satellites and the subwoofer described in Altec Lansing Manual). *Id.* Finally, Petitioner argues that where to locate the control circuitry and audio signal processing circuitry simply would have been a matter of design choice. *Id.*

We agree with Petitioner that the control circuitry taught in Altec Lansing Manual is not limited to the IR receiver positioned on the satellite speaker, but rather includes circuitry in the subwoofer that receives commands from the remote control via the IR receiver (e.g., circuitry that receives a signal from the remote to control the volume of the subwoofer). We also are persuaded by Petitioner that where to locate the particular circuitry would have been a predictable matter of design choice, with the circuitry performing the same intended function regardless of whether it is located in the subwoofer or a satellite speaker. *See also Mouttet*, 686 F.3d at 1332 ("It is well-established that a determination of obviousness based on teachings from multiple references does not require an actual, physical substitution of elements.").

Patent Owner argues that page seven of Altec Lansing Manual does not describe the same product as the remainder of the reference. PO Resp. 42–43. Accordingly, Patent Owner argues, Petitioner cannot rely on page

seven to show audio signal processing circuitry. *Id.* As explained above, we agree that page seven does not belong with the remainder of Altec Lansing Manual. Nevertheless, we agree with Petitioner (*see* Reply 14) that pages 4–6 show audio signal processing circuitry and the ability to control the speaker system with a remote control. Thus, the reference as a whole supports Petitioner's argument even without page seven.

7. Claims 5, 9, 20, 21, 33, 36, 47, and 48 Would Have Been Obvious Over WinAmp, Irman Web Pages, and Altec Lansing Manual

Each of claims 5, 9, 20, 21, 33, 36, 47, and 48 recites an audio system that includes an AM/FM tuner located at least partially within the housing. Petitioner, through its declarant, contends that the notion of an AM/FM radio tuner incorporated within a speaker system was well-known and, by contrast, that it was uncommon to place an AM/FM tuner in a computer. Ex. 1017 ¶ 44. According to Dr. Lippman, it would have been an obvious engineering combination, with no undue design challenges, to place an AM/FM tuner in the housing of the speaker system of Altec Lansing Manual, and a person of ordinary skill in the art would have added a tuner to give users the advantage of listening to the radio without using computer resources. *Id*.

Patent Owner concedes that coupling an AM/FM tuner with a speaker is "very old," but, nevertheless, argues that Petitioner has failed to provide a reason to combine a tuner within the housing of the Altec Lansing Manual speaker system. PO Resp. 45. Patent Owner argues that a skilled artisan would have added a tuner using an input on the back of the speaker system

rather than incorporating it within the housing of a satellite speaker. *Id.* at 46 (citing Stevenson Decl., Ex. $2026 \, \P \, 73$). According to Patent Owner, incorporating a tuner into a satellite speaker would require more interconnections and would lead to interference, as the satellite speakers are meant to be placed near the computer. *Id.*

Petitioner replies that such interconnections would have been well within the abilities of a skilled artisan and that interference was a common issue that a skilled artisan would have known to alleviate by shielding. Reply 14–15. We agree with Petitioner. The record shows that adding an AM/FM tuner within the Altec Lansing Manual speaker system housing would have been little more than re-locating or adding a well-known and desirable feature, for its intended purpose, with predictable results. *See KSR*, 550 U.S. at 416–17; Lippman Decl., Ex. 1017 ¶ 44.

Regarding claims 21 and 48, Patent Owner argues that a skilled artisan would not have added control buttons on an Altec Lansing Manual satellite speaker to control a function of the computer because software on the computer (e.g., WinAmp software) already could control the computer function. PO Resp. 46–47. Petitioner responds that the control buttons on the satellite speaker would be redundant of those on the remote control and that it would have been desirable if the remote control were to fail.

Reply 15. We are persuaded that Petitioner's proposed reason has rational

Reply 15. We are persuaded that Petitioner's proposed reason has rational underpinning.

In sum, Petitioner has proved, by a preponderance of the evidence, that claims 5, 9, 20, 21, 33, 36, 47, and 48 would have been obvious over WinAmp, Irman Web Pages, and Altec Lansing Manual.

D. Obviousness of Claims 12–17, 39–44, 62, 63, 67–70, and 76 Over WinAmp, Irman Web Pages, Altec Lansing Manual, and Looney

Petitioner asserts that claims 12–17, 39–44, 62, 63, 67–70, and 76 would have been obvious over WinAmp, Irman Web Pages, and Altec Lansing Manual, and Looney. *See* Pet. 52–59.

Looney describes compressing music into MPEG3 (also referred to as MP3) files and storing those files in a database along with data indicating categories to which the MP3 files are assigned. Ex. 1013, col. 2, ll. 27–50. The MP3 files are stored in the database separately from the category information. *Id.* at col. 6, ll. 14–17 ("These categories are carried in a database, along with the raw digital music data, and allow the user to playback each of the individual selections based upon specific categories in a random or ordered manner."). The music files can be organized into such categories as "title, artist, date, main music category, sub-main music category," etc. *Id.* at col. 6, ll. 51–63.

According to Petitioner, Looney discloses sorting digital music files based on metadata. Pet. 53. Petitioner's proposed reason to combine Looney with WinAmp, Irman Web Pages, and Altec Lansing Manual is to allow the users to navigate their music collections in a conventional way. Pet. 53–54 (citing Lippman Decl., Ex. 1017 ¶ 48). Dr. Lippman's opinion, offered on behalf of Petitioner, assumes "that 'the music files' would include the database of [Looney] that includes the metadata." Ex. 1017 ¶ 48. In the alternative, Dr. Lippman states that the location of the data used to perform the sorting simply would have been a matter of design choice. *Id*.

Patent Owner argues that Looney does not describe an assemblage of music files based on "metadata *included in* the music file." PO Resp. 47.

Instead, Patent Owner argues, Looney describes organizing music files using metadata stored separately in a database. *Id.* at 28. As explained in Section II.A.3, we agree that claims 12–17 and 39–44 require a remote configured to transmit a signal representing a command for causing the computer to select a first group of music files that is based on a first type of metadata that is located in the music file, which may be in the file header or elsewhere in the file. Nevertheless, the evidence of record supports the conclusion of obviousness.

While Looney describes organizing music files based on metadata stored separately from the music files (*see*, *e.g.*, Ex. 1013, col. 6, Il. 14–17), the '682 patent, itself, admits that "[m]etadata' values are typically included in file header information of music files in many popular music file formats." Ex. 1001, col. 7, Il. 20–22. Indeed, WinAmp discloses that each MP3 file can store "ID3 Tag" information, which includes metadata such as "Title," "Artist," "Album," and "Genre." Ex. 1009, at 28; *see* Pet. 56. Looney teaches the concept of organizing music files into assemblages based on types of metadata, such as title, artist, and music style. Ex. 1013, col. 11, Il. 1–22. Per the admission in the '682 patent, a skilled artisan would have known that the metadata could have been stored in the music files themselves (such as the MP3 files described in WinAmp, Ex. 1009, at 28). As Dr. Lippman observed, "the location of the data used to perform the sorting is simply a matter of design choice." Ex. 1017 ¶ 48. *See Kubin*, 561 F.3d at 1359; *Perfect Web*, 587 F.3d at 1331.

Petitioner contends that a skilled artisan would have combined the teachings of Looney with those of WinAmp, Irman Web Pages, and Altec Lansing Manual "to allow the user to navigate their music collection in a

conventional way." Pet. 53. Patent Owner argues that "[b]ecause the WinAmp software already includes a way for users to organize the music, there is no reason why one of ordinary skill in the art would choose to implement some other scheme, in particular Looney's different approach." PO Resp. 48. The arguments support the record evidence that skilled artisans would have known about these two music file organization systems to navigate, find, and play stored music. We conclude that substituting Looney's scheme of organizing music files for that described in WinAmp would have been nothing more than a mere substitution of one type of file organization system for another, or the obvious choice of known options from predictable solutions. *See Kubin*, 561 F.3d at 1359; *Perfect Web*, 587 F.3d at 1331.

Having reviewed Petitioner's evidence of unpatentability for the remaining limitations of claims 12–17, 39–44, 62⁶, 63, 67–70, and 76, we conclude that Petitioner has proved by a preponderance of the evidence that each of these claims would have been obvious over WinAmp, Irman Web Pages, Altec Lansing Manual, and Looney.

E. Obviousness Grounds Based on SMS

Our determination that each challenged claim is unpatentable over WinAmp, Irman Web Pages, and Altec Lansing Manual, along with Looney, renders it unnecessary to reach Petitioner's contentions that claim 1–11, 18–21, 24, 27, 28, 30–38, 45–48, 51, 54, 73, and 74 would have been obvious

⁶ The findings and conclusions set forth in Section II.C.6, above, for claims 1 and 28 are applicable to the similar limitations of independent claim 62.

over SMS, with or without Nomad Manual, and that claims 12–17, 39–44, 62, 63, 67–70, and 76 would have been obvious over SMS and Looney, with or without Nomad Manual. *Cf. In re Gleave*, 560 F.3d 1331, 1338 (Fed. Cir. 2009) (not reaching obviousness after finding anticipation).

III. CONCLUSION

Petitioner has demonstrated by a preponderance of the evidence that claims 1–21, 24, 27, 28, 30–48, 51, 54, 62, 63, 67–70, 73, 74, and 76 of the '682 patent are unpatentable based on the following grounds of unpatentability:

Claims 1–11, 18–21, 24, 27, 28, 30–38, 45–48, 51, 54, 73, and 74 under 35 U.S.C. § 103(a) as obvious over WinAmp, Irman Web Pages, and Altec Lansing Manual; and

Claims 12–17, 39–44, 62, 63, 67–70, and 76 under 35 U.S.C. § 103(a) as obvious over WinAmp, Irman Web Pages, Altec Lansing Manual, and Looney.

IV. ORDER

For the reasons given, it is

ORDERED that, based on a preponderance of the evidence, claims 1–21, 24, 27, 28, 30–48, 51, 54, 62, 63, 67–70, 73, 74, and 76 of U.S. Patent No. 8,401,682 B2 are held unpatentable;

FURTHER ORDERED that Patent Owner's Motion to Exclude is granted-in-part; page seven of Exhibit 1011 is excluded; and

IPR2013-00350 Patent 8,401,682 B2

FURTHER ORDERED that, because this is a final written decision, parties to this proceeding seeking judicial review of our Decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC, Petitioner

v.

AGIS SOFTWARE DEVELOPMENT, LLC, Patent Owner

Case IPR2018-01079 Patent 8,213,970

PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 8,213,970

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1010	Simon Says "Here's How!" Simon TM Mobile Communications Made Simple, Simon Users Manual, IBM Corp., 1994. ("Simon")	
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1014	McKinsey & Company, The McKinsey Report: FDNY 9/11 Response (2002) ("The McKinsey Report")	
1015	History of Mobile Phones, Wikipedia.com, https://en.wikipedia.org/wiki/History_of_mobile_phones (last visited May 10, 2018) ("Hist. Mobile Phones")	
1016	Apple Newton, Wikipedia.com, https://en.wikipedia.org/wiki/Apple_Newton (last visited May 10, 2018) ("Apple")	

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1017	Email, Wikipedia.com, https://en.wikipedia.org/wiki/Email (last visited May 10, 2018) ("Email")	
1018	From touch displays to the Surface: A brief history of touchscreen technology, Arstechnica.com https://arstechnica.com/gadgets/2013/04/from-touch-displays-to-the-surface-a-brief-history-of-touchscreen-technology/ (last visited May 10, 2018) ("Arstechnica")	
1019	Palm VII, Wikipedia.com, https://en.wikipedia.org/wiki/Palm_VII (last visited May 10, 2018) ("Palm")	

I. INTRODUCTION

Google petitions for *inter partes* review of claims 1 and 3-9 of U. S. Patent No. 8,213,970 ("'970 patent") each of which recites a combination of limitations that existed in prior art. These claims are directed to sending "forced message alerts," which are electronic messages that require a response, and tracking the receipt of those "forced message alerts" sent to the recipient device. IBM, Bellcore, and Micron Technology, however, taught or suggested all the claim limitations well before the date of invention for the '970 patent and, as such, each challenged claim should be canceled.

In the early 1990s (well before the '970 patent's earliest effective filing date), Bellcore, for instance, disclosed personal digital assistants (PDAs) for sending and receiving electronic messages, such as, emails and voice mails. (*See* Google 1008, Pepe.) IBM and Micron Technology were also working on systems and methods for sending and receiving mandatory-response messages. (*See* Google 1007, Johnson; Google 1006, Hammond.) In fact, IBM applied its work with mandatory-response messages to PDAs with a touchscreen user interface and a stylus. (*See* Google 1005, Kubala; and Google 1009, Banerjee.) These disclosures from these companies illustrate that it was known or would have been obvious to use a PDA to send, receive, and track forced-message alerts, as recited in the claims of the '970 patent.

The Examiner, without considering such systems and methods, allowed those claims, but only after they were amended to recite the concept of providing a recipient with a list of possible responses to an incoming message. But even that concept was known and taught in the prior art. For example, Kubala discloses a system in which a PDA receives a mandatory-response message and displays a menu of possible responses that may be selected by a user "as a quick response to the original e-mail message" (Kubala, ¶0057.) Similarly, Pepe discloses a PDA that provides a menu of possible responses from which a user may choose in order to respond to an incoming electronic message. (Pepe, 36:16-20, 40-42, FIGS. 42, 45.)

Google presents multiple grounds—one based on Kubala (which predates the '970 patent's *actual* filing date) and two based on Pepe (which predates the '970 patent's *earliest effective* filing date). Because these prior-art references are directed to or disclose precisely what the challenged claims recite, the Board should institute review and find those claims unpatentable.

II. STANDING

Google certifies that the '970 patent is available for *inter partes* review.

Google also certifies that it is not barred or estopped from requesting this *inter partes* review on the grounds identified herein.

III. TECHNICAL BACKGROUND

A. Overview of the '970 patent (Google 1001)

The '970 patent is directed to sending and receiving responses to "forced message alerts." (Google 1001, '970 patent, 1:19-23.) The '970 patent explains, "[t]he heart of the invention lies in the forced message alert software application program provided in each PC or PDA/cell phone." (*Id.*, 4:47-49; *see also id.*, 7:8-16.) The '970 patent describes sending the forced-message alerts to a receiving device (*see id.*, 7:43-8:15, FIGS. 3A, 3B) and then receiving, acknowledging and responding to the forced-message alerts received from the sending device (*see id.*, 8:16-57, FIG. 4). And, when the sending device receives no acknowledgment from the receiving device, the '970 patent explains that the sending device can continue to transmit the forced-message alert until acknowledged. (*Id.*, 8:25-37.)

The application that issued as the '970 patent was filed on November 26, 2008, and claims priority to U.S. Patent Application No. 10/711,490 (Google 1011, the '490 application), filed September 21, 2004. As explained below, the '970 patent is not entitled to this priority claim, because the '490 application does not provide written-description support for the claimed "forced message alert software application program." (*See infra* Section V.A.)

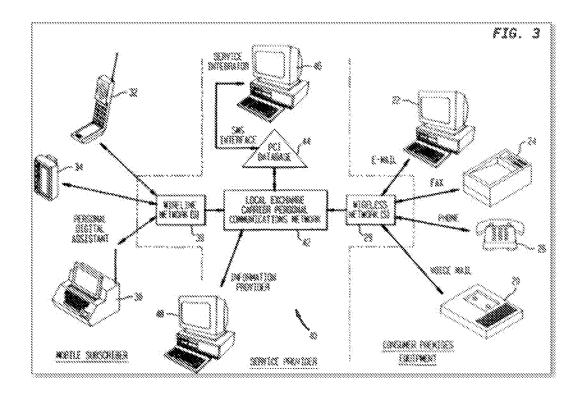
B. The concepts of the '970 Patent were well known in the prior art

Johnson, Pepe, Hammond, and Kubala teach or suggest all the features recited in the challenged claims of the '970 patent.

By 1994, Johnson improved upon well-known electronic-messaging systems by creating a mandatory-response email system that included "designating an electronic email object as requiring a specific response and then transmitting the electronic mail object to a recipient." (*See* Johnson, 2:23-31; *see also* Williams, Google 1003, ¶41-48.) The recipient is prompted for a specific response and is prohibited from performing a selected action until the specific response has been entered. (*See* Johnson, 2:23-31; *see also* Williams, ¶41-48.)

Later, in 1998, Pepe introduced software applications on mobile devices (e.g., cell phone or PDA) that managed services that were available on many devices as shown below in Figure 3. Pepe's personal-communications applications were designed to facilitate electronic-message exchange. And, in that regard, it improved on Johnson's mandatory-response email-messaging system because users could now send and receive email messages on PDAs and select predetermined messages on their PDA display screen to respond to email messages with mandatory responses. (*See* Williams, ¶¶49-51.)

Then, also in 1998, Hammond improved Johnson's mandatory-response email-messaging system by tracking the timing of delivery as well as the response of email messages with mandatory responses. The improved mandatory-response email-messaging system could also resend email messages with mandatory responses whose delivery and review is not confirmed. (*See id.*, ¶¶53-56.)



In the same 2005 timeframe as Hammond's system, Banerjee developed systems and methods that enabled alternate input commands using a stylus with a PDA. Namely, by applying pressure to a pressure sensor on the stylus, an application on the PDA was invoked that interprets the input as a right mouse click on a computer. A POSA would understand that being able to make the equivalent of a right mouse click using a stylus on the touchscreen of PDAs would improve application use and interactivity. An example of such an application would have been Johnson's improved mandatory-response email-messaging application with Pepe's list of predetermined messages, and Hammond's tracking of delivery and responses. (*See* Williams, ¶55-56.)

Additionally, in 2006, Kubala improved the mandatory-response email-

messaging systems, such as those described in Johnson as improved by Pepe and Hammond, by alerting a recipient that an action is required in response to the received electronic message transmitted by the sender. (*See id.*, ¶¶58.)

As set forth in more detail below (*see infra* Section V), the combination of Kubala and Hammond and the combination of Hammond, Johnson, and Pepe teach or suggest each and every feature of claims 1 and 3-9. (*See id.*, ¶63-64.) The Board should institute review and find those claims unpatentable in view of these references, especially since the Examiner did not consider any of the references in any Office Action during prosecution of the '970 patent.

C. Summary of the prosecution history

The prosecution history of the '970 patent is brief.

The application was filed on November 26, 2008. (Google 1002, '970 Pros. Hist., p. 44.) Unlike the previous applications in the priority chain, the application that led to the '970 patent was directed to "forced message alerts"—i.e., electronic messages that required the recipient to respond. The '970 patent explains that "[t]he heart of the invention lies in the forced message alert software application program provided in each PC or PDA/cell phone." ('970 patent, 4:47-49.) These forced message alerts "allow[] a participant to send a text or voice message to a group of people and force an automatic acknowledgement of receipt and a manual response." (*Id.*, 3:22-28.)

About two years after the application was filed, the Examiner issued a Non-final Office Action. ('970 Pros. Hist., 55-68.) In reply, the Applicant amended certain claims to require that "a manual response list" is displayed on "a recipient PC or PDA/cell phone" and that the received message "can only be cleared by manually selecting and transmitting a response to the manual response list." (*Id.*, 81-92). The Examiner then issued a new rejection in a Final Office Action. (*Id.*, 96-109.)

In response to the Final Office Action, the Applicant amended the independent claims to include "requiring a required manual response from the response list by the recipient in order to clear recipient's response list from recipient's cell phone display." (*Id.*, 120-31.) After an Advisory Action, the Applicant and the Examiner had an interview and the Examiner allowed after-final claim amendments. (*Id.*, 142-45.) Thereafter, a Notice of Allowance was mailed with an Examiner's amendment to remove "PC" from the claims. (*Id.*, 146-59.)

The Examiner did not cite or review any of the references relied on here.

IV. CLAIM CONSTRUCTION¹

A. Relevant law and person of ordinary skill in the art

For an unexpired patent in an AIA proceeding, claim terms are given their "broadest reasonable construction" consistent with the specification. *Cuozzo Speed Techs.*, *LLC v Lee*, 136 S.Ct. 2131, 2142 (2016). "Under the broadest reasonable interpretation, words of the claim must be given their plain meaning, unless such meaning is inconsistent with the specification and prosecution history." *Trivascular, Inc. v. Samuels*, 812 F.3d 1056, 1062 (Fed. Cir. 2016).

"[T]he 'broadest reasonable interpretation' that [the PTO] may give meansplus-function language is that statutorily mandated in paragraph six." *In re Donaldson Co.*, 16 F.3d 1189, 1194-95 (Fed. Cir. 1994) (*en banc*). Construing a means-plus-function limitation is a two-step process. *Medtronic, Inc. v. Advanced Cardiovascular, Inc.*, 248 F.3d 1303, 1311 (Fed. Cir. 2001). The first step is to determine the function of the means-plus-function limitation. *Id.* (citation omitted).

¹ Google proposes constructions for several means-plus-function terms to resolve the unpatentability issues here. On the record before the district court, Google reserves the right to argue that certain terms are indefinite under 35 U.S.C. § 112.

The second step is to determine the corresponding structure described in the specification and equivalents thereof. *Id*.

For computer-implemented means-plus-function limitations, "the disclosed structure is not the general purpose computer, but rather the special purpose computer programmed to perform the disclosed algorithm." *WMS Gaming, Inc. v. Int'l Game Tech.*, 184 F.3d 1339, 1349 (Fed. Cir. 1999). The algorithm may be disclosed "as a mathematical formula, in prose, or as a flow chart, or in any other manner that provides sufficient structure." *Typhoon Touch Techs., Inc. v. Dell, Inc.*, 659 F.3d 1376, 1385 (Fed. Cir. 2011) (quoting *Finisar Corp. v. DirecTV Grp., Inc.*, 523 F.3d 1323, 1340 (Fed. Cir. 2008)).

The claims, specification, and prosecution history are viewed from the perspective of a person of ordinary skill in the art ("POSA"). A POSA is "presumed to be aware of all the pertinent prior art." *Standard Oil Co. v. Am. Cyanamid Co.*, 774 F.2d 448, 454 (Fed. Cir. 1985). This hypothetical person "is also a person of ordinary creativity, not an automaton." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007).

Here, a POSA would have had either: (1) a Bachelor of Science degree in Electrical Engineering or an equivalent field, with three to five years of academic or industry experience in the field of electronic communications; or (2) a Master of Science degree in Electrical Engineering or an equivalent field, with two to four

years of academic or industry experience in the same field. (*See* Williams, ¶¶29-30.)

B. "data transmission means"

The function of the "data transmission means" is to facilitate the transmission of electronic files between said PDA/cell phones in different locations. (*See* '970 patent, 8:65-9:39 (claim 1).) The corresponding structure is a server that communicates according to either (i) WiFi, WiMax, or other peer-to-peer communications or (ii) SMS, TCP/IP, or other messaging protocol. (*See id.*, 4:1-36; *see also* Williams, ¶33.)

C. "means for attaching . . ."

The recited function is to attach a forced-message alert software packet to a voice or text message creating a forced-message alert that is transmitted by a sender PDA/cell phone to a recipient PDA/cell phone. (*See id.*, 8:65-9:39 (claim 1).) The corresponding structure is a computer configured to perform a portion of the forced-message alert software-application program that allows a user to create a message, select recipients of that message, select a default or new response list to be sent with the message, and then send the message to the recipients. (*See id.*, 7:43-63; FIG. 3A; *see also* Williams, ¶34.)

D. "means for requiring . . ."

The recited function is to require a required manual response from the response list by the recipient in order to clear the recipient's response list from the

recipient's cell phone display. (*See id.*, 8:65-9:39 (claim 1).) The corresponding structure is the forced-message alert software-application program on the recipient PDA/cellular phone that causes the message and manual response list to be displayed on the screen of the recipient PDA/cellular phone and clears the forced alert text data when a response is selected from the manual-response list. (*See id.*, 8:39-46, FIG. 4; *see also* Williams, ¶35.)

E. "means for receiving and displaying a listing of which recipient PDA/cell phones have automatically acknowledged..."

The recited function is to receive and display a listing of which recipient PDA/cell phones have automatically acknowledged the forced-message alert and which recipient PDA/cell phones have not automatically acknowledged the forced-message alert. (*See id.*, 8:65-9:39 (claim 1).) The corresponding structure is forced-message alert software-application program on the sender's PDA/cell phone that monitors for and receives electronic transmissions with acknowledgement receipts. (*See id.*, 7:64-8:5, FIG. 3A, 3B; *see also* Williams, ¶36.)

F. "means for periodically resending..."

The recited function is periodically resending a forced-message alert to a recipient PDA/cell phone that has not automatically acknowledged the forced-message alert. (*See id.*, 8:65-9:39 (claim 1).) The corresponding structure is the forced-message alert software-application program on the sender PDA/cell phone that will "periodically resend the forced message alert to the PC or PDA/cell phone

that have [sic] not acknowledged receipt." (*Id.*, 8:6-9; *see also id.*, FIG. 3A, 3B; *see also* Williams, ¶37.)

G. "means for receiving and displaying a listing of which recipient PDA/cell phones have transmitted . . ."

The recited function is receiving and displaying a listing of which recipient PDA/cell phones have transmitted a manual response to a forced-message alert and details the response from each recipient PDA/cell phone that responded. (*See id.*, 8:65-9:39 (claim 1).) The corresponding structure is the forced-message alert software-application program on the sender's PDA/cell phone that monitors for and receives electronic transmissions with manual responses and displays those responses on the sender's PDA/cell phone. (*See id.*, 8:9-15, FIG. 3A, 3B; *see also* Williams, ¶38.)

V. IDENTIFICATION OF CHALLENGE

Google requests *inter partes* review of claims 1 and 3-9 of the '970 patent on three grounds:

Ground	'970 Patent Claims	Basis for Ground
1	1 and 3-9	Kubala and Hammond
2	1 and 3-9	Hammond, Johnson, and Pepe
3	1 and 3-9	Hammond, Johnson, Pepe, and Banerjee

A. Ground 1: Claims 1 and 3-9 are obvious over Kubala and Hammond—references that are prior art to the '970 patent's actual filing date (November 26, 2008).

Ground 1 is based on references that are prior art to the '970 patent's actual filing date (November 26, 2008), because that is the priority date to which the '970 patent is entitled. The '970 patent states that "[t]he *heart of the invention* lies in the *forced message alert software application program* provided in each PC or PDA/cell phone." ('970 patent, 4:47-49 (emphases added).) This "forced message alert software application program" is required by every single independent claim (*see id.*, 8:65-9:39 (claim 1) and 10:7-41(claim 6)) and is also described throughout the specification (*see id.*, 1:19-23, 1:57-67, 2:7-35, 2:49-55, 3:4-14, 3:22-28, 7:8-8:57). Similar disclosures are *not* contained in any of the applications to which the '970 patent claims priority.

The '970 patent claims priority to three earlier-filed applications: (i) U.S. Application No. 10/711,490 ('490 application, Google 1011), filed on September 21, 2004; (ii) U.S. Application No. 11/308,648 ('648 application, Google 1012), filed on April 17, 2006; and (iii) U.S. Application No. 11/612,830 ('830 application, Google 1013), filed on December 19, 2006. None of these earlier-filed applications provide sufficient written-description support for at least a forced-message alert software-application program, as required by each independent claim of the '970 patent.

First, the '490 application is directed to employing cellular telephone communications to monitor locations, initiating cellular calls and conference calls with other cellular telephones of a plurality of communications net participants by touching a display screen, and causing a remote cellular phone to annunciate audio announcements or call another phone number. ('490 application, Abstract, 8-32.) The '490 application notes that each cellular phone can poll the other cell phones to transmit their location and status. But each of the cellular phones that poll do not include a "forced message alert" in the poll, nor do they track the poll responses. (*Id.*, 14, ¶14.) And, in contrast to the '970 patent, the '490 application allows a sending PDA/cell phone to remotely control a recipient PDA/cell phone *without* action by the remote phone operator:

In spite of the rapid advance in cellular phone technology, it would also be desirable to actuate a remote cellular phone to annunciate an audio message to alert the remote user that there is an emergency (or for another reason)... and cause the remote phone to call another phone number (as an example, to automatically establish an 800 number conference call), to vibrate, or increase the loudness of an announcement without any action by the remote phone operator.

(*Id.*, 9 ¶4 (emphasis added).) Thus, the '490 application performs steps for remotely controlling recipient phones without a manual response from the recipient

remote phone operator. The '490 application does not teach or suggest a "forced message alert software application program" as described and claimed in the '970 patent. Accordingly, the '970 patent is not entitled to the priority date of the '490 application, September 21, 2004. (*See* Williams, ¶66.)

Second, the '648 application also does not disclose a forced-message alert as required by the independent claims of the '970 patent. The '648 application is directed to automatically shifting from GPRS/EDGE/CDMA/1XEVDO to SMS when any cellular phone of a plurality of cellular phones of communication net participants makes or receives a voice call and shift back upon completion of the voice call. ('648 application, Abstract, 16-61.) Embodiments also cause an alert (audible voice alert, beep) to emanate from a user's device when an incoming message arrives, show a location of the sender of a message on the user's display, and cause an alert (verbal announcement, vibration, or text) when another participant of the communication net participants is within a predetermined distance. (Id., 42-44, ¶¶69, 72, 74.) But nowhere does the '648 application teach or suggest at least a "forced message alert" let alone the "forced message alert software application program" as described and claimed in the '970 patent. Accordingly, the '970 patent is not entitled to the priority date of the '648 application, April 17, 2006. (See Williams, ¶67.)

Third, the '830 application also does not disclose a forced-message alert as required by the independent claims of the '970 patent. The '830 application is directed to a plurality of cellular phone/PDA/GPS devices of communication net participants with advanced communication software (ACS) application programs that can: poll other cell phone/PDA/GPS devices of the plurality for location, status, and identity; and remotely control one or more of the other cell phone/PDA/GPS devices of the plurality. ('830 application, 7-8 (specification pages 3:6-4:2), 5-40.) At best, the '830 application generically mentions the ability of one phone to control *certain* functions on another phone:

Each cell phone has the ability to remotely control from one cellular phone/PDA/GPS any of the other cellular phone/PDA/GPS systems phones including the ability to control remote cellular phones to make verbal prerecorded announcements, place return calls, place calls to another phone 15 number, vibrate, execute text to speech software, change sound intensity, remotely control software and functions resident on the remote phone and process and display information by touching the display screen at their location on the PDA display and selecting the appropriate soft switch; the ability to layer a sufficient number of switches or buttons on the PDA display to perform the above functions without overlaying the map; and the ability to change the 20 nomenclature of a series of soft switches and symbology for different operating environments.

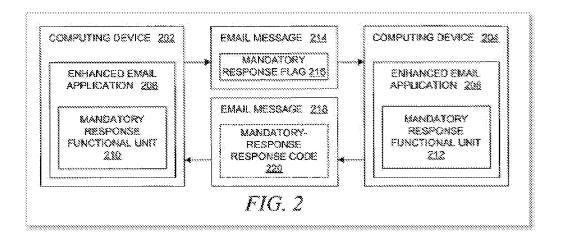
(*Id.*, 23 (spec. pages 19:11-20); *see also id.*, 6 (spec. pages 2:14-18).) But nowhere does the '830 application disclose the concepts of (i) a manual-response list or (ii) requiring a manual response from such a response list to clear the response list from the recipient's phone—two concepts that were explicitly added during prosecution to gain allowance of the independent claims of the '970 patent. (*See* '970 Pros. Hist., 120-31; *see also supra* Section III.C.) Accordingly, the '970 patent is not entitled to the priority date of the '830 application, December 19, 2006. (*See* Williams, ¶68.)

Because the '970 patent is not entitled to priority to any of the earlier-filed applications, it is entitled to a priority date of only November 26, 2008—its actual filing date. Kubala and Hammond both pre-date the '970 patent's actual filing date. *First*, Kubala published on September 28, 2006—more than one year before November 26, 2008. (*See* Kubala, (43).) Thus, Kubala is prior art under 35 U.S.C. § 102(b). *Second*, Hammond issued on February 8, 2005—more than one year before November 28, 2008. (*See* Hammond, (45).) Thus, Hammond is also prior art under 35 U.S.C. § 102(b) with respect to the '970 patent's actual filing date.²

² As set forth below (*see* Section V.B), Hammond is also prior art under § 102(e) with respect to the '970 patent's earliest effective filing date.

1. <u>Overview:</u> Kubala discloses PDAs that send and receive mandatory-response messages, and Hammond tracks acknowledgements of and responses to such messages.

Kubala discloses methods and systems for accommodating mandatory responses in electronic messaging. (Kubala, Title.) For example, Kubala's Figure 2 (reproduced below) illustrates a computing device 202 that includes an enhanced email application 206 with a mandatory-response functional unit 210. (Kubala, ¶0033.) The combined enhanced email application 206 and mandatory-response functional unit 210 reads on the claimed "forced message alert software application" program." Enhanced email application 206 allows computing device 202 to send an email message 214 with a mandatory-response flag 216. (*Id.*, ¶¶0035-0036.) "The **recipient is alerted** to the detected request for the response for the received electronic message, and after alerting the recipient, actions are required by the recipient with respect to usage of a data processing system until the recipient uses the data processing system to send a response for the received electronic message to the sender." (*Id.*, Abstract (emphasis added); *see also* Williams, ¶¶71-72.)

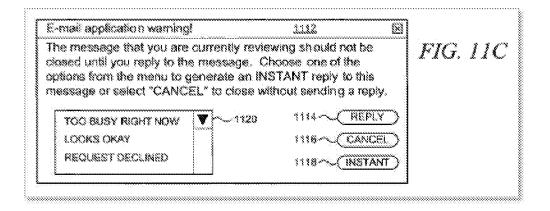


Kubala explains that the computing devices 202, 204 can be PDAs as illustrated in Figure 1A and that Kubala's use of the term "email message" includes "text messages, instant messages, fax messages, voicemail messages, video messages, audio messages, and other types of messages." (*Id.*, ¶¶0032-0033; *see also* Williams, ¶72.)

"FIGS. 11A-11D depicts a set of diagrams that represent a set of GUI windows through which an e-mail application alerts a user by displaying warning messages and error messages to the user as a result of a user action when the e-mail application has an e-mail message that contains a mandatory request flag." (Id., ¶0022, (emphasis added); see also Williams, ¶74.)

Kubala's Figure 11C (reproduced below) shows an example of alerting a user by displaying a menu 1120 of possible responses. (*Id.*, ¶0057.) Kubala explains that "[t]he text strings that are used as menu items may be obtained in a variety of manners." (*Id.*) For example, Kubala explains that the text strings may

be "required and standardized," they may be "configurable," or they may be "extracted from the original e-mail message." (*Id.*) (*See also* Williams, ¶75.)



Kubala also discloses collecting and recording information about the manner in which recipients respond to email messages that have a mandatory-response flag. (*Id.*, ¶¶0050, 0051, 0061, FIG. 9; *see also* Williams, ¶76.)

Like Kubala, Hammond discloses methods and systems for enhancing reliability of electronic messaging. (*See* Hammond, (54).) In particular, Hammond discloses a "Message Review Server (MRS) system [that] sends an electronic message to designated recipients, and then automatically helps ensure that each message has been successfully delivered and that each message has been reviewed." (*Id.*, 3:1-5.) To track these messages, Hammond discloses a Message Tracking Table that includes detailed information about electronic messages that have been read by recipients. (*See id.*, 6:56-8:45, FIG. 2 (reproduced below).) Hammond also discloses a Message Receipt Tracker routine (*id.*, 10:5-47, FIG. 4) and a Message Tracking Table Processor routine (*id.*, 6:3-19, 10:48-11:48, FIGS.

5A, 5B) for managing the status of electronic messages transmitted in the system. (See Williams, ¶¶77-79.)

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A POSA would have been motivated to combine Kubala and Hammond because they are both directed to the same field of endeavor and attempt to solve the same problem—i.e., to ensure that important electronic messages receive

timely responses. A POSA would have been further motivated to combine Kubala with Hammond because Kubala provides additional details for features that are mentioned as part of the system in Hammond; for example, Hammond discloses that electronic messages may be transmitted via "wireless RF" (*see* Hammond, 4:33-38), and Kubala provides details about these types of wireless communications (*see* Kubala, ¶0027, FIG. 1A). (*See* Williams, ¶¶80-89.)

Moreover, given that Kubala explicitly discloses that a receiving email application may collect and record information about the manner in which a recipient responds to an email message that has a mandatory-response flag (see Kubala, ¶¶0050, 0051, 0061, FIG. 9), implementing Hammond's tracking features in Kubala's system would have been an obvious design choice. See SDI Technologies, Inc., v. Bose Corp., IPR2013-00350, Paper 36, p. 26 (P.T.A.B. Nov. 7, 2014) (holding that the use and arrangement of "known elements would have been an obvious matter of design choice"). Because Hammond merely discloses details about tracking features that are already suggested by Kubala's system that collects and records information about the recipients response to a message, this combination of Kubala and Hammond would not "result in a difference in function or give unexpected results," so this type of combination, which is recited in the claims, is unpatentable as an obvious design choice. See In re Rice, 341 F.2d 309, 314 (CCPA 1965).

In fact, the combination of Kubala's email system with Hammond's tracking features "represents no more than 'the predictable use of prior art elements according to their established functions," of sending mandatory-response emails and tracking responses to such emails, which is an obvious combination "as a matter of law." Wyers v. Master Lock Co., 616 F.3d 1231, 1245 (Fed. Cir. 2010) (quoting KSR, 550 U.S. at 417); see also Ball Aerosol & Specialty Container, Inc. v. Limited Brands, Inc., 555 F.3d 984, 993 (Fed. Cir. 2009) (a "predictable variation" is obvious as a matter of law).

2. Independent claim 1

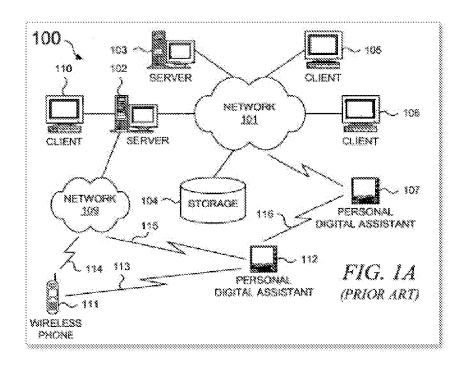
This claim is obvious in view of Kubala and Hammond.

[1.] A communication system for transmitting, receiving, confirming receipt, and responding to an electronic message, comprising:

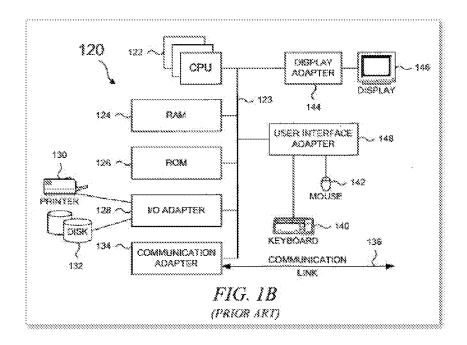
To the extent the preamble is limiting, Kubala discloses a communication system for transmitting, receiving, and responding to an electronic message. (*See* Kubala, (54), Abstract.) Kubala also discloses that it was known to "generate return receipts to the sender when the sender's e-mail message is received at its intended destination or when the recipient opens the e-mail message, thereby providing an acknowledgement that a particular message has been received and/or opened." (*Id.*, ¶0006.) Kubala therefore expressly teaches or suggests this limitation. (*See* Williams, ¶91.)

[1.1] a predetermined network of participants, wherein each participant has a similarly equipped PDA/cell phone that includes a CPU and a touch screen display a CPU [sic] and memory;

Kubala discloses this limitation. The predetermined network of participates is shown in Kubala's Figure 1A (reproduced below), which includes a plurality of personal digital assistants 107, 112. (*See* Kubala, ¶¶0026-0027; *see also* Williams, ¶92.)



Kubala's Figure 1B (reproduced below) illustrates that each PDA/cell phone includes at least one CPU 122, a memory 124, 126, and a user interface adapter 148, which Kubala describes as being coupled to a touch-screen display. (*See id.*, \$\quad \quad \



[1.2] a data transmission means that facilitates the transmission of electronic files between said PDA/cell phones in different locations;

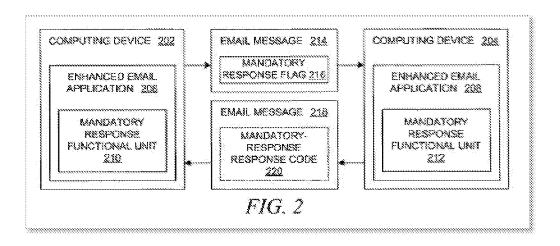
Kubala discloses this feature. The recited "data transmission means" encompasses a server that communicates according to peer-to-peer communications (e.g., WiFi or WiMax) or another messaging protocol (e.g., SMS or TCP/IP). (*See* Section IV.B.) In Kubala, a server supports a network 109 and a client 110, allowing the PDAs/cell phones to (1) "communicate with one another" using, for example, "Transport Control Protocol/Internet Protocol (TCP/IP)" or (2) "directly transfer data between themselves" using, for example, "Bluetooth "Mireless technology or WiFi technology (IEEE 802.11)." (Kubala, ¶0027, FIG. 1A.) Kubala therefore expressly discloses this limitation. (*See* Williams, ¶94.)

[1.3] a sender PDA/cell phone and at least one recipient PDA/cell phone for each electronic message;

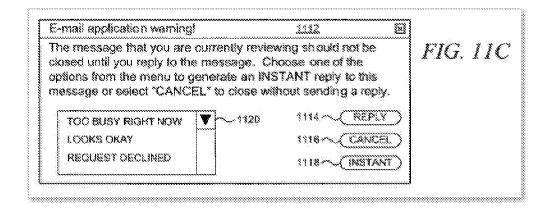
Kubala discloses a plurality of PDAs/cell phones that communicate with each other. (*Id.*, ¶¶0027, 0032, 0033, FIG. 1A.) In other words, one PDA/cell phone sends an electronic message (i.e., "a sender PDA/cell phone") and another PDA/cell phone receives it (i.e., a "recipient PDA/cell phone"). (*See* Williams, ¶95.)

[1.4] a forced message alert software application program including a list of required possible responses to be selected by a participant recipient of a forced message response loaded on each participating PDA/cell phone;

Kubala discloses this limitation. Kubala's Figure 2 (reproduced below) illustrates an enhanced email application 208 that includes a mandatory-response functional unit 212. The combined enhanced email application 208 and mandatory-response functional unit 212 read on the claimed "forced message alert software application program." Referring to Figure 2, Kubala explains that the mandatory-response functional unit 212 provides an email message 218 in response to an email message 214 with a mandatory-response flag 216. (Kubala, ¶0035; *see also id., ¶¶*0013, 0033, 0036; *see also* Williams, ¶96.)

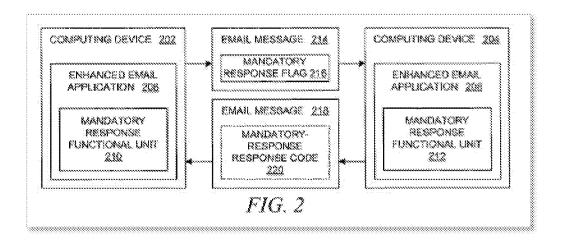


Kubala also discloses the claimed "list of required possible responses to be selected by a participant recipient of a forced message response loaded on each participating PDA/cell phone." Kubala's Figure 11C (reproduced below) shows an example of alerting a user by displaying a menu 1120 of possible responses to a sender's message. Kubala explains that a recipient's selection of one of the "quick response[s]" in menu 1120 fulfills "the sender's request that the recipient is required to provide a mandatory response." (*Id.*, ¶¶0022, 0047, 0057; *see also id.*, ¶¶0054, 0055, 0060; Williams, ¶¶97-98.)



[1.5] means for attaching a forced message alert software packet to a voice or text message creating a forced message alert that is transmitted by said sender PDA/cell phone to the recipient PDA/cell phone, said forced message alert software packet containing a list of possible required responses and requiring the forced message alert software on said recipient PDA/cell phone to transmit an automatic acknowledgment to the sender PDA/cell phone as soon as said forced message alert is received by the recipient PDA/cell phone;

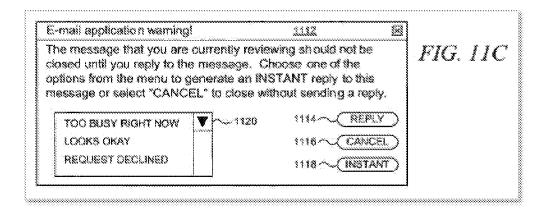
Kubala teaches or suggests both the structure and function required by this limitation. Again, the structure for the recited "means for attaching . . ." is a software application program on a PDA that performs the recited function. (*See supra* Section IV.C.) Like this structure, Kubala discloses an enhanced email application 206 on a computing device (e.g., PDA) 202, as illustrated in Figure 2 (reproduced below). (*See* Kubala, ¶¶0033-0036; *see also* Williams, ¶99.)



Kubala also discloses the claimed functions. The claimed "forced message alert application software packet" is met by Kubala's disclosure of a mandatory-

response flag 216 that is attached to an email message 214, as illustrated in Figure 2 (above). Kubala explains that e-mail message 214 may be a text message, voicemail message, audio message, video message, or other type of message. (*Id.*, ¶0032.) Kubala also explains that "[m]andatory response flag 216 may be implemented in a variety of data formats" (*Id.*, ¶0035; *see also id.*, ¶¶0036-0041, 0054-0061, FIGS. 3, 4; *see also* Williams, ¶100.)

Kubala also discloses the claimed "list of possible required responses." Kubala's Figure 11C (reproduced below) illustrates an example of alerting a user by displaying a menu 1120 of possible responses that a recipient may choose from in order to respond to a sender's message. (*Id.*, ¶10022, 0047, 0057.) And Kubala discloses that, in one embodiment, the "text strings that are used as menu items" may be "extracted from the original e-mail message that was received from the sender" (*Id.*, ¶0057; *see also id.*, ¶10040, 0041.) This disclosure from Kubala teaches or suggests the claimed function that the "forced message alert software packet contain[s] a list of possible required responses." (*See* Williams, ¶101.)



Moreover, Kubala teaches or suggests the claimed functionality of "requiring the forced message alert software on said recipient PDA/cell phone to transmit an automatic acknowledgment to the sender PDA/cell phone as soon as said forced message alert is received by the recipient PDA/cell phone." In fact, Kubala discloses that it was known "to generate return receipts to the sender when the sender's email message is received at its intended destination or *when* the recipient opens the e-mail message, thereby providing an acknowledgement that a particular message has been received." (Id., ¶0006 (emphasis added).) Based on these teachings in Kubala, a POSA would have understood that the condition that causes the acknowledgement to be sent back to the sender is a configurable parameter, which could be set to occur when the sender's email message is received at its intended destination or, in other words, as soon as it is received at the recipient's device. (See Williams, ¶¶102-104.)

[1.6] means for requiring a required manual response from the response list by the recipient in order to clear recipient's response list from recipient's cell phone display;

Kubala teaches or suggests both the structure and function required by this limitation. Again, the structure for the recited "means for requiring . . ." is a software application program on a PDA that performs the recited function. (*See supra* Section IV.D.) Like this structure, Kubala discloses an enhanced email

application 206 on a PDA. (Kubala, ¶¶0033-0036, FIG. 2; see also Williams, ¶106.)

Kubala also discloses the required functions. "The e-mail application may indicate the presence of a mandatory response flag: using a message within a popup window; other information within a status bar; through the use of colors on a display screen; or through **some other means of** *alerting the user*." (*See id.*, ¶0047, (emphasis added).) Again, Kubala discloses "diagrams that represent a set of GUI windows **through which** *an e-mail application alerts a user* by displaying warning messages and error messages to the user as a result of a user action when the e-mail application has an e-mail message that contains a mandatory request flag." (*See id.*, ¶0022, (emphasis added).) An example of the GUI window alert includes a menu of possible responses from which a recipient can choose (*see id.*, ¶10047, 0057, FIG. 11C (menu 1120)) which satisfies the claimed "response list."

Although the specific embodiment illustrated in Figure 11C shows that a user can "select 'CANCEL' to close without sending a reply," Kubala also explicitly teaches that "the recipient can be *prevented* from closing a review of the received e-mail message, from deleting the received e-mail message, and from exiting the e-mail application until the recipient has responded to the received email message." (*Id.*, ¶0009 (emphasis added); *see also id.*, ¶0055.) Moreover, Kubala also discloses that when a recipient is required to respond to a mandatory-

response message is a configurable feature. (*See id.*, ¶¶0009, 0054, 0055, 0059-0060.) For example, the recipient may be required to respond "when the recipient first reviews the e-mail message." (*Id.*, ¶0060.)

These disclosures teach or suggest the claimed requirement that a response is required "in order to clear recipient's response list from recipient's cell phone display." (See Williams, ¶¶108-110.)

[1.7] means for receiving and displaying a listing of which recipient PDA/cell phones have automatically acknowledged the forced message alert and which recipient PDA/cell phones have not automatically acknowledged the forced message alert;

Kubala discloses the claimed structure and the claimed function of this limitation. Hammond also discloses the claimed function of this limitation.

Again, the structure for the recited "means for receiving . . ." is a software application program on a PDA that performs the recited function. (*See supra* Section IV.E.) Like this structure, Kubala discloses an enhanced email application 206, 208 that includes mandatory-response functional unit 210, 212 on a PDA. (*See* Kubala, ¶0033-0036, FIG. 2.) Kubala further explains that it was known to automatically acknowledge receipt of an electronic message, (*see id.*, ¶0006.) In addition, Kubala explicitly discloses that the receiving e-mail application may collect and record information about the manner in which the recipient responds to an e-mail message that has a mandatory-response flag. The information may

include mandatory-response return-status codes included within the reply e-mail. (*Id.*, ¶¶0050, 0051, 0061, FIG. 9.) A POSA would have known that a listing of the recorded information regarding the responses or automatic acknowledgements, were accessible. (*See* Williams ¶111.)

To the extent it is argued that Kubala doesn't teach this limitation,

Hammond also states that "the recipient computer systems provide receipts when

messages are received and when messages are reviewed" (Hammond, 5:20
23; see also id., Abstract, 2:11-18.) These acknowledgement receipts are tracked in

Hammond's Message Tracking Tables, as depicted in Figure 2 (reproduced

below), and are described throughout the specification. (See id., 3:1-4:28, 5:31-37,

10:6-22, 6:56-8:45; See Williams, ¶112.)

ID	Recipien (ID) ABC BCD CDE ABC	3 Send Time 07/26/XX 18:26:33 97/26/XX 18:26:33 97/28/XX 19:05:19 08/10/XX 09:19:13	07/26/XX 36:28:15 07/27/XX 96:13:12 08/10/XX 09:16:17	\$ Review Thes \$7728/XX 19:12:33 \$7727/XX 11:33:37 97:30/XX 99:68:13	Resemp Time Period Thomas 2 hours	Review Reminste r Time Period I day 18 lusus 2 days	8 Post- Peview Time Period I hour
D T	ABC BCD CDE	Time 97/26/XX 18/26/33 97/26/XX 18/26/33 97/28/XX 16/05/10 08/10/XX	Time 07/26/XX 18:28:15 07/27/XX 09:13:12 08/16/XX	Tims 67/28/XX 19:12:03 67/27/XX 11:37:07 57/36/XX	Time Period Thusa Thours	Remissio r Time Period I day IS Issues	Review Time Period I hour
7	BCD CDE	18;26;33 97/26/XX 18;26;33 97/28/XX 10;05;16 08/10/XX	16:28:15 07/27/XX 00:13:12 08/19:XX	19:12:33 67/27/XX 11:33:37 87/30/XX	2 hours	18 hours	
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(*Id.*, FIG. 2)

A POSA would have been motivated to combine Hammond with Kubala based on the disclosures in the references themselves, particularly as it relates to exchanging and tracking recipient-device acknowledgements. Again, Kubala generally discloses that it was known to provide acknowledgement receipts, (*see*

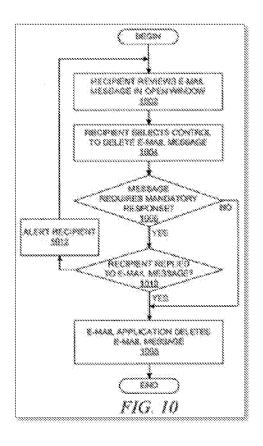
Kubala, ¶0006), and record details about the responses to the emails with mandatory-response flags. Hammond also discloses acknowledgement receipts and how to track these acknowledgement receipts. Because these disclosures in Kubala and Hammond are all directed to tracking responses to mandatory-responses messages, these disclosures would have motivated a POSA to combine Hammond and Kubala. (*See* Williams, ¶¶113-114.)

[1.8] means for periodically resending said forced message alert to said recipient PDA/cell phones that have not automatically acknowledged the forced message alert; and

Kubala discloses the claimed structure, and Kubala and Hammond disclose the claimed function of this limitation. The structure for the recited "means for periodically . . . " is a software application program on a PDA that performs the recited function. (*See supra* Section IV.F.) Like this structure, Kubala discloses an enhanced email application 208 that includes mandatory-response functional unit 212 on a PDA. (*See* Kubala, ¶¶0033-0036, FIG. 2; *see* Williams, ¶115.)

Kubala discloses that when a reply to an email message with an associated mandatory-response flag has not been made, the enhanced email application 208 loops back to alert the recipient via 1012, as illustrated in Figure 10 (reproduced below). The looping back at 1012 has the effect of resending the message to the user until the user replies to the received e-mail message as required. (*See id.*,

¶0053, FIG. 10.) Thus, Kubala teaches or suggests the claimed function of "periodically resending" a forced-message alert that was not acknowledged. (*See* Williams, ¶116.)



To the extent that it is argued that Kubala does not teach this limitation, Hammond's "system tracks whether each message has been delivered and reviewed by to [sic] each recipient, and uses the message information to resend the messages whose delivery or review is not confirmed." (Hammond, 2:47-50; *see also id.*, Abstract, 2:1-8, 4:21-28, 5:5-6:19, 6:66-7:63, 10:48-63, FIGS. 2, 3A, 3B, 4, 5A, 5B.) As explained above (*see* claim [1.7] and Section V.A.1), a POSA

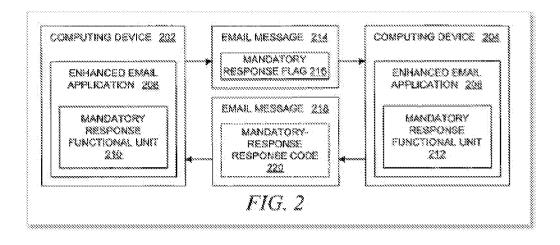
would have been motivated to combine Kubala and Hammond. Williams, ¶¶117-118.)

[1.9] means for receiving and displaying a listing of which recipient PDA/cell phones have transmitted a manual response to said forced message alert and details the response from each recipient PDA/cell phone that responded.

Kubala and Hammond disclose this limitation. The structure for this "means for" limitation is a software application program on a PDA that performs the recited function. (*See supra* Section IV.G.) Like this structure, Kubala discloses an enhanced email application 206, 208 and a mandatory-response functional unit 210, 212 on a PDA, which together are designed to receive and display a listing of which recipient PDA/cell phones have transmitted a manual response to said forced-message alert and details the response from each recipient PDA/cell phone that responded. (*See* Kubala, ¶0033-0036, 0050, 0051, 0061, FIG. 2; Williams, ¶119-120.)

Kubala's Figure 2 (reproduced below) shows that a sending PDA (e.g., computing device 202) can receive and display a response (e.g., email message 218) from a recipient PDA (e.g., computing device 204). (*See* Kubala, ¶0026-0041.) This disclosure from Kubala meets the claimed requirement to receive and display details of the response from each recipient PDA/cell phone that responded. (*See* Williams, ¶121.)

Kubala also discloses "receiving and displaying a listing of which recipient PDA/cell phones have transmitted a manual response to said forced message alert." For example, Kubala states that the receiving e-mail application 208 (shown above) may collect and record information about the manner in which the recipient responds to an e-mail message that has a mandatory-response flag. The information may include mandatory-response return-status codes included within the reply e-mail. (Kubala, ¶¶0050, 0051, 0061, FIG. 9.) Further, a POSA would know that a listing of the recorded information regarding the responses to e-mail messages were available and accessible. (*See* Williams, ¶122.)



Hammond also provides this disclosure. Hammond discloses a "Message Receipt Tracker component [that] attempts to identify when sent messages have been delivered to recipients and when sent messages have been reviewed by recipients." (Hammond, 5:17-20; *see also id.*, 5:20-6:55.) Hammond's Figure 2 (reproduced below) shows a Message Tracking Table that includes detailed

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information about electronic messages that have been read by recipients. (*See id.*, 6:56-8:45.) And Hammond discloses a Message Receipt Tracker routine (*id.*, FIG. 4, 10:5-47) and a Message Tracking Table Processor routine (*id.*, FIGS. 5A and 5B, 10:48-11:48). (*See* Williams, ¶123.)

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As explained above (*see* claim [1.7] and Section V.A.1), a POSA would have been motivated to combine Kubala with Hammond. (*See* Williams, ¶124.)

* * *

Thus, claim 1 is obvious over Kubala and Hammond. (See Williams, ¶125.)

3. Dependent claim 3

Claim 3 depends from claim 1.

3. The system as in claim 1, wherein said data transmission means is TCP/IP or another communications protocol.

As set forth above with respect to claim [1.2], Kubala discloses a server that allows PDAs/cell phones to communicate according to TCP/IP or another communication protocol (e.g., WiFi). (Kubala, ¶0027, FIG. 1A; Williams, ¶127.)

4. Dependent claim 4

Claim 4 depends from claim 1.

4. The system as in claim 1, wherein the response list that is transmitted within the forced message alert software packet is a default response list that is embedded in the forced message alert software application program.

This claim adds the limitation that the response list is "a default response list." Kubala discloses this limitation. Kubala says that "[t]he text strings that are used as menu items may be obtained in a variety of manners." (*Id.*, ¶0057.) For example, Kubala's Figure 11C includes a list of possible default responses, including "too busy right now," "looks okay," and "requested declined." (*Id.*,

¶0057, FIG. 11C.) These are default responses. Kubala also explains that the text strings may be "required and standardized within a data format specification, e.g., in a standard similar to RFC 2822." (*Id.*; *see also id.*, ¶0057, 0060.) Kubala's disclosure of these types of menu items teaches or suggests the claimed "default response list." (*See* Williams, ¶129-130.)

5. Dependent claim 5

Claim 5 depends from claim 1.

5. The system as in claim 1, wherein the response list that is transmitted within the forced message alert software packet is a custom response list that is created at the time the specific forced message alert is created on the sender PDA/cell phone.

This claim adds the limitation that the response list is "a custom response list that is created at the time the specific forced message alert is created on the sender PDA/cell phone." Kubala discloses this limitation. Again, Kubala says that "[t]he text strings that are used as menu items may be obtained in a variety of manners." (Kubala, ¶0057.) In one example, the text strings are "configurable":

[T]he text strings may be *configurable* through the enhanced e-mail application by allowing user-specifiable or system-administrator-specifiable parameters. As another alternative, the text strings may be extracted from the original e-mail message that was received from the sender, in which case the text strings may have been *configured* as

user-specifiable or system-administrator-specifiable parameters in the sender's instance of the enhanced e-mail application."

(*Id.* (emphasis added); *see also id.*, ¶¶0057, 0060.) Kubala's disclosure of "configurable" menu items teaches or suggests the claimed "custom response list." (*See* Williams, ¶¶132-133.)

6. Independent claim 6

Claim 6 is obvious in view of Kubala and Hammond.

6. A method of sending a forced message alert to one or more recipient PDA/cell phones within a predetermined communication network, wherein the receipt and response to said forced message alert by each intended recipient PDA/cell phone is tracked, said method comprising the steps of:

The combination of Kubala and Hammond discloses the preamble, to the extent it is limiting. As set forth above (*supra* claims [1.1], [1.3]), Kubala discloses a method for sending a forced-message alert to one or more recipient PDA/cell phones within a predetermined communication network. (*See* Kubala, ¶¶0026-0027, 0032, 0033, FIG. 1A; Williams, ¶135.) And as also set forth above (*supra* claim [1.7]), Hammond discloses the ability to track the receipt and response to forced-message alerts. (*See* Hammond, Abstract, 2:11-18, 3:1-4:28, 5:20-37, 10:6-22, 6:56-8:45, FIG. 2.)

[6.1] accessing a forced message alert software application program on a sender PDA/cell phone;

As set forth above (*supra* claim [1.4]), Kubala discloses an enhanced email application that reads on this limitation. (*See* Kubala, ¶¶0013, 0033-0036, FIG. 2; Williams, ¶136.)

[6.2] creating the forced message alert on said sender PDA/cell phone by attaching a voice or text message to a forced message alert application software packet to said voice or text message;

As set forth above (*supra* claim [1.5]), Kubala teaches or suggests creating the forced-message alert on said sender PDA/cell phone by attaching a voice or text message to a forced message alert application software packet to said voice or text message—as required by this limitation. (*See* Kubala, ¶¶0032-0036, 0037-0041, 0054-0061, FIGS. 1A, 1B, 2-4; Williams, ¶137.)

[6.3] designating one or more recipient PDA/cell phones in the communication network;

As set forth above (*supra* claim [1.5]), Kubala teaches or suggests designating one or more recipient PDA/cell phones in the communication network—as required by this limitation. (*See* Kubala, ¶¶0032-0036, 0037-0044, 0054-0061, FIGS. 1A, 1B, 2-5; Williams, ¶138.)

[6.4] electronically transmitting the forced message alert to said recipient PDA/cell phones;

As set forth above (*supra* claim [1.5]), Kubala teaches or suggests this claim feature. (*See* Kubala, ¶¶0032-0036, 0037-0044, 0054-0061, FIGS. 1A, 1B, 2-5; Williams, ¶139.)

[6.5] receiving automatic acknowledgements from the recipient PDA/cell phones that received the message and displaying a listing of which recipient PDA/cell phones have acknowledged receipt of the forced message alert and which recipient PDA/cell phones have not acknowledged receipt of the forced message alert;

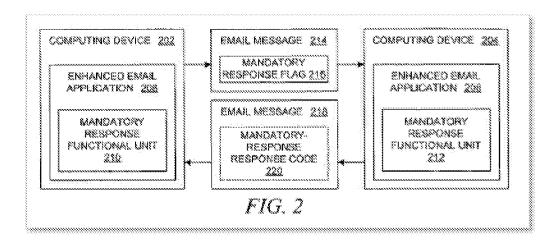
As set forth above (*supra* claims [1.5] and [1.7]), the combination of Kubala and Hammond teaches or suggests the features in this limitation. (*See* Kubala, ¶¶0032-0036, 0037-0044, 0054-0061, FIGS. 1A, 1B, 2-5; Hammond, Abstract, 2:11-18, 3:1-4:28, 5:20-37, 10:6-22, 6:56-8:45, FIG. 2; Williams, ¶140.)

[6.6] periodically resending the forced message alert to the recipient PDA/cell phones that have not acknowledged receipt;

As set forth above (*supra* claim [1.8]), the combination of Kubala and Hammond teaches or suggests the features in this limitation. (*See* Kubala, ¶¶0033-0036, FIG. 2; Hammond, 2:47-50; *see also id.*, Abstract, 2:1-8, 4:21-28, 5:5-6:19, 6:66-7:63, 10:48-63, FIGS. 2, 3A, 3B, 4, 5A, 5B; Williams, ¶141.)

[6.7] receiving responses to the forced message alert from the recipient PDA/cell phones and displaying the response from each recipient PDA/cell phone; and

Kubala discloses this limitation. For example, Kubala's Figure 2 (reproduced below) illustrates that a sending PDA (e.g., computing device 202) may receive an email message 218 from a recipient PDA (e.g., computing device 204) in response to an email message 214 with a mandatory response flag 216. (See Kubala, ¶¶0033-0036; Williams, ¶142.)



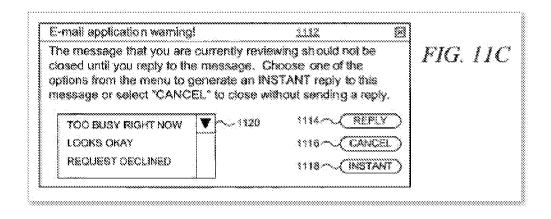
The received email would have been displayed on computing device 202. (*See* Williams, ¶143; Kubala, ¶¶0028-0036, 0041, FIGS. 1A, 1B, 2.)

[6.8] providing a manual response list on the display of the recipient PDA/cell phone that can only be cleared by the recipient providing a required response from the list;

As set forth above, Kubala teaches or suggests the features in this limitation. (*See supra* claims [1.5] and [1.6]; Kubala, ¶¶0009, 0033-0036, 0040, 0041, 0047, 0054-0060, FIGS. 2, 8, 10, 11A, 11C; Williams, ¶144.)

[6.9] clearing the recipient's display screen or causing the repeating voice alert to cease upon recipient selecting a response from the response list required [sic] that can only be cleared by manually selecting and transmitting a response to the manual response list.

Kubala teaches or suggests the features in this limitation. (*See* Kubala, ¶0033-0036, 0049, 0053, 0054, 0057, FIGS. 2, 8, 10, 11C; Williams, ¶145.) Specifically, Kubala discloses that a user can select a response from a menu of responses. (*See* Kubala, ¶0057, FIG. 11C (reproduced below).)



After selecting a response from menu 1120, a user presses the "INSTANT" button 1118, which closes window 1112, thus *clearing* the recipient's cell-phone display and generating a reply message. (*Id.*, ¶0057.) Kubala explains:

"INSTANT" button 1118 closes window 1112 and then creates a reply e-mail message with an automatically generated reply message in which the message body is predetermined or pre-configured; in this example, when "INSTANT" button 1118 is selected, the e-mail application determines which menu item within menu 1120 has been selected by the user as a quick response to the original e-mail message, thereby fulfilling the sender's request that the recipient is required to provide a mandatory response.

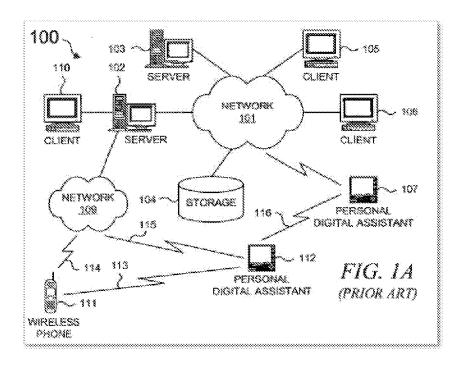
(*Id.* (emphasis added).) Although the specific embodiment illustrated in Figure 11C shows that a user can "select 'CANCEL' to close without sending a reply," Kubala also explicitly teaches that "the recipient can be *prevented* from closing a review of the received e-mail message, from deleting the received e-mail message, and from exiting the e-mail application until the recipient has responded to the received email message." (*Id.*, ¶0009 (emphasis added).) Thus, Kubala teaches or suggests "selecting a response from the response list required [sic] that *can only* be cleared by manually selecting and transmitting a response to the manual response list," as required by this claim. (*See* Williams, ¶146-147.)

7. Dependent claim 7

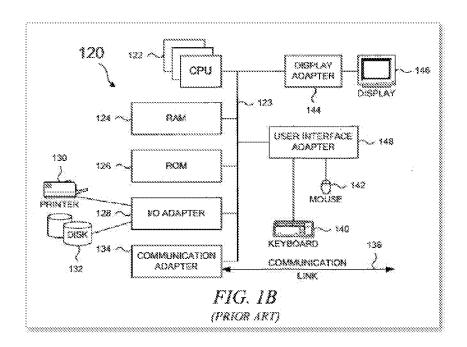
Dependent claim 7 depends from claim 6.

wherein each PDA/cell phone within a predetermined communication network is similarly equipped and has the forced message alert software application program loaded on it.

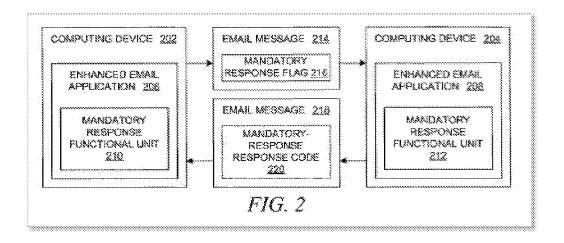
As set forth above (*supra* claims [1.1], [1.4]), Kubala teaches or suggests the features of this limitation. (*See* Kubala, ¶¶0026-0036, FIGS. 1A, 1B, 2; Williams, ¶149.) In particular, the predetermined network of participants is shown in Kubala's Figure 1A (reproduced below), which includes a plurality of PDAs 107, 112. (*See* Kubala, ¶¶0026-0027.)



Kubala's Figure 1B (reproduced below) illustrates that each PDA/cell phone includes at least one CPU 122, a memory 124, 126, and a user-interface adapter 148, which Kubala describes as being coupled to a touch-screen display. (*See* Kubala, ¶¶0029-0030; Williams, ¶150.)



Moreover, Kubala's Figure 2 (reproduced below) illustrates an enhanced email application 208 that includes a mandatory-response functional unit 212. The combined enhanced email application 208 and mandatory-response functional unit 212 reads on the claimed "forced message alert software application program." Referring to Figure 2, Kubala explains that the mandatory-response functional unit 212 provides an email message 218 in response to an email message 214 with a mandatory-response flag 216. (Kubala, ¶0035; *see also id., ¶¶*0013, 0033, 0036; Williams, ¶151.)



Thus, Kubala teaches or suggests claim 7.

8. Dependent claim 8

Dependent claim 8 depends from claim 6.

wherein said forced message alert application software packet contains a response list, wherein said response list is a default list embedded in the forced message alert software application program.

As set forth above with respect to claim 4, Kubala teaches or suggests "a default list embedded in the forced message alert software application program." (*See* Kubala, ¶¶0057, 0059, 0060, FIG. 11C; Williams, ¶154.)

9. Dependent claim 9

Dependent claim 9 depends from claim 6.

wherein said forced message alert application software packet contains a response list, wherein said response list is a custom response list that is created at the time the specific forced message alert is created on the sender PDA/cell phone.

As set forth above with respect to claim 5, Kubala teaches or suggests "a custom response list that is created at the time the specific forced message alert is created on the sender PDA/cell phone." (*See* Kubala, ¶¶0057, 0059, 0060; Williams, ¶156.)

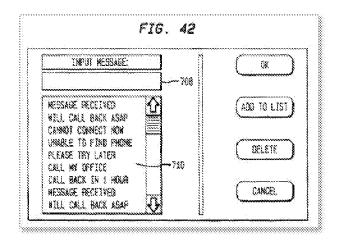
B. <u>Ground 2:</u> Claims 1 and 3-9 are obvious over Hammond in view of Johnson and Pepe—references that are prior art to the '970 patent's *earliest effective* filing date (September 21, 2004).

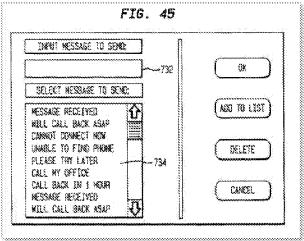
All the references in this ground pre-date the earliest effective filing date of the '970 patent (September 21, 2004). *First*, Hammond was filed on September 17, 1998 and issued on February 8, 2005. (*See* Hammond, (22), (45).) Thus, even if the '970 patent is entitled to an effective filing date of September 21, 2004, Hammond is prior art under at least § 102(e). *Second*, Johnson issued on June 28, 1994 (*see* Johnson at (45)) and is, therefore, prior art under 35 U.S.C. § 102(b). *Third*, Pepe issued on April 21, 1998 (*see* Pepe at (45)) and is, therefore, also prior art under 35 U.S.C. § 102(b).

1. Overview: Hammond tracks acknowledgements of and responses to mandatory-response messages; Johnson prevents a user from closing a mandatory-response message that has not been responded to; and Pepe discloses PDAs that provide an on-screen menu of possible responses to an incoming message.

As explained with respect to Ground 1, Hammond discloses methods and systems for tracking acknowledgements of and responses to electronic messages. (*See supra* Section V.A.1.) Like Hammond, Johnson also discloses methods and systems for ensuring responses to outgoing electronic messages. (*See* Johnson, Abstract.) Specifically, Johnson discloses that a recipient of a message may be "prohibited from performing a selected action until the specific response has been entered by the recipient." (*Id.*; *see also* Williams, ¶¶159-161.)

Pepe discloses PDAs that can send and receive electronic messages. For example, Pepe discloses "application software residing in the PDA" that is described in Pepe by "the screens displayed on a PCI subscriber's PDA." (Pepe, 34:11-15.) For example, Pepe's FIGS. 42 and 45 (reproduced below) are exemplary screens that may appear on a recipient's screen, including a list of possible responses (i.e., box 710 in Figure 42 and box 734 in Figure 45) to an incoming message. (*See* Pepe, 36:16-20, 38-51; *see also* Williams, ¶162.)





A POSA would have been motivated to combine Pepe with Hammond and Johnson at least based on the teachings in these references. (See infra claim [1.1]; Williams, ¶164-167.) In addition, because Hammond, Johnson, and Pepe are all directed to mobile devices that can send, receive, and track mandatory-response messages, the combination of Hammond, Johnson, and Pepe would have been an obvious design choice. See SDI Techs., Inc., IPR2013-00350, Paper 36 at 26 (holding that the use and arrangement of "known elements would have been an obvious matter of design choice"). Because Pepe merely discloses details of a PDA that are suggested by Hammond and Johnson, this combination would not "result in a difference in function or give unexpected results," so this combination, which is recited in the claims, is unpatentable as an obvious design choice. See In re Rice, 341 F.2d at 314. The combination of Hammond, Johnson, and Pepe further "represents no more than 'the predictable use of prior art elements according to their established functions," of sending mandatory-response emails and tracking

responses to such emails, which is an obvious combination "as a matter of law." *Wyers*, 616 F.3d at 1245 (quoting *KSR*, 550 U.S. at 417); *see also Ball Aerosol*, 555 F.3d at 993 ("predictable variation" was obvious as a matter of law).

2. Independent claim 1

This claim is obvious in view of Hammond, Johnson, and Pepe.

[1.] A communication system for transmitting, receiving, confirming receipt, and responding to an electronic message, comprising:

To the extent the preamble is limiting, Hammond, Johnson, and Pepe each disclose communication systems for transmitting, receiving, and responding to electronic messages. (*See* Hammond, Abstract, 2:11-17; Johnson, Abstract, 3:4-15, FIG. 1; Pepe, Abstract, 3:45-58, 5:28-14:21, FIGS. 1-6.) And Hammond's and Johnson's systems "confirm [] receipt" of electronic messages, as claimed. (*See* Hammond, 3:1-30; 5:17-61; Johnson, 1:58-61, 3:64-4:2.) Thus, the combination of references expressly discloses this limitation. (*See* Williams, ¶169.)

[1.1] a predetermined network of participants, wherein each participant has a similarly equipped PDA/cell phone that includes a CPU and a touch screen display a CPU and memory;

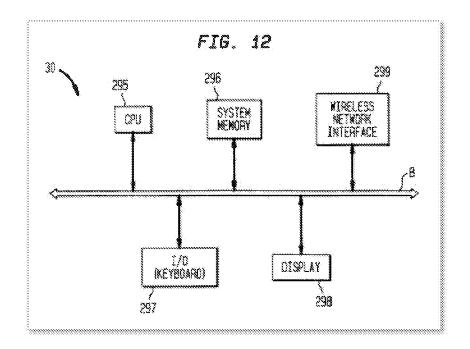
Hammond, Johnson, and Pepe each disclose "a predetermined network of participants," as claimed. (*See* Hammond, Abstract, 2:11-17; Johnson, Abstract, 2:16-31, 3:4-15, FIG. 1; Pepe, Abstract, 3:45-58, 5:28-14:21, FIGS. 1-6.) But Hammond's and Johnson's networks include "computers." (*See, e.g.*, Hammond,

4:29-47, FIG. 1 (describing computer systems 100, 150, 160, 170, and 180);

Johnson, 3:4-4:2, FIG. 1 (describing computers 12 and 30 in LAN 10 and 32).)

(Williams, ¶170.)

To the extent that Hammond and Johnson's disclosure of "computers" is found to not encompass a PDA/cell phone, Pepe supplies this missing disclosure. For example, Pepe's Figures 1-6 show a plurality of PDA/cell phones interacting in a network. (See also Pepe, 5:28-14:21.) Each PDA includes a CPU, an input-output device, a display, and a memory. (See id., 16:50-61, FIG. 12 (reproduced below).) Although the phrase "touchscreen display" does not appear in Pepe, a POSA would have understood Pepe's disclosure of an input-output device and display to teach or suggest the claimed touchscreen display, because PDAs with touchscreen displays were known well before the '970 patent. (See Williams, ¶¶6, 46-48, 57, 139, 143, 167, 172-174 (discussing devices that included a touchscreen display); see also Banerjee, ¶¶0019-0048.) In other words, a POSA would have interpreted Pepe's input-output device and display to teach or suggest a touchscreen display, as claimed. (See Williams, ¶¶172-174.)



A POSA would have been motivated to combine Pepe with Hammond and Johnson at least based on the teachings in these references. (*See* Williams, ¶172-174) For example, all these references are directed to sending and receiving electronic messages. (*See* Hammond, Abstract, 2:11-17; Johnson, Abstract, 3:4-15, FIG. 1; Pepe, Abstract, 3:45-58, 5:28-14:21, FIGS. 1-6.) And Hammond says that "any transmission medium"—including "wireless RF"—"can be used for the transmission of the electronic messages." (Hammond, 4:33-38.) Similarly, Johnson says that "[t]he electronic mail object may be in the form of text, an image, or a voice message." (Johnson, 4:1-2; *see also id.*, 4:2-18.) Hammond's disclosure of "wireless RF" and Johnson's disclosure of "text," "image," or "voice" messages suggests—if not explicitly teaches—the use of a PDA/cell phone. (*See* Williams, ¶172-174.) So, based on these disclosures, a POSA would have been motivated to

combine Pepe's PDA/cell phone with the force-response message systems of Hammond and Johnson. (*See* Williams, ¶¶172-174.)

[1.2] a data transmission means that facilitates the transmission of electronic files between said PDA/cell phones in different locations;

Pepe discloses this feature. The recited "data transmission means" encompasses a server that communicates according to peer-to-peer communications (e.g., WiFi or WiMax) or another messaging protocol (e.g., SMS or TCP/IP). (*See* Section IV.B.) Pepe discloses a PCI server 48 that enables the PDA/cell phone to communicate according to TCP/IP. (*See* Pepe, 24:31-38, 24:49-53, 27:22-28.) And those communications can be with other PDAs/cell phones. (*See id.*, 33:4-34:8.) Pepe thus expressly discloses the recited "data transmission means that facilitates the transmission of electronic files between said PDA/cell phones in different locations." (*See* Williams, ¶174.)

[1.3] a sender PDA/cell phone and at least one recipient PDA/cell phone for each electronic message;

Pepe expressly discloses a sender PDA/cell phone and at least one recipient PDA/cell phone for each electronic message. Pepe explains that a first PDA/cell phone can send a message to a second PDA/cell phone. (*See id.*, 33:4-52, FIGS. 25, 26; *see also id.*, FIGS. 1-6 (showing PDAs in a network), 9:1-6 (explaining that

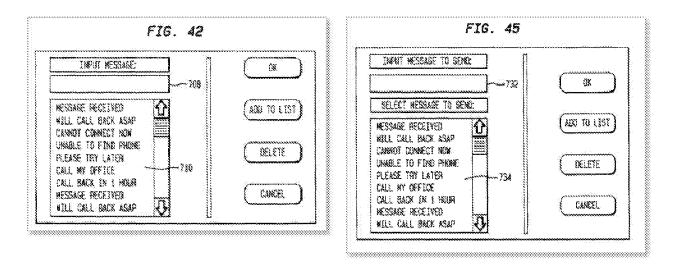
a plurality of PDAs may be connected to a wireless network and messages may be sent to and from those PDAs); (See Williams, ¶175.)

[1.4] a forced message alert software application program including a list of required possible responses to be selected by a participant recipient of a forced message response loaded on each participating PDA/cell phone;

The combination of Hammond, Johnson, and Pepe discloses this limitation. In particular, Hammond and Johnson each disclose systems for requiring a response to an electronic message. (*See* Hammond, Abstract, 1:66-2:50, 3:30-4:28, 6:3-19, 9:12-15; Johnson, Abstract, 1:58-61, 3:64-4:2, 4:28-39, 5:1-6:65, 7:46-62, FIG. 6.) Yet neither Hammond nor Johnson discloses a software-application program that is loaded on each PDA/cell phone and that includes a list of possible responses. (*See* Williams, ¶176.)

Pepe supplies this missing disclosure. It discloses "application software residing in the PDA" that is described in Pepe by "the screens displayed on a PCI subscriber's PDA." (Pepe, 34:11-15; *see also id.*, 5:17-20 ("The application residing in the PDA is described in FIGS. 28-45, which illustrate exemplary screens displayed to a PCI subscriber using a wireless PDA."), 34:9-36:51, FIGS. 28-45.) Specifically, Pepe's Figures 42 and 45 (reproduced below) are exemplary screens that may appear when a user wants to edit a message to be sent to another PDA/cell phone. Each of these screens includes a list of possible responses (i.e.,

box 710 in Figure 42 and box 734 in Figure 45) that can be selected by the user to send in response to a received message. (*See id.*, 36:16-20, 36:38-51; Williams, ¶177.)



As explained above at least with respect to claim [1.1], a POSA would have been motivated to combine Pepe's PDA/cell phone with the force-response message systems of Hammond and Johnson. (*See* Williams, ¶178.) Therefore, the combination of Hammond, Johnson, and Pepe discloses this limitation.

[1.5] means for attaching a forced message alert software packet to a voice or text message creating a forced message alert that is transmitted by said sender PDA/cell phone to the recipient PDA/cell phone, said forced message alert software packet containing a list of possible required responses and requiring the forced message alert software on said recipient PDA/cell phone to transmit an automatic acknowledgment to the sender PDA/cell phone as soon as said forced message alert is received by the recipient PDA/cell phone;

The combination of Hammond, Johnson, and Pepe disclose this limitation. In particular, Hammond and Johnson each alone disclose the transmission of forced message alerts to recipient computers. (*See* Hammond at Abstract, 1:66-2:50, 3:1-4:28, 5:17-61, 6:3-19; Johnson, 1:58-61, 2:1-35, 3:64-4:42, 6:60-65.) And Hammond and Johnson also each disclose that the transmitted message requires the recipient device to transmit an automatic acknowledgement as soon as the message is received by the recipient device. (*See* Hammond, 1:46-54, 5:17-41, 11:55-12:6; Johnson, 1:58-61, 2:6-15, 3:64-4:1.) Yet Hammond and Johnson do not explicitly disclose application software on a PDA/cell phone as required by the recited "means for attaching . . ." (*see supra* Section IV.C), nor do these references explicitly disclose a list of possible required responses—as recited in this claim. (*See* Williams, ¶179.)

Pepe, however, describes both. *First*, as set forth above with respect to claim [1.4], Pepe discloses "application software residing in the PDA." (*See* Pepe, 5:17-

20, 34:8-36:51, FIGS. 28-45.) *Second*, as also set forth above with respect to claim [1.4], Pepe discloses a list of possible responses that can be selected by a user to send in response to a received message. (*See id.*, 36:16-20, 36:38-51, FIGS. 42, 45; Williams, ¶180.)

As explained above at least with respect to claim [1.1], a POSA would have been motivated to combine Pepe's PDA/cell phone with the force-response message systems of Hammond and Johnson. (*See* Williams, ¶181.) Therefore, the combination of Hammond, Johnson, and Pepe discloses this limitation.

[1.6] means for requiring a required manual response from the response list by the recipient in order to clear recipient's response list from recipient's cell phone display;

Johnson discloses the function, and Pepe discloses the structure, recited in this limitation. In particular, Johnson discloses that a response must be provided by a "recipient in order to clear [a received message] from recipient's cell phone display." (See Johnson, 4:28-32 ("[T]he sender of the electronic mail object may mark or associate an attribute with the electronic mail object such that it cannot be exited out of until the appropriate reply has been made.") (emphasis added); see also id., 4:18-42.) Pepe discloses application software that is resident on the PDA/cell phone (see Pepe, 5:17-20, 34:8-36:51, FIGS. 28-45) and a list of possible responses that can be selected by a user to send in response to a received message

(*see id.*, 36:14-20, 36:38-51, FIGS. 42, 45). As explained above at least with respect to claim [1.1], a POSA would have been motivated to combine Pepe's PDA/cell phone with Johnson's force-response message system. (*See* Williams, ¶182.) Therefore, the combination of Johnson and Pepe discloses this limitation.

[1.7] means for receiving and displaying a listing of which recipient PDA/cell phones have automatically acknowledged the forced message alert and which recipient PDA/cell phones have not automatically acknowledged the forced message alert;

Hammond discloses the function, and Pepe discloses the structure, recited in this limitation. In particular, Hammond tracks which recipients have automatically acknowledged a forced-message alert. (See Hammond, 2:11-15 (disclosing that Hammond's system tracks "message delivery information and message review information"); see also id., 5:17-8:45, (disclosing additional details about the Message Receipt Tracker component and Message Tracking Table Processor component), Figure 2 (illustrating an example Message Tracking Table).) Hammond also tracks which recipients have not automatically acknowledged the forced message alert. (See id., 2:11-15 (disclosing that Hammond's system "specifies actions to take when a message is not delivered or not reviewed within a specified period of time"); see also id., 5:17-8:45, (disclosing additional details about the Message Receipt Tracker component), Figure 2 (illustrating an example Message Tracking Table).) Despite disclosing these claimed functions, Hammond

does not disclose the claimed structure—i.e., application software on a PDA—required by this means-plus-function limitation. (*See supra* Section IV.E; Williams, ¶183.)

But Pepe discloses this structure. Specifically, Pepe discloses application software that is resident on the PDA/cell phone. (*See* Pepe, 5:17-20, 34:8-36:51, FIGS. 28-45.) And, as explained above at least with respect to claim [1.1], a POSA would have been motivated to combine Pepe's PDA/cell phone with Hammond's force-response message system. (*See* Williams, ¶184.) Therefore, the combination of Hammond and Pepe discloses this limitation.

[1.8] means for periodically resending said forced message alert to said recipient PDA/cell phones that have not automatically acknowledged the forced message alert; and

Hammond discloses the claimed function, and Pepe discloses the claimed structure. In particular, Hammond's "system tracks whether each message has been delivered and reviewed by to [sic] each recipient, and uses the message information to resend the messages whose delivery or review is not confirmed." (Hammond, 2:47-50; *see also id.*, Abstract, 2:1-8, 4:21-28, 5:6:19, 6:66-7:63, 10:48-63, FIGS. 2, 3A, 3B, 4, 5A, 5B.) Despite disclosing this function, Hammond does not disclose the claimed structure—i.e., application software on a PDA—

required by this means-plus-function limitation. (See supra Section IV.F; Williams, ¶185.)

But Pepe discloses this structure. Specifically, Pepe discloses application software that is resident on the PDA/cell phone. (*See* Pepe, 5:17-20, 34:8-36:51, FIGS. 28-45.) And, as explained above at least with respect to claim [1.1], a POSA would have been motivated to combine Pepe's PDA/cell phone with Hammond's force-response message system. (*See* Williams, ¶186.) Therefore, the combination of Hammond and Pepe discloses this limitation.

[1.9] means for receiving and displaying a listing of which recipient PDA/cell phones have transmitted a manual response to said forced message alert and details the response from each recipient PDA/cell phone that responded.

Hammond discloses the claimed function, and Pepe discloses the claimed structure. In particular, Hammond discloses a "Message Receipt Tracker component [that] attempts to identify when sent messages have been delivered to recipients and when sent messages have been reviewed by recipients." (Hammond, 5:17-20; *see also id.*, 5:20-6:55.) Hammond's Figure 2 (reproduced below) shows a Message Tracking Table that includes detailed information about electronic messages that have been read by recipients. (*See id.*, 6:56-8:45.) And Hammond discloses a Message Receipt Tracker routine (*id.*, FIG. 4, 10:5-47) and a Message Tracking Table Processor routine (*id.*, FIGS. 5A and 5B, 10:48-11:48). Despite

disclosing these functions, Hammond does not expressly disclose the claimed structure—i.e., application software on a PDA—required by this means-plusfunction limitation. *See supra* Section IV.G; (*See* Williams, ¶187.)

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But Pepe discloses this structure. Specifically, Pepe discloses application software that is resident on the PDA/cell phone. (*See* Pepe, 5:17-20, 34:8-36:51,

FIGS. 28-45.) And, as explained above at least with respect to claim [1.1], a POSA would have been motivated to combine Pepe's PDA/cell phone with Hammond's force-response message system. (*See* Williams, ¶188.) Therefore, the combination of Hammond and Pepe discloses this limitation.

3. Dependent claim 3

Claim 3 depends from claim 1.

3. The system as in claim 1, wherein said data transmission means is TCP/IP or another communications protocol.

Pepe expressly discloses this limitation. Pepe's PCI server allows the PDA/cell phone to communicate according to TCP/IP. (*See* Pepe, 24:31-38, 24:49-53, 27:22-28; Williams, ¶190.)

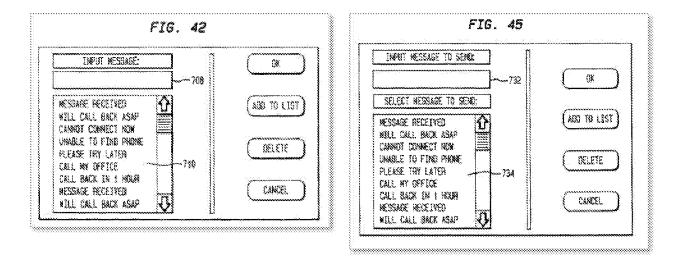
4. Dependent claim 4

Claim 4 depends from claim 1.

4. The system as in claim 1, wherein the response list that is transmitted within the forced message alert software packet is a default response list that is embedded in the forced message alert software application program.

Pepe discloses application software residing in the PDA. (*Id.*, 5:17-20, 34:8-36:51, FIGS. 28-45.) In Figures 42 and 45 (reproduced below), Pepe shows a list of possible responses (i.e., box 710 in Figure 42 and box 734 in Figure 45) that can be selected by the user to send in response to a received message. (*See id.*, 36:16-

20, 36:38-51.) A POSA would have understood Pepe's list of possible responses to teach or suggest the claimed default response list. (*See* Williams, 192.)



5. Dependent claim 5

Claim 5 depends from claim 1.

5. The system as in claim 1, wherein the response list that is transmitted within the forced message alert software packet is a custom response list that is created at the time the specific forced message alert is created on the sender PDA/cell phone.

The combination of Pepe and Johnson discloses this limitation. Specifically, Pepe discloses application software residing in the PDA. (*Id.*, 5:17-20, 34:8-36:51, FIGS. 28-45.) Pepe's Figures 42 and 45 show lists of possible responses. And Pepe says that "[t]he user may compose a unique message in box 708 or edit one already on a list shown in box 710." (*Id.*, 36:16-20.) Moreover, Johnson discloses that the sender of a forced-response message may set certain "persistent reply attributes"

that "govern user interaction for forcing a reply containing data from the recipient of the electronic mail object." (Johnson, 4:33-39; *see also id.*, 5:43-6:65.) A POSA would have understood that Johnson's persistent reply attributes are compatible with Pepe's teachings, and could have been used to specify a custom response list to be displayed on a recipient's PDA/cell phone, as taught by Pepe. (*See* Williams, ¶¶195-196.)

6. Independent claim 6

This claim obvious in view of Hammond, Johnson, and Pepe.

6. A method of sending a forced message alert to one or more recipient PDA/cell phones within a predetermined communication network, wherein the receipt and response to said forced message alert by each intended recipient PDA/cell phone is tracked, said method comprising the steps of:

The combination of Hammond, Johnson, and Pepe discloses this limitation. Specifically, Hammond and Johnson each disclose systems for requiring a response to an electronic message (i.e., "a forced message alert"). (*See* Hammond, Abstract, 1:66-2:50, 3:1-4:28, 6:3-19, 9:12-15; Johnson, Abstract, 1:58-61, 2:23-31, 3:64-4:42, 5:1-5.) Hammond, Johnson, and Pepe each disclose "a predetermined communication network," as claimed. (*See* Hammond, Abstract, 1:66-2:5, 2:11-17, 4:29-47, FIG. 1; Johnson, Abstract, 3:4-15, 2:16-23, FIG. 1; Pepe, Abstract, 3:45-58, 5:28-14:21, FIGS. 1-6.) And Pepe's network includes a plurality of PDA/cell phones. (*See* Pepe, 5:28-14:21, FIGS. 1-6.) Moreover,

Hammond discloses a "Message Receipt Tracker component [that] attempts to identify when sent messages have been delivered to recipients and when sent messages have been reviewed by recipients." (Hammond, 5:17-20; *see also id.*, 5:20-6:55.) Hammond's Figure 2 (reproduced below) shows a Message Tracking Table that includes detailed information about electronic messages that have been read by recipients. (*See id.*, 6:56-8:45.) And Hammond discloses a Message Receipt Tracker routine (*id.*, FIG. 4, 10:5-47) and a Message Tracking Table Processor routine (*id.*, FIGS. 5A and 5B, 10:48-11:48). (*See* Williams, ¶198.)

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A POSA would have been motivated to combine Pepe with Hammond and Johnson at least based on the teachings in these references, as explained above at least with respect to claim [1.1]. (See Williams, ¶199.)

[6.1] accessing a forced message alert software application program on a sender PDA/cell phone;

As set forth above (*supra* claim [1.4]), the combination of Hammond, Johnson, and Pepe teaches or suggests the features of this limitation. (*See* Hammond, Abstract, 6:3-19; Johnson, Abstract; Pepe, 34:8-36:51, 5:17-20, FIGS. 28-45.) A POSA would have been motivated to combine Pepe with Hammond and Johnson at least based on the teachings in these references, as explained above with respect to claim [1.1]. (*See* Williams, ¶200.)

[6.2] creating the forced message alert on said sender PDA/cell phone by attaching a voice or text message to a forced message alert application software packet to said voice or text message;

As set forth above (*supra* claim [1.5]), the combination of Hammond, Johnson, and Pepe teaches or suggests the features of this limitation. (*See* Hammond, Abstract, 1:66-2:50, 3:1-4:28, 5:17-61; Johnson, 1:58-61, 2:1-35, 3:64-4:42, 6:60-65; Pepe, 34:8-36:51, 5:17-20, FIGS. 28-45.) As explained above at least with respect to claim [1.1], a POSA would have been motivated to combine Pepe's PDA/cell phone with the force-response message systems of Hammond and Johnson. (*See* Williams, ¶201.)

[6.3] designating one or more recipient PDA/cell phones in the communication network;

Hammond discloses a method that includes "indicating a plurality of intended recipient users." (Hammond, 11:55-12:25.) And Pepe discloses that a message may be sent from one PDA to another. (*See* Pepe, 33:4-52, FIGS. 25-26.) To send such a message, a PDA must be "designat[ed]" as in this claim. (*See* Williams, ¶202.)

[6.4] electronically transmitting the forced message alert to said recipient PDA/cell phones;

As set forth above (*supra* claim [1.5]), the combination of Hammond, Johnson, and Pepe teaches or suggests the features of this limitation. (*See* Hammond at Abstract, 1:66-2:50, 3:1-4:28, 4:48-60, 6:3-19, 8:46-10:4, FIGS. 3A, 3B; Johnson, 1:58-61, 2:1-35, 3:64-4:42; Pepe, 33:4-52, FIGS. 25-26.) Moreover, as explained above at least with respect to claim [1.1], a POSA would have been motivated to combine Pepe's PDA/cell phone with the force-response message systems of Hammond and Johnson. (*See* Williams, ¶203.)

[6.5] receiving automatic acknowledgements from the recipient PDA/cell phones that received the message and displaying a listing of which recipient PDA/cell phones have acknowledged receipt of the forced message alert and which recipient PDA/cell phones have not acknowledged receipt of the forced message alert;

Hammond and Johnson each disclose that a transmitted message requires the recipient device to transmit an automatic acknowledgement. (*See* Hammond, 5:17-41; Johnson, 1:58-61, 2:6-15, 3:64-4:1; *see also supra* claims [1.5], [1.7].) And Hammond tracks which recipients have automatically acknowledged a forced-message alert and which recipients have not. (*See* Hammond, 1:46-54, 2:11-15, 5:17-8:45, 11:55-12:6, FIG. 2; Williams, ¶204-205.)

[6.6] periodically resending the forced message alert to the recipient PDA/cell phones that have not acknowledged receipt;

As set forth above (*supra* claim [1.8]), Hammond's "system tracks whether each message has been delivered and reviewed by to [sic] each recipient, and uses the message information to resend the messages whose delivery or review is not confirmed." (Hammond, 2:47-50; *see also id.*, Abstract, 2:1-8, 4:21-28, 5:5-6:19, 6:66-7:63, 10:48-63, FIGS. 2, 3A, 3B, 4, 5A, 5B; *supra* claim [1.8]; Williams, ¶206.)

[6.7] receiving responses to the forced message alert from the recipient PDA/cell phones and displaying the response from each recipient PDA/cell phone; and

Hammond, Johnson, and Pepe each disclose systems for sending, receiving, and responding to electronic messages. (*See* Hammond, Abstract, 2:11-17; Johnson, 3:4-15, FIG. 1; Pepe, Abstract, 3:45-58, 5:28-14:21, FIGS. 1-6.) And Pepe's network includes PDAs/cell phones. (*See* Pepe, FIGS. 1-6; Williams, ¶207.)

[6.8] providing a manual response list on the display of the recipient PDA/cell phone that can only be cleared by the recipient providing a required response from the list;

The combination of Pepe and Johnson disclose this limitation. (*See supra* claims [1.4], [1.6]; *see also* Williams, ¶¶208-209.) Pepe discloses a manual list of possible responses that can be displayed on a recipient PDA/cell phone. (*See* Pepe, 36:16-20, 36:38-51, FIG. 42 (box 710), FIG. 45 (box 734).) And Johnson discloses that an attribute may be associated with an electronic message "such that it cannot be exited out of"—i.e., cleared—"until the appropriate reply has been made." (Johnson, 4:28-32.)

[6.9] clearing the recipient's display screen or causing the repeating voice alert to cease upon recipient selecting a response from the response list required that can only be cleared by manually selecting and transmitting a response to the manual response list.

As set forth above, the combination of Pepe and Johnson discloses the features of this limitation. (*See supra* claim [6.8]; Johnson, 4:18-42; Pepe, 5:17-20, 34:8-36:51, FIGS. 28-45.) In particular, Johnson discloses that a response must be provided by a "recipient in order to clear [a received message] from recipient's cell phone display." (Johnson, 4:25-32.) And Pepe discloses application software that is resident on the PDA/cell phone (Pepe, 5:17-20, 34:8-36:51, FIGS. 28-45) and a list of possible responses that can be selected by a user to send in response to a received message (*id.*, 36:16-20, 36:38-51, FIGS. 42, 45). As explained above at least with respect to claim [1.1], a POSA would have been motivated to combine Pepe's PDA/cell phone with Johnson's forced-response system. (*See* Williams, ¶210.)

7. Dependent claim 7

Claim 7 depends from claim 6.

wherein each PDA/cell phone within a predetermined communication network is similarly equipped and has the forced message alert software application program loaded on it.

Pepe discloses this limitation. (*See supra* claims [1.1] and [1.4]; *see also* Pepe, Abstract, 3:45-58, 5:28-14:21, FIGS. 1-6.) For example, Pepe's Figures 1-6 show a plurality of PDA/cell phones interacting in a network. (*See also* Pepe, 5:28-14:21.) And Pepe discloses "application software residing in the PDA" that is described in Pepe by "the screens displayed on a PCI subscriber's PDA." (*Id.*, 34:11-15; *see also id.*, 5:17-20, 34:8-36:51, FIGS. 28-45.) Specifically, Pepe's Figures 42 and 45 (reproduced below) are exemplary screens that may appear when a user wants to edit a message to be sent to another PDA/cell phone. Each of these screens includes a list of possible responses (i.e., box 710 in Figure 42 and box 734 in Figure 45) that can be selected by the user to send in response to a received message. (*See id.*, 36:16-20, 36:38-51; Williams, ¶212.)

8. Dependent claim 8

Claim 8 depends from claim 6.

wherein said forced message alert application software packet contains a response list, wherein said response list is a default list embedded in the forced message alert software application program.

Pepe discloses a list of required responses. (*See supra* claim [4]; Pepe, 5:17-20, 34:8-36:51, FIGS. 28-45; Williams, ¶214.)

9. Dependent claim 9

Claim 9 depends from claim 6.

wherein said forced message alert application software packet contains a response list, wherein said response list is a custom response list that is created at the time the specific forced message alert is created on the sender PDA/cell phone.

The combination of Pepe and Johnson discloses this limitation. (*See supra* claim [5]; Pepe, 5:17-20, 34:8-36:51, FIGS. 28-45; Johnson, 4:33-39, 5:43-6:65.) A POSA would have understood that Johnson's persistent reply attributes could have been used to specify a custom response list to be displayed on a recipient's PDA/cell phone, as taught by Pepe. (*See* Williams, ¶216.)

C. <u>Ground 3:</u> Claims 1 and 3-9 are obvious over Hammond in view of Johnson, Pepe, and Banerjee.

Google set forth above in Ground 2 how Hammond, Johnson, and Pepe render obvious claims 1 and 3-9. In addition to Hammond, Johnson, and Pepe, Ground 3 also includes Banerjee, which explicitly teaches a PDA that includes a touchscreen display. (*See*, *e.g.*, Banerjee, Abstract.) Banerjee published on July 10, 2003 (*see id.*, (43)) and is, therefore, also prior art under 35 U.S.C. § 102(b).

In addition to the reasons set forth above for combining Pepe with

Hammond and Johnson, a POSA also would have been motivated to combine Pepe
with Banerjee at least because both of these references are directed to sending and

receiving electronic messages via PDAs. (*See* Pepe, Abstract, 3:45-58, 5:28-14:21, FIGS. 1-6; Banerjee, ¶[0019]-[0021], FIG. 1; *see also* Williams, ¶218.) And Pepe discloses an input-output device, without providing details about that input-output device. (*See* Pepe, 16:50-61, FIG. 12.) But Banerjee provides such details and discloses a PDA with a touchscreen display. (*See generally* Banerjee; Williams, ¶218.) Because Banerjee provides additional details regarding the input-output device disclosed by Pepe, a POSA would have been motivated to combine Pepe's PDA with the touchscreen display of Banerjee. (*See* Williams, ¶218.)

For these reasons and the reasons set forth in Ground 2 above, claims 1 and 3-9 are obvious over the combination of Hammond, Johnson, Pepe, and Banerjee.

VI. THIS PETITION CONTAINS NEW ARGUMENTS AND PRIOR ART NOT PREVIOUSLY PRESENTED TO THE OFFICE.

First, Google's petition is different than the IPR petition that Apple Inc. ("Apple") filed against the '970 patent on March 22, 2018, because the two petitions rely on entirely different sets of prior art. As set forth above, Google relies on various combinations of Kubala, Hammond, Johnson, Pepe, and Banerjee. In contrast, Apple relies on three completely different references: U.S. Publication No. 2005/0030977 ("Casey"); U.S. Patent No. 7,386,589 ("Tanumihardja"); and U.S. Patent No. 6,232,971 ("Haynes"). Because Google relies on different prior art than Apple, Google's petition and Apple's petition are not redundant for purposes of 35 U.S.C. § 325(d).

Second, the prior art cited in Google's petition was not cited, and is different from the prior art considered by the Examiner, during original prosecution of the '970 patent. So Google's petition is also not redundant to the original examination for purposes § 325(d).

VII. SECONDARY CONSIDERATIONS

Google is not aware of any secondary considerations that would overcome the showing of obviousness set forth herein. If the Patent Owner Preliminary Response includes any evidence of secondary considerations, Google should be given an opportunity to file a reply.

VIII. MANDATORY NOTICES

REAL PARTIES IN INTEREST: The real parties in interest are Google LLC;
Huawei Device USA Inc.; Huawei Device Co., Ltd.; Huawei Device (Dongguan)
Co., Ltd.; Huawei Technologies USA Inc.; Huawei Technologies Co., Ltd.; and
LG Electronics, Inc.

RELATED MATTERS:

The '970 patent has been asserted in the five currently pending district court cases in the Eastern District of Texas:

• AGIS Software Development LLC v. Huawei Device USA Inc., TXED-2-17-cv-00513, filed June 21, 2017;

- AGIS Software Development LLC v. HTC Corporation, TXED-2-17-cv-00514, filed June 21, 2017;
- AGIS Software Development LLC v. LG Electronics, Inc., TXED-2-17-cv-00515, filed June 21, 2017;
- AGIS Software Development LLC v. Apple Inc., TXED-2-17-cv-00516, filed June 21, 2017; and
- AGIS Software Development LLC v. ZTE Corporation, TXED-2-17-cv-00517, filed June 21, 2017.

The '970 patent is also the subject of the following *inter partes* review:

Apple Inc. v. AGIS Software Development LLC, IPR2018-00821, filed
 March 22, 2018.

The '970 patent claims the benefit of U.S. Patent Nos. 7,853,273; 7,630,724; and 7,031,728.

LEAD AND BACKUP COUNSEL: Under 37 C.F.R. § 42.8(b)(3) and 42.10(a), Google appoints Jonathan Tuminaro (Reg. No. 61,327) as lead counsel and Robert E. Sokohl (Reg. No. 36,013) and Karen Wong-Chan (Reg. No. 69,235) as back-up counsel—all at the address: STERNE, KESSLER, GOLDSTEIN & FOX, P.L.L.C., 1100 New York Avenue, N.W., Washington, D.C., 20005, phone (202) 371-2600 and facsimile (202) 371-2540.

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IX. CONCLUSION

For the reasons provided above, *inter partes* review of claims 1 and 3-9 of U.S. Patent No. 8,213,970 is requested.

Respectfully submitted, STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

/Jonathan Tuminaro/

Jonathan Tuminaro (Reg. No. 61,327) Robert E. Sokohl (Reg. No. 36,013) Karen Wong-Chan (Reg. No. 69,235) Attorneys for Petitioner

Date: May 15, 2018

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Inter Partes Review of U.S. Patent No. 8,213,970

CERTIFICATE OF WORD COUNT

The undersigned hereby certifies that the portions of the above-captioned Petition for *Inter Partes* Review of U.S. Patent No. 8,213,970 specified in 37 C.F.R. § 42.24 have 13,819 words, in compliance with the 14,000 word limit set forth in 37 C.F.R. § 42.24(a)(1)(i). This word count was prepared using Microsoft Word 2010.

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

/Jonathan Tuminaro/

Jonathan Tuminaro Registration No. 61,327 Attorney for Petitioner

Date: May 15, 2018

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CERTIFICATION OF SERVICE (37 C.F.R. §§ 42.6(e), 42.105(a))

The undersigned hereby certifies that true and correct copies of the abovecaptioned **PETITION FOR INTER PARTES REVIEW OF U.S. PATENT NO.**

8,213,970, all associated exhibits, and Petitioner's Power of Attorney were served in their entireties on May 15, 2018, upon the following parties via FedEx[®] Express:

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address of record for U.S. Patent No.
8,213,970

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Date: May 15, 2018

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Exhibit 1023

Filed on behalf of Google LLC

By: Jonathan Tuminaro (Reg. No. 61,327)

Robert E. Sokohl (Reg. No. 36,013) Karen Wong-Chan (Reg. No. 69,235) Sterne, Kessler, Goldstein & Fox PLLC

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC Petitioner

v.

AGIS SOFTWARE DEVELOPMENT LLC Patent Owner

Case IPR2018-01079 Patent 8,213,970

PETITIONER'S REPLY TO PATENT OWNER PRELIMINARY RESPONSE

Mail Stop "PATENT BOARD"

Patent Trial and Appeal Board U.S. Patent & Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

EXHIBIT LIST

Exhibit No.	Description
1001	U.S. Patent No. 8,213,970 B2 to Beyer ("'970 patent")
1002	Prosecution History of U.S. Patent No. 8,213,970 (Application No. 12/324,122) ("'970 Pros. Hist.")
1003	Declaration of David H. Williams
1004	Curriculum Vitae of David H. Williams
1005	U.S. Patent Application Publication No. 2006/0218232 to Kubala <i>et al.</i> ("Kubala")
1006	U.S. Patent No. 6,854,007 to Hammond ("Hammond").
1007	U.S. Patent No. 5,325,310 to Johnson et al. ("Johnson")
1008	U.S. Patent No. 5,742,905 to Pepe et al. ("Pepe")
1009	U.S. Publication No. 2003/0128195 to Banerjee et al. ("Banerjee")
1010	Simon Says "Here's How!" Simon TM Mobile Communications Made Simple, Simon Users Manual, IBM Corp., 1994. ("Simon")
1011	Prosecution History of U.S. Patent Application No. 10/711,490 ("'490 application")
1012	Prosecution History of U.S. Application No. 11/308,648 ("'648 application")
1013	Prosecution History of U.S. Application No. 11/612,830 ("'830 application")
1014	McKinsey & Company, The McKinsey Report: FDNY 9/11 Response (2002) ("The McKinsey Report")
1015	History of Mobile Phones, Wikipedia.com, https://en.wikipedia.org/wiki/History_of_mobile_phones (last visited May 10, 2018) ("Hist. Mobile Phones")
1016	Apple Newton, Wikipedia.com, https://en.wikipedia.org/wiki/Apple_Newton (last visited May 10, 2018) ("Apple")

Exhibit No.	Description
1017	Email, Wikipedia.com, https://en.wikipedia.org/wiki/Email (last
	visited May 10, 2018) ("Email")
1018	From touch displays to the Surface: A brief history of touchscreen
	technology, Arstechnica.com
	https://arstechnica.com/gadgets/2013/04/from-touch-displays-to-
	the-surface-a-brief-history-of-touchscreen-technology/ (last visited
	May 10, 2018) ("Arstechnica")
1019	Palm VII, Wikipedia.com, https://en.wikipedia.org/wiki/Palm_VII
	(last visited May 10, 2018) ("Palm")

AGIS accuses Google of a "lack of candor" while simultaneously omitting a dispositive fact and withholding highly relevant case law. Contrary to this baseless accusation, Google's petition and the relevant case law demonstrate that—at all times—Google has been entirely candid with the Board.

Google complied with the PTO's rules by identifying (i) the related district-court matters and (ii) the claim constructions that form the basis of its petition.

Caterpillar Inc. v. Wirtgen Am., Inc., IPR2017-02185, Paper no. 7 at 11 (May 3, 2018) ("Caterpillar"); Western Digital Corp. v. Spex Techs., Inc., IPR2018-00082, Paper 11 at 10, 11 (Apr. 25, 2018). Google even noted that alternative claim constructions may be advanced in different fora. Pet. at 8 n.1. Yet AGIS accuses Google of a "lack of candor" for "withholding seemingly inconsistent claim constructions from the record" POPR at 24. That accusation has no merit.

As an initial matter, AGIS omits the fact that the district-court parties (including AGIS) submitted claim constructions in district court a month *after*

¹ The Federal Circuit has consistently held that parties are entitled to take alternative—or even inconsistent—positions. *See, e.g., Bancorp Services v. Sun Life Assur. Co. of Canada*, 687 F.3d 1266, 1280 (Fed. Cir. 2012). And alternative, inconsistent positions are allowable at the PTAB. *See, e.g.*, Nippon *Suisan Kaisha Ltd. v. Pronova Biopharma Norge, AS*, PGR2017-00033, Paper 7 (Jan. 17, 2018).

Google filed its petitions here. Moreover, the PTO's rules do not require a petitioner to take "positions consistent with related cases in different fora."
Caterpillar at 11. Instead, the PTO's rules only "require that the parties identify
[the] related matters." Id. "Various reasons may justify inconsistencies among fora,
including differing legal or evidentiary standards, a change in litigation strategy, or
a change in position." Id. Thus, Google's claim constructions here are not required
to be consistent with the defendants' claim constructions in district court.

And AGIS's argument is nonsensical in an adversarial proceeding. If AGIS believed that the district-court defendants' claim constructions were correct, it was free to argue such in its Preliminary Response. But, in district court, AGIS *opposed* the district-court defendants' claim constructions and has not argued here that those claim constructions are correct. Nor has AGIS argued against applying the presumption that § 112 ¶ 6 does not apply to claims that lack the word "means." Instead of arguing the merits, AGIS asserts that any difference between Google's position and the district-court party positions mandates denial, citing *Facebook*. *See* POPR at 18 (citing IPR2017-00998, Paper 13 at 18 (Sept. 5, 2017)).

The facts here are like Caterpillar, not Facebook. Like AGIS, the patent owner in Caterpillar cited Facebook and asserted that "the Board has denied institution of an $inter\ partes$ review when a petitioner fails to notify the Board that it has construed claim terms under § 112, \P 6 in a parallel proceeding." Caterpillar

at 12. The *Caterpillar* panel rejected that argument, pointing to the obvious distinction from *Facebook*, where *Facebook* was based on "the *district court's determination* that *the sole challenged claim [wa]s indefinite* and Petitioner's failure to inform us of its seemingly inconsistent claim construction positions"—a position taken by the petitioner prior to filing the petition. *Id.* at 12 (emphasis added). But, in *Caterpillar* (like here), no prior claim-construction position was taken or ruled on. So, no party had prevailed, no ruling had issued, and no party was then subject to any potential preclusion.

AGIS also failed to cite a decision that rejected a nearly identical argument to the one it makes here. In *Western Digital*, the same counsel that represents AGIS argued that an IPR petition should be denied because the petitioner failed to "take ownership" of any claim constructions from a related district-court matter. IPR2018-00082, Paper 11 at 10, 11 (Apr. 25, 2018). The panel rejected that argument, explaining that "37 C.F.R. § 104(b)(3) does not require [p]etitioner to express its subjective agreement regarding correctness of its proffered claim constructions or to take ownership of those constructions." *Id.* at 12. AGIS's counsel's failure to cite this case is troubling, where *Western Digital* confirms that Google "complie[d] with [the PTO's] rules by identifying [the] claim constructions it proposes as the basis for requesting review of the challenged claims." *Id.*

Google satisfied 37 C.F.R § 42.11 and § 11.18(b)(2) and its duty of candor.

Case IPR2018-01079 U.S. Patent 8,213,970

Respectfully submitted, STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

/Robert Sokohl/

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Date: September 19, 2018

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CERTIFICATION OF SERVICE (37 C.F.R. §§ 42.6(e), 42.105(a))

The undersigned hereby certifies that true and correct copies of the above-captioned **PETITIONER'S REPLY TO PATENT OWNER PRELIMINARY RESPONSE** was served in its entirety on September 19, 2018, upon the following parties via email:

Vincent J. Rubino, III Alfred R. Fabricant Peter Lambrianakos Enrique W. Iturralde vrubino@brownrudnick.com afabricant@brownrudnick.com plambrianakos@brownrudnick.com eiturralde@brownrudnick.com

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Exhibit 1024

Paper 34 Date: November 19, 2019

UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD
GOOGLE LLC, Petitioner,
V.
AGIS SOFTWARE DEVELOPMENT, LLC, Patent Owner.
IPR2018-01079 Patent 8,213,970

Before TREVOR M. JEFFERSON, CHRISTA P. ZADO, and KEVIN C. TROCK, *Administrative Patent Judges*.

ZADO, Administrative Patent Judge.

JUDGMENT Final Written Decision Determining All Challenged Claims Unpatentable 35 U.S.C. § 318(a)

I. INTRODUCTION

We have authority to hear this *inter partes* review under 35 U.S.C. § 6. This Final Written Decision issues pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons discussed herein, we determine that Google LLC ("Petitioner")¹ has shown, by a preponderance of the evidence, that claims 1 and 3–9 ("challenged claims") of U.S. Patent No. 8,213,970 B2 (Ex. 1001, "the '970 patent") are unpatentable. *See* 35 U.S.C. § 316(e) (2012); 37 C.F.R. § 42.1(d) (2017).

A. Procedural History

Petitioner filed a Petition for *inter partes* review of claims 1 and 3–9 of the '970 patent. Paper 2 ("Pet." or "Petition"). AGIS Software Development, LLC ("Patent Owner")² subsequently filed a Preliminary Response. Paper 6 ("Prelim. Resp."). Petitioner field an authorized Reply to Patent Owner's Preliminary Response. Paper 8. On November 20, 2018, the Board entered a decision instituting an *inter partes* review of all claims and all grounds presented in the Petition. Paper 9 ("Institution Decision" or "Inst. Dec.").

After institution, Patent Owner filed a Response to the Petition.

Paper 17 ("Response" or "PO Resp."). Petitioner thereafter filed a Reply to Patent Owner's Response. Paper 22 ("Pet. Reply" or "Reply"). Patent Owner filed a Sur-reply to Petitioner's Reply to Patent Owner's Response.

¹ Pursuant to 37 C.F.R. § 42.8, Petitioner identifies as real parties-in-interest Google LLC, Huawei Device USA Inc., Huawei Device Co., Ltd., Huawei Device (Dongguan) Co., Ltd., Huawei Technologies USA Inc., Huawei Technologies Co., Ltd., and LG Electronics, Inc. Pet. 79.

² Pursuant to 37 C.F.R. § 42.8, Patent Owner identifies only itself as a real party-in-interest. Paper 5, 1.

Paper 27 ("Sur-reply"). Patent Owner also filed a Request for Rehearing of the Institution Decision, Paper 12, which we denied, Paper 26.

An oral hearing was held on Sept. 5, 2019. A transcript of the hearing is included in the record. Paper 33 ("Tr.").

B. Related Matters

The parties advise that the '970 patent has been asserted in *AGIS*Software Development LLC v. Huawei Device USA Inc. et al., No. 2:17-cv00513 (E.D. Tex.); AGIS Software Development LLC v. HTC Corporation,
No. 2:17-cv-00514 (E.D. Tex.); AGIS Software Development LLC v. LG

Electronics, Inc., No. 2:17-cv-00515 (E.D. Tex.); AGIS Software

Development LLC v. Apple Inc., No. 2:17-cv-00516-JRG (E.D. Tex.); AGIS

Software Development LLC v. ZTE Corporation et al., No. 2:17-cv-00517

(E.D. Tex.). Pet. 79–80; Paper 5, 3–4. Patent Owner further advises that the '970 patent and patents related to the '970 patent are the subject of various filings requesting inter partes review. Paper 5, 2–3 (table identifying inter partes review case numbers)

C. The '970 Patent

The '970 patent generally discloses a specialized software application program on a personal computer ("PC") or PDA/cell phone for creating and processing forced message alerts. Ex. 1001, code (57). The specification of the '970 patent ("Specification") discloses it is desirable for a PDA/cell phone user to be able to simultaneously send Digital Smart Message Service ("SMS") or TCP/IP messages to a large group of PCs or cell phones using cellular technology (such as GSM or CDMA) or WiFi. *Id.* at 1:51–57. The Specification further discloses that in some situations it is additionally desirable to know which PCs and PDA/cell phones received the message, which PCs and PDA/cell phones did not receive the message, and the

response of each recipient of the message. *Id.* at 1:57–61. "As a result, what is needed is a method in which a sender of a text or voice message can force an automatic acknowledgement upon receipt from a recipient's cell phone or PC and a manual response from the recipient via the recipient's cell phone or PC." *Id.* at 1:65–67. In addressing these issues, the Specification discloses "[t]he heart of the invention lies in [a] forced message alert software application program provided in each PC or PDA/cell phone." *Id.* at 4:47–49. The software provides the ability to

(a) allow an operator to create and transmit a forced message alert from a sender PDA/cell phone to one or more recipient PCs and PDA/cell phones within the communication network; (b) automatically transmit an acknowledgement of receipt to the sender PDA cell phone upon the receipt of the forced message alert; (c) periodically resend the message to the recipient PCs and PDA/cell phones that have not sent an acknowledgement; (d) provide an indication of which recipient PCs and PDA/cell phones have acknowledged the forced message alert; (e) provide a manual response list on the display of the recipient PC and PDA/cell phone's display that can only be cleared by manually transmitting a response; and (f) provide an indication on the sender PDA/cell phone of the status and content the manual responses.

Id., code (57). The Specification explains that a forced message alert is comprised of a text or voice message and a forced message alert software packet. *Id.* at 2:11–13, 8:23–25

D. Illustrative Claims

Petitioner challenges claims 1 and 3–9 of the '970 patent. Pet. 12. Claims 1 and 6 are independent. Claim 1, reproduced below, is illustrative.

1. A communication system for transmitting, receiving, confirming receipt, and responding to an electronic message, comprising:

- [1.1] a predetermined network of participants, wherein each participant has a similarly equipped PDA/cell phone that includes a CPU and a touch screen display and a CPU memory;
- [1.2] a data transmission means that facilitates the transmission of electronic files between said PDA/cell phones in different locations;
- [1.3] a sender PDA/cell phone and at least one recipient PDA/cell phone for each electronic message;
- [1.4] a forced message alert software application program including a list of required possible responses to be selected by a participant recipient of a forced message response loaded on each participating PDA/cell phone;
- [1.5] means for attaching a forced message alert software packet to a voice or text message creating a forced message alert that is transmitted by said sender PDA/cell phone to the recipient PDA/cell phone, said forced message alert software packet containing a list of possible required responses and requiring the forced message alert software on said recipient PDA/cell phone to transmit an automatic acknowledgement to the sender PDA/cell phone as soon as said forced message alert is received by the recipient PDA/cell phone;
- [1.6] means for requiring a required manual response from the response list by the recipient in order to clear the recipient's response list from recipient's cell phone display;
- [1.7] means for receiving and displaying a listing of which recipient PDA/cell phones have automatically acknowledged the forced message alert and which recipient PDA/cell phones have not automatically acknowledged the forced message alert;

- [1.8] means for periodically resending said forced message alert to said recipient PDA/cell phones that have not automatically acknowledged the forced message alert; and
- [1.9] means for receiving and displaying a listing of which recipient PDA/cell phones have transmitted a manual response to said forced message alert and details the response from each recipient PDA/cell phone that responded.

Ex. 1001, 8:65–9:39 (brackets and numbering added).

Claim 6, reproduced below, also is illustrative.

- 6. A method of sending a forced message alert to one or more recipient PD A/cell phones within a predetermined communication network, wherein the receipt and response to said forced message alert by each intended recipient PDA/cell phone is tracked, said method comprising the steps of:
- [6.1] accessing a forced message alert software application program on a sender PDA/cell phone;
- [6.2] creating the forced message alert on said sender PDA/cell phone by attaching a voice or text message to a forced message alert application software packet to said voice or text message;
- [6.3] designating one or more recipient PDA/cell phones in the communication network;
- [6.4] electronically transmitting the forced message alert to said recipient PDA/cell phones;
- [6.5] receiving automatic acknowledgements from the recipient PDA/cell phones that received the message and displaying a listing of which recipient PDA/cell phones have acknowledged receipt of the forced message alert and which recipient PDA/cell phones have not acknowledged receipt of the forced message alert;

- [6.6] periodically resending the forced message alert to the recipient PDA/cell phones that have not acknowledged receipt;
- [6.7] receiving responses to the forced message alert from the recipient PDA/cell phones and displaying the response from each recipient PDA/cell phone; and
- [6.8] providing a manual response list on the display of the recipient PDA/cell phone that can only be cleared by the recipient providing a required response from the list;
- [6.9] clearing the recipient's display screen or causing the repeating voice alert to cease upon recipient selecting a response from the response list required that can only be cleared by manually selecting and transmitting a response to the manual response list.

Ex, 1001, 10:7–41 (brackets and numbering added).

E. Prior Art and Asserted Grounds of Unpatentability

Petitioner asserts that claims 1 and 3–9 would have been unpatentable on the following grounds (Pet. 12):

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1, 3–9	103(a)	Kubala, ³ Hammond ⁴
1, 3–9	103(a)	Hammond, Johnson, ⁵ Pepe ⁶
1, 3–9	103(a)	Hammond, Johnson, Pepe, Banerjee ⁷

Petitioner relies on the declaration of David Hilliard Williams, Ex. 1003 ("Williams Declaration"), and the supplemental declaration of Mr. Williams, Ex. 1023 ("Williams Supplemental Declaration"), to support its contentions.

II. ANALYSIS

A. Legal Principles

A claim is unpatentable under § 103(a) if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations, including (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) when in evidence, objective indicia of non-obviousness

³ U.S. Patent Publication 2006/0218232 A1, filed March 24, 2005 and published September 29, 2006. Ex. 1005 ("Kubala").

⁴ U.S. Patent 6,854,007 B1, filed September 17, 1998 and issued Febuary 8, 2005. Ex. 1006 ("Hammond").

⁵ U.S. Patent 5,325,310, filed June 26, 1992 and issued June 28, 1994. Ex. 1007 ("Johnson").

⁶ U.S. Patent 5,742,905, filed September 19, 1994 and issued April 21, 1998. Ex. 1008 ("Pepe").

⁷ U.S. Patent Publication 2003/0128195 A1, filed January 8, 2002 and published July 10, 2003. Ex. 1009 ("Banerjee").

(i.e., secondary considerations). Graham v. John Deere Co., 383 U.S. 1, 17–18 (1966). "To satisfy its burden of proving obviousness, a petitioner cannot employ mere conclusory statements. The petitioner must instead articulate specific reasoning, based on evidence of record, to support the legal conclusion of obviousness." *In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016).

B. Level of Ordinary Skill in the Art

Petitioner asserts that a person of ordinary skill in the art in the field of the '970 patent would have had either (1) a Bachelor of Science degree in electrical engineering or an equivalent field, with three to five years of academic or industry experience in the field of electronic communications, or (2) a Master of Science degree in electrical engineering or an equivalent field, with two to four years of academic experience in the same field. Pet. 9–10 (citing Ex. 1003 ¶¶ 29–30).

Patent Owner asserts that a person of ordinary skill in the art would have had at least a bachelor's degree in computer science, computer engineering, or equivalent with one to two years of experience in the field of computer programming with a focus on building systems such as GPS-based localization and network transmission. PO Resp. 7 (citing Ex. 2005 ¶¶ 18–20). Patent Owner further asserts that extensive experience and technical training might substitute for educational requirements, while advanced degrees might substitute for experience. *Id.* (citing Ex. 2005 ¶¶ 18–20).

The parties agree that an ordinarily skilled artisan in the field of the '970 patent would have had a bachelor's degree in the pertinent technical

⁸ Neither party presents arguments or evidence of secondary considerations, which therefore do not constitute part of our analysis.

field, and a few years of experience and/or more advanced education in the pertinent field. Therefore, we determine a person of ordinary skill in the art would have had a bachelor's degree in electrical engineering, computer science, or computer engineering, or equivalent, and two to four years of additional experience, either work or educational, in the field of electrical communications. We do not adopt Patent Owner's assessment that a skilled artisan would have focused on building systems such as GPS-based localization and network transmission. PO Resp. 7. Patent Owner fails to explain how this is pertinent to the field of the '970 patent, which relates to providing computers and/or PDA/cell phones with forced message alert software that enables users to create and send message alerts.

We note that the level of skill in the art also may be reflected in the prior art. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001); *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995); *In re Oelrich*, 579 F.2d 86, 91 (CCPA 1978).

C. Claim Construction

1. Introduction

In an *inter partes* review filed before November 13, 2018, claim terms in an unexpired patent are given their broadest reasonable construction in light of the specification of the patent. Consistent with that standard, we assign claim terms their ordinary and customary meaning, as would be understood by one of ordinary skill in the art at the time of the invention, in

⁹ This standard applies to *inter parties* reviews filed before November 13, 2018. 77 Fed. Reg. 48727 (Aug. 14, 2012) (codified at 37 C.F.R. § 42.100(b)), as amended at 81 Fed. Reg. 18766 (Apr. 1, 2016); *see also* 83 Fed. Reg. 51340 (Oct. 11, 2018) (amending 37 C.F.R. § 42.100(b) effective November 13, 2018) (now codified at 37 C.F.R. § 42.100(b) (2019)).

the context of the entire patent disclosure. *See In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007).

We note that the district court issued an order construing terms of the '970 patent in *AGIS Software Development LLC v. Huawei Device USA Inc. et al.*, No. 2:17-cv-00513 (E.D. Tex.) on October 10, 2018. Ex. 3001, 9–29 ("District Court Claim Construction Order"). We have considered the district court's constructions.

2. Terms to be Construed Expressly

Petitioner proposes that we construe as means-plus-function under 35 U.S.C. § 112, ¶ 6, the terms in claim 1 that include the word "means," i.e., limitations 1.2 and 1.5 to 1.9. Pet. 10–12. Patent Owner agrees these terms should be construed as means-plus-function, and further argues we should adopt the constructions entered in the district court proceeding for the purposes of consistency across proceedings. Prelim. Resp. 9–14.¹⁰

We agree these terms should be construed under § 112, ¶ 6. A claim limitation is presumed to invoke § 112, ¶ 6, when it uses the term "means" in combination with functional language, as is the case here. *Signtech USA*, *Ltd. v. Vutek, Inc.*, 174 F.3d 1352, 1356 (Fed. Cir. 1999). Having determined limitations 1.2 and 1.5 to 1.9 are to be construed under § 112, ¶ 6, below we set forth identification of the function recited in each

¹⁰ We note that prior to institution, Patent Owner did not provide any proposal regarding construction of limitations 1.2 and 1.5 to 1.9, *see generally* Prelim. Resp., and we adopted preliminary constructions based on Petitioner's proposals, as well as the evidence in the record at the time, Inst. Dec. 9–16. After institution, Patent Owner proposed that we construe the limitations in accordance with the district court's constructions, but did not provide any argument or evidence to support its proposal other than to argue that the Board's constructions should be consistent with that of the district court. PO Resp. 9–14.

limitation and the corresponding structure in the written description of the Specification that performs each function. *See Asyst Techs, Inc. v. Empak, Inc.*, 268 F.3d 1364, 1369 (Fed. Cir. 2001) ("The first step in construing a means-plus function limitation is to identify the function explicitly recited in the claim. The next step is to identify the corresponding structure set forth in the written description that performs the particular function set forth in the claim.") (citations omitted).

In addition, although neither party proposes a construction for the term "forced message alert," Patent Owner's arguments regarding claim limitation 1.5 raise an issue regarding the construction of this term. PO Resp. 14–18. Therefore, we also address Patent Owner's interpretation of the term "forced message alert."

We determine that no other claim terms require express construction. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (citing *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

3. (limitation 1.2) "data transmission means that facilitates the transmission of electronic files between said PDA/cell phones in different locations"

We construe the term "data transmission means" under 35 U.S.C. § 112, ¶ 6. The parties agree that the function is to "facilitate the transmission of electronic files between said PDA/cell phones in different locations," as recited in limitation 1.2. Pet. 10; PO Resp. 10. We agree that this is the recited function.

Petitioner asserts that the corresponding structure is a server that communicates according to either (1) Wifi, WiMax, or other peer-to-peer communications or (2) SMS, TCP/IP, or other messaging protocols. Pet. 10

(citing Ex. 1001, 4:1–36). Patent Owner proposes we adopt the district court's determination that the corresponding structure is a "communications network server; and equivalents thereof." PO Resp. 10; Ex. 3001, 10. In pertinent part, both parties assert the corresponding structure is a *server*.

Neither party, however, explains why the corresponding structure is a server. Petitioner provides a bare assertion, without any explanation as to why its construction is correct, and cites to Mr. William's declaration which likewise includes a bare assertion without any explanation. Pet. 10 (citing Ex. 1003 ¶ 33). Patent Owner does not explain why we should adopt its construction, other than we should do so "for the purposes of consistency" with the district court's construction. PO Resp. 10.

Although Petitioner does not provide any explanation, Petitioner cites to a description of a communication server that forwards data addressed from one network participant to another, "thus permitting the transmission of forced message alerts, other text and voice messages, photographs, video, Email, and URL data" between network participants. Pet. 10 (citing Ex. 1001, 4:1-6). Notably, the Specification does not refer to a server as a transmission means. Neither party addresses other descriptions in the Specification that refer explicitly to two types of transmission means. The Specification refers to the Internet as a transmission means: "[t]o operate on the network, obviously the PC must be on and have an active connection to the Internet or other digital transmission means." Ex. 1001, 3:43–45 (emphasis added). The Specification also refers to communications protocols, such as TCP/IP, as digital transmission means: "[a] plurality of PCs and PDA/cell phones each having forced alert software installed providing a communication network . . . with the ability to: 1) allow an operator to create and transmit (via TCP/IP or another digital transmission

means) a forced voice alert." *Id.* at 2:7–11 (emphasis added). Nor do the parties address claim 2, which depends directly from claim 1, and recites "wherein said data transmission means is TCP/IP or another communications protocol." *Id.* at 9:40–63.

Based on our review of claim 2 and the above-noted disclosure in the Specification, we determine the corresponding structure for a "data transmission means" is "a PDA/cell phone programmed to implement transmission of a forced message alert using TCP/IP or another communications protocol, and equivalents thereof."

We note that the district court's claim construction order does not provide analysis as to why a server is the corresponding structure for a "data transmission means," instead stating that the construction was agreed upon by the parties. Ex. 3001, 10. Furthermore, there is no indication in the district court's claim construction order that the court considered the language of claim 2, or the portions of the Specification we discuss above about the network and communications protocols being *transmission means*. *Id*.

As we discussed above, we construe limitations 1.5 to 1.9 under 35 U.S.C. § 112, ¶ 6. *Supra* Sec. III.C.2. For each of limitations 1.5 to 1.9, the parties agree that the recited function is the respective recitation following the words "means for" (except for limitation 1.5, for which Petitioner asserts the function is less than the entire recitation after "means for," discussed below). Pet. 10–12; PO Resp. 10–14. As set forth below, for each of limitations 1.5 to 1.9, we determine that the recited function is the entire recitation of the respective limitation following the words "means for."

With regard to the functions specified in limitations 1.5–1.9, Petitioner contends that the corresponding structure is a computer configured to implement or perform the algorithm recited in the function. Pet. 10–12. As to limitations 1.5, 1.6, and 1.8, Patent Owner essentially agrees with Petitioner, except that Patent Owner asserts the structure is a PC or PDA/cell phone configured to implement or perform the algorithm. PO Resp. 10–14. For limitations 1.7 and 1.9, Patent Owner asserts the corresponding structure is a hardware display and hardware transmitter. *Id.* at 12–14.

For reasons discussed below, *infra* Sec. II.C.4.a.1, we determine the corresponding structure in limitations 1.5, 1.6, and 1.8 is a PDA/cell phone, programmed to carry out an algorithm that performs the recited function. For limitations 1.7 and 1.9, we determine that PDA/cell phone hardware including a display, such as display 16, and a wireless receiver and/or transceiver, and equivalents thereof, corresponds to the receiving function. *Infra* Sec. II.C.4.2.

(1) Limitations 1.5, 1.6, and 1.8

Limitations 1.5, 1.6, and 1.8 are computer-implemented means-plus-function limitations because the disclosed structure is a special purpose computer programmed to perform a disclosed algorithm. *WMS Gaming, Inc. v. Int'l Game Tech.*, 184 F.3d 1339, 1349 (Fed. Cir. 1999) (explaining that for computer-implemented means-plus-function limitations, "the disclosed structure is not the general purpose computer, but rather the special purpose computer programmed to perform the disclosed algorithm"). The Specification indicates that PCs and PDA/cell phones are computing devices that include special software—i.e., the forced message alert software application program—programmed to perform the functions recited in limitations 1.5, 1.6, and 1.9. Ex. 1001, 3:41–43 ("Each PC described herein

is like any other contemporary PC, except that it has the forced message alert software application program installed on it."); *see also id.* at 3:29–31 ("Each PDA/cell phone described herein . . . can function just as any other cell phone . . . [i]n addition . . . it has the forced message alert software application program."), 4:27, 4:36 (disclosing that the PDA/cell phone includes a CPU).

Because the disclosed structure is a special purpose computer, the Specification must disclose an algorithm for performing the claimed function. *See, e.g., Noah Systems Inc. v. Intuit Inc.*, 675 F.3d 1302, 1312 (Fed. Cir. 2012).

For the foregoing reasons, we determine that the corresponding structure for the respective functions recited in each of limitations 1.5, 1.6, and 1.8 is a PDA/cell phone programmed to carry out an algorithm. Below we identify the algorithm disclosed for performing the claimed functions. *Infra* Sec. III.C.4.a.1.a–c.

(a) (limitation 1.5) "means for attaching a forced message alert software packet to a voice or text message creating a forced message alert that is transmitted by said sender PDA/cell phone to the recipient PDA/cell phone, said forced message alert software packet containing a list of possible required responses and requiring the forced message alert software on said recipient PDA/cell phone to transmit an automatic acknowledgement to the sender PDA/cell phone as soon as said forced message alert is received by the recipient PDA/cell phone"

For limitation 1.5, Petitioner asserts that the specified function is "attach a forced message alert software packet to a voice or text message creating a forced message alert that is transmitted by a sender PDA/cell phone to a recipient PDA/cell phone." Pet. 10 (citing Ex. 1001, 8:65–9:39 (claim 1)). Without explanation, Petitioner omits the remainder of limitation 1.5, which recites "said forced message alert software packet

containing a list of possible required responses and requiring the forced message alert software on said recipient PDA/cell phone to transmit an automatic acknowledgement to the sender PDA/cell phone as soon as said forced message alert is received by the recipient PDA/cell phone." Petitioner does not adequately explain, nor do we discern why, the remaining language recited in element 1.5 should not be construed as part of the specified function. Patent Owner asserts the recited function includes the entire recitation following "means for" in limitation 1.5. PO Resp. 10. We agree with Patent Owner, and determine the specified function includes the entire recitation following "means for" in limitation 1.5.

For the structure corresponding to the specified function of limitation 1.5, Petitioner identifies the forced message alert software application program functionality described at Ex. 1001, 7:43–63 and Figure 3A. Pet. 10. Patent Owner asserts we should adopt "the algorithm disclosed . . . at 7:8–8:36; and equivalents thereof." PO Resp. 11.

We find that the disclosure identified by Petitioner describes the recited function because it discloses the steps of a process for sending a forced message alert, except that it does not expressly describe "attaching" the forced message alert software packet to a voice or text message. Ex. 1001, 7:43–63; Fig. 3A. However, it is implied that this step occurs because a user types a text or records a voice message, and a forced message alert is sent, *id.* at 7:43–63, and elsewhere the Specification explains that the software allows a user to create a forced message alert comprising a voice or text message and forced message alert software packet, *id.* at 2:9–13.

The district court, and Patent Owner, also identify Ex. 1001, 7:8–42 and 8:1–36 as disclosing the algorithm. PO Resp. 11; Ex. 3001, 15–18. We find the disclosure at Ex. 1001, 7:8–20 corresponds to the recited function

because it describes as part of the process that the forced message alert software packet contains a list of possible required responses (*see*, *e.g.*, limitation 1.5, "said forced message alert software packet containing a list of possible required responses"). We also find Ex. 1001, 8:25–30 corresponds to the recited function because it discloses transmitting an automatic acknowledgement receipt (*see*, *e.g.*, limitation 1.5, "requiring the forced message alert software . . . to transmit an automatic acknowledgement receipt").

However, the district court and Patent Owner are over-inclusive in their citation to the '970 patent disclosure. The district court and Patent Owner cite to continuous blocks of text that disclose not just the algorithm corresponding to the recited function, but also features not recited in the function. We do not incorporate into our construction features that do not perform the recited function. "Section 112 paragraph 6 does not 'permit incorporation of structure from the written description beyond that necessary to perform the claimed function.' Structural features that do not actually perform the recited function do not constitute corresponding structure and thus do not serve as claims limitations." *Asyst Techs*, 268 F.3d at 1369–70 (citations omitted).

We find that the features disclosed at Ex. 1001, 7:21–42, 8:1–25 and 8:31–36 are not part of the algorithm for performing the function recited in limitation 1.5. For example, Ex. 1001, 7:21–42 describes repeating a message at a defined rate until a user makes a selection from a required response list. The disclosure at Exhibit 1001, 8:1–25 and 8:31–36 describes features unrelated to the recited function including a sender PC or PDA/cell phone monitoring for manual responses, and a recipient PC or PDA/cell

phone separating a forced message alert packet from a text or voice message. None of these features are part of the function specified in limitation 1.5.

For the foregoing reasons, we determine that the corresponding structure is a PDA/cell phone programmed to carry out the algorithm disclosed at Ex. 1001, 2:11–13, 7:8–20, 7:43–63, 8:25–30, and Fig. 3A, and equivalents thereof.

(b) (limitation 1.6) "means for requiring a required manual response from the response list by the recipient in order to clear recipient's response list from recipient's cell phone display"

For the structure corresponding to the specified function of limitation 1.6, Petitioner identifies the forced message alert software application program functionality described at Ex. 1001, 8:39–46 and Figure 4. Pet. 11. Patent Owner asserts we should adopt "the algorithm disclosed . . . at 8:37–57; and equivalents thereof." PO Resp. 12.

We find that the disclosure identified by Petitioner, which relates to the scenario in which a text message is received, describes the applicable algorithm. The disclosure describes a means for requiring a required manual response from the response list by the recipient in order to clear recipient's response list from recipient's cell phone display, namely by causing a text message and response list to be shown on a recipient PC or PDA/cell phone until a manual response is selected from the response list, and clearing the forced alert text only after the user of the recipient device has selected a response. Ex. 1001, 8:39–46. We also find the disclosure at Ex. 1001, 8:46–51, which relates to receipt of voice messages, describes the applicable algorithm, as contended by Patent Owner, because the recited function also encompasses scenarios in which voice messages are received.

However, contrary to Patent Owner's assertion, we find the disclosure at Ex. 1001, 8:37–39 and 8:52–57, does not describe the algorithm for the recited function. Patent Owner does not provide any explanation to support its position, other than its argument that the district court included this disclosure in its claim construction. PO Resp. 11–12. The disclosure at Ex. 1001, 8:37–39 and 8:52–57 describes the forced voice alert software application program "effectively tak[ing] control" of the recipient device and releasing effective control of the recipient PDA/cell phone. Ex. 1001, 8:37– 39, 8:52–57. However, the function specified in limitation 1.6 does not mention taking or releasing control of the PDA/cell phone. On the other hand, claim 2, which depends directly from claim 1, explicitly claims a means for taking control of the recipient PDA/cell phone. Ex. 1001, 9:46-54 ("means for controlling of the recipient PDA/cell phone upon transmitting said automatic acknowledgment and causing . . . the text message and a response list to be shown on the display of the recipient PDA cell phone"). Accordingly, we find the feature of taking and releasing control of the PDA/cell phone does not constitute part of the algorithm that achieves the function recited in limitation 1.6, and does not serve as a limitation on the claim. Cf. Asyst Techs, 268 F.3d at 1369–70 ("Structural features that do not actually perform the recited function do not constitute corresponding structure and thus do not serve as claims limitations").

For the foregoing reasons, we determine that the corresponding structure is a PDA/cell phone programmed to carry out the algorithm disclosed at Ex. 1001, 8:39–46 and the portions of Figure 4 described at 8:39–46, and equivalents thereof.

(c) (limitation 1.8) "means for periodically resending said forced message alert to said recipient PDA/cell phones that have not automatically acknowledged the forced message alert"

For the structure corresponding to the specified function of limitation 1.8, Petitioner identifies the forced message alert software application program functionality described at Ex. 1001, 8:6–9 and Fig. 3A and 3B. Pet. 11–12. Patent Owner asserts we should adopt the "the algorithm disclosed . . . at 7:64–8:8; and equivalents thereof." PO Resp. 13.

We are persuaded that Ex. 1001, 8:6–8¹¹ and the corresponding step in Figure 3B (second step) provide sufficient detail to disclose the applicable algorithm because they disclose "[t]he sender PC or PDA/cell phone will then periodically resend the forced message alert to the PC or PDA/cell phone that have not acknowledged receipt," and "[t]he sender cell phone, integrated PDA/cell phone or PC periodically resends the message alert to the recipient cell phones, integrated PDA/cell phones or PCs that have not acknowledged receipt," respectively. Ex. 1001, 8:6–8.

Patent Owner is over-inclusive because the disclosure at Ex. 1001, 7:64–8:5 describes features unrelated to the function recited in limitation 1.8. *Cf. Asyst Techs*, 268 F.3d at 1369–70 ("Structural features that do not actually perform the recited function do not constitute corresponding structure and thus do not serve as claims limitations"). The features relate, for example, to monitoring for and receiving acknowledgments of receipt of forced message alerts, Ex. 1001, 7:64–67,

¹¹ Petitioner includes line 9 of column 8, but this appears to be in error. Line 9 begins a new paragraph and contains only the sentence fragment, "The sender PC or PDA/cell phone also monitors for and," which is unrelated to the recited function. Therefore, we exclude line 9 from the algorithm.

and the sender PC or PDA/cell phone providing an indication on a display of which of the recipients have and have not acknowledged receipt, Ex. 1001, 8:1–5.

For the foregoing reasons, we determine that the corresponding structure is a PDA/cell phone programmed to carry out the algorithm disclosed at Ex. 1001, 8:6–8 and corresponding step in Fig. 3B (second step in Figure 3B), and equivalents thereof.

(2) Limitations 1.7 and 1.9 – (limitation 1.7) "means for receiving and displaying a listing of which recipient PDA/cell phones have automatically acknowledged the forced message alert and which recipient PDA/cell phones have not automatically acknowledged the forced message alert"; (limitation 1.9) "means for receiving and displaying a listing of which recipient PDA/cell phones have transmitted a manual response to said forced message alert and details the responses from each recipient PDA/cell phone that responded"

For the structure corresponding to the specified function of limitation 1.7, Petitioner identifies the forced message alert software application program functionality described at Ex. 1001, 7:64–8:5 and Figures 3A and 3B. Pet. 11. For the structure corresponding to the specified function of limitation 1.9, Petitioner identifies the forced message alert software application program functionality described at Ex. 1001, 8:9–15 and Figures 3A and 3B. *Id.* at 12.

Patent Owner contends the corresponding structure is "PDA/cell phone hardware including touch screen 16, and wireless transmitter or cellular modem; and equivalents thereof." PO Resp. 12–14.

Therefore, the dispute raised by the parties' proposals is whether the corresponding structure is: (1) a computer configured to implement or perform an algorithm, or (2) a hardware transmitter (presumably for "receiving") and a hardware display (presumably for "displaying"). We

adopt Patent Owner's approach, namely that the corresponding structures are a hardware display and receiver and/or transceiver. With regard to the function of displaying, the Specification discloses a hardware display of the PDA/cell phone (*see*, *e.g.*, Figure 1, LCD display 16) that displays an indication of which recipients have sent acknowledgements and an indication of the response from each recipient cell phone. Ex. 1001, 8:1–5, 8:12–15. As to the function of receiving, the Specification discloses that the PC and PDA/cell phone can communicate using WiFi or WiMax, both of which are wireless, and the PDA/cell phone can communicate over a wireless cellular network, thereby indicating the PC and PDA/cell phone each have a wireless receiver and/or transceiver for receiving automatic acknowledgements. Ex. 1001, 4:7–11.

Therefore, we find the corresponding structure is PDA/cell phone hardware including a display, such as display 16, and a wireless receiver and/or transceiver, and equivalents thereof.

We decline to adopt Patent Owner's proposal that a wireless *transmitter* performs the receiving function, because a transmitter transmits rather than receives. PO Resp. 12–14. We also decline to adopt Patent Owner's proposal that a "cellular modem" corresponds to the receiving function because Patent Owner does not identify any disclosure in the Specification of a cellular modem performing the receiving function. *Id.*

b) "forced message alert"

Claim 1 recites (Ex. 1001, 9:14–23) (emphasis added):

means for attaching a forced message alert software packet to a voice or text message creating a *forced message alert* that is transmitted by said sender PDA/cell phone to the recipient PDA/cell phone, said forced message alert software packet containing a list of possible required responses and requiring the

forced message alert software on said recipient PDA/cell phone to transmit an automatic acknowledgement to the sender PDA/cell phone as soon as said forced message alert is received by the recipient PDA/cell phone.

Claim 6 recites (Ex. 10:7–11, 14–17) (emphasis added):

A method of sending a forced message alert to one or more recipient PDA/cell phones . . . said method comprising the steps of . . . creating the *forced message alert* on said sender PDA/cell phone by attaching a voice or text message to a forced message alert application software packet to said voice or text message.

Neither party proposes a construction for the term "forced message alert." *See* Pet. 8–12; *see also* PO Resp. 9–14. However, in its discussion of patentability, Patent Owner argues Kubala's email message 214 with mandatory response flag 216 (asserted "forced message alert") is not a "forced message alert" because it is not "forced to the display without any action on the part of the recipient." PO. Resp. 15–18; Sur-Reply 11–15. In doing so, Patent Owner seeks to write a negative limitation, i.e., forcing a message to the display *without any action on the part of the recipient*, into claims 1 and 6. In light of Patent Owner's argument, we consider whether a "forced message alert" should be interpreted as a message that must be forced to the display without any action on the part of the recipient.

We begin with the language of the claims viewed in light of the Specification. The negative limitation Patent Owner seeks to write into claims 1 and 6 appears nowhere in the language of the claims. *See, e.g.,* Pet. Reply 4–6 (arguing limitation 1.5 does not impose the restriction asserted by Patent Owner). The claim language makes clear that a "forced message alert" is created by attaching a forced message alert software packet to a voice or text message. Ex. 1001, 9:14–15 (claim 1, "means for attaching a forced message alert software packet to a voice or text message

creating a forced message alert") (emphasis added); see also Ex. 1001, 10:14–17 (claim 6, "creating the forced message alert on said sender PDA/cell phone by attaching a voice or text message to a forced message alert application software packet to said voice or text message") (emphasis added). Accordingly, by the very language of the claims, a message is forced because it is attached to a forced message alert software packet. Nothing in the claim language indicates that what makes the message forced is forcing its display without any action on the part of the recipient.

The Specification reinforces the understanding that a forced alert is a message with a forced alert software packet attached thereto, disclosing that forced alert software provides the ability to "create and transmit (via TCP/IP or another digital transmission means) a forced voice alert, wherein said forced voice alert is comprised of a text or voice massage file and a forced alert software packet." Ex. 1001, 2:7–13.

Accordingly, the claim language viewed in light of the Specification is unambiguously clear—a "forced message alert" is a message (e.g., text or voice) attached to a forced message alert software packet.

Patent Owner argues, nonetheless, that we should read its proposed negative claim limitation into the term "forced message alert" based on disclosure in the Specification that upon detection of a forced message alert, a recipient PDA/cell phone transmits an automatic acknowledgement of receipt to the sender, and after transmitting the receipt, the forced voice alert software application program effectively takes control of the recipient PDA/cell phone. PO Resp. 16 (citing Ex. 1001, 8:25–39). Patent Owner also relies on disclosure in the Specification that states "the forced message alert software application program causes the text message and the response list to be shown on the display of the recipient until selection of a manual

response from the response list." PO Resp. 17 (citing Ex. 1001, 8:37–44); *see also* Sur-reply 12–14.

Patent Owner's reliance on the cited disclosure is unavailing for several reasons. First, the disclosure cited by Patent Owner does not specify that the message alert is displayed *without any action on part of the recipient*, and does not preclude a user from first opening the message before being presented with a display of the message. Ex. 1001, 8:25–44. Patent Owner's argument appears to be that the software's effective taking control of the PDA/cell phone, disclosed at Ex. 1001, 8:37–39, implies a recipient can no longer perform actions that would cause a forced message alert to be displayed, thereby suggesting messages are forced to the display without any action on the part of the recipient. PO Resp. 16. However, we do not find this persuasive because the Specification does not preclude steps such as a user performing acts, e.g., opening a message, that lead to display of the forced alert message.

Second, even if we were to infer that the Specification is describing forcing the message to a display without any action by the recipient, we do not discern a reason to write such a requirement into the claims that appears nowhere in the claim language. *See SuperGuide Corp. v. DirecTV Enters.*, *Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004) ("Though understanding the claim language may be aided by the explanations contained in the written description, it is important not to import into a claim limitations that are not a part of the claim.").

Review of the claims as a whole confirms that we should not read Patent Owner's proposed requirement into the term "forced message alert." If we were to adopt Patent Owner's view, it would be inconsistent with Patent Owner's, and our, interpretation above of limitation 1.5 of claim 1.

As we discussed above, we construe limitation 1.5 as reciting means-plusfunction, and we determine the structure corresponding to the specified function is a PDA/cell phone programmed to carry out the algorithm disclosed at Ex. 1001, 2:11–13, 7:8–20, 7:43–63, 8:25–30, and Fig. 3A, and equivalents thereof. Supra Sec. II.C.4.a.1.a; see also PO Resp. 10–11 (Patent Owner submitting this limitation should be construed as a meansplus-function term). Therefore, if we were to read into limitation 1.5 a requirement of forcing a forced message alert to a display without any action on part of the recipient, there would need to be supporting disclosure in the Specification of an algorithm for performing this function. *Noah Sys., Inc.* v. Intuit Inc., 675 F.3d 1302, 1312 (Fed. Cir. 2012) (citing Aristocrat Techs. Australia Pty Ltd. v. Int'l Game Tech., 521 F.3d 1238, 1333) (Fed. Cir. 2008)). However, as we discussed above, the Specification does not disclose an algorithm sufficient to perform the negative limitation proposed by Patent Owner, i.e., forcing a message to the display without any action on part of the user.

We note the algorithm we identify for limitation 1.5, *supra* Sec. II.C.4.a.1.a, does not disclose forcing a forced message alert to a display without any action on part of the recipient. Ex. 1001, 2:11–13, 7:8–20, 7:43–63, 8:25–30, Fig. 3A. Furthermore, there is no such requirement even under Patent Owner's proposed construction because not even Patent Owner's proposed algorithm discloses forcing a forced message alert to a display without any action on part of the recipient. PO Resp. 11 (asserting the algorithm is disclosed at Ex. 1001, 7:8–8:36); *see also* Pet. Reply 4–6.

For the foregoing reasons, we conclude that a "forced message alert" should not be interpreted as a message that must be forced to the display without any action on the part of the recipient.

5. Summary

Our constructions for limitations 1.2 and 1.5 to 1.9 are summarized below:

Limitation	Specified Function	Corresponding Structure
1.2	facilitate the transmission of	a PDA/cell phone
	electronic files between said	programmed to implement
	PDA/cell phones in different	transmission of a forced
	locations	message alert using TCP/IP
		or another communications
		protocol, and equivalents
		thereof
1.5	attaching a forced message	PDA/cell phone programmed
	alert software packet to a	to carry out the algorithm
	voice or text message	disclosed at Ex. 1001, 2:11–
	creating a forced message	13, 7:8–20, 7:43–63, 8:25–
	alert that is transmitted by	30, and Fig. 3A, and
	said sender PDA/cell phone	equivalents thereof
	to the recipient PDA/cell	
	phone, said forced message	
	alert software packet	
	containing a list of possible	
	required responses and	
	requiring the forced message	
	alert software on said	
	recipient PDA/cell phone to	
	transmit an automatic	
	acknowledgement to the	
	sender PDA/cell phone as	
	soon as said forced message	
	alert is received by the	
	recipient PDA/cell phone	
1.6	requiring a required manual	PDA/cell phone programmed
	response from the response	to carry out the algorithm
	list by the recipient in order	disclosed at Ex. 1001, 8:39–
	to clear the recipient's	46 and the portions of
	response list from recipient's	Figure 4 described at 8:39–
	cell phone display	46, and equivalents thereof
1.7	receiving and displaying a	PDA/cell phone hardware

Limitation	Specified Function	Corresponding Structure
	listing of which recipient PDA/cell phones have automatically acknowledged the forced message alert and which recipient PDA/cell phones have not automatically acknowledged the forced message alert	including a display, such as display 16, and a wireless receiver and/or transceiver, and equivalents thereof
1.8	periodically resending said forced message alert to said recipient PDA/cell phones that have not automatically acknowledged the forced message alert	PDA/cell phone programmed to carry out the algorithm disclosed at Ex. 1001, 8:6–8 and corresponding step in Fig. 3B (second step in Figure 3B), and equivalents thereof
1.9	receiving and displaying a listing of which recipient PDA/cell phones have transmitted a manual response to said forced message alert and details the responses from each recipient PDA/cell phone that responded	PDA/cell phone hardware including a display, such as display 16, and a wireless receiver and/or transceiver, and equivalents thereof

D. Asserted Obviousness Over Kubala and Hammond

As noted above, Petitioner asserts claims 1 and 3–9 of the '970 patent would have been obvious over the combination of Kubala and Hammond. Pet. 12; Pet. Reply 2–15. Patent Owner contends Petitioner has not shown unpatentability of claims 1 and 3–9 on this ground. PO Resp. 14–28; Surreply 7–15. For the reasons stated below, we determine Petitioner has demonstrated, by a preponderance of the evidence, that claims 1 and 3–9 are unpatentable under § 103 as obvious over the combination of Kubala with Hammond.

1. Kubala (Ex. 1005)

Kubala generally discloses a method, system, apparatus, or computer program product for processing electronic messages. Ex. $1005 \, \P \, 9$. Kubala explains that employee productivity may suffer demonstrably in proportion to the number of email messages the employee receives. *Id.* $\P \, 5$. This is due in part to the high volume of emails an employee may receive, because the task of responding to emails messages consumes an increasingly larger portion of the employee's workday. *Id.* To address these issues, Kubala states that "it would be advantageous to provide productivity enhancing features within e-mail applications for the handling of email messages so that important messages receive the appropriate attention from the recipient of an e-mail message." *Id.* $\P \, 8$.

Kubala specifically discloses computing devices such as network-enabled phones and PDAs that directly transfer data between each other across wireless links. *Id.* ¶ 27. The devices include email application software that facilitates email communication between devices, wherein the email software 206 includes enhanced functionality. *Id.* ¶ 35. One of the enhanced features is mandatory response functional unit 210 that operates to request that an outgoing email message be flagged as requiring a mandatory response from the email recipient. *Id.* Enhanced email application 206 relies on functional unit 210 to either assist in generation of the outgoing email message or perform the modifications necessary to flag the outgoing message as requiring a mandatory response. *Id.* Kubala discloses, for example, that email message 214 may contain mandatory response flag 216 indicating to the enhanced email application on the recipient computing device that email message 214 should be handled as an important message

requiring a mandatory response. *Id.* Kubala discloses that mandatory response flag 216 may be implemented in a variety of data formats. *Id.*

2. *Hammond (Ex. 1006)*

Hammond generally discloses a system for enhancing the reliability of communicating with electronic messages. Ex. 1006, code (57). Hammond explains that electronically communicated messages such as email, paging messages, and voice mail have become increasingly pervasive. *Id.* at 1:13–15. According to Hammond, although initial distribution of electronic messages by a sender is quick and convenient, ensuring that a message is received and reviewed by a recipient within a certain timeframe can be inconvenient. *Id.* at 1:21–26. Hammond addresses these issues by disclosing a system that sends an electronic message to designated recipients, and automatically helps ensure that each message has been received and reviewed by the recipient. *Id.* at 2:1–5. If receipt is not confirmed within a certain specified timeframe, the system can automatically resend the electronic message or take other appropriate action. *Id.* at 2:5–8.

In one embodiment, the disclosed system includes a Message Review Server ("MRS") that sends electronic messages to designated recipients, and automatically helps ensure that each message has been received and reviewed. *Id.* at 3:1–5. The MRS also allows the sender of an electronic message to specify message delivery information that specifies actions to take when a message is not delivered within a specified timeframe. *Id.* at 3:12–15. For example, the sender can specific that if receipt notification is not received within a specified time period, the message will be resent to the recipient. *Id.* at 3:15–18. Message delivery information can also specify

frequency or duration options, such as an option to resend a message every two hours. *Id.* at 3:18–22.

In one embodiment, Kubala discloses that use of the MRS system begins when a sender of an electronic message supplies a message to a Message Sender component. Ex. 1006, 4:48–51. The sender supplies the message, identifies one or more recipients for the message, and specifies various optional message tracking information (e.g., message delivery information, message review information, and message post-review information). *Id.* at 4:51–56. A sender also can supply delivery information such as a resend period of time and can optionally supply other resend options. *Id.* at 4:56–60. The system also includes a Message Receipt Tracker component that attempts to identify when sent messages have been delivered to recipients and when sent messages have been reviewed by recipients. *Id.* at 5:17–20

3. Claim 1

Petitioner relies on Kubala as teaching the subject matter of claim 1, but asserts that to the extent Patent Owner argues Kubala does not teach limitations 1.7 to 1.9, Hammond provides the missing disclosure. Pet. 23–40.

Patent Owner argues: (1) Kubala and Hammond do not disclose a "forced message alert" (PO Resp. 14–18), as recited in limitation 1.5, (2) Kubala does not disclose "requiring a required manual response from the response list by the recipient in order to clear recipient's response list from recipient's cell phone display," as recited in limitation 1.6 (PO Resp. 18–22), (3) Kubala and Hammond do not disclose "displaying a listing of which recipient PDA/cell phones have automatically acknowledged the forced message alert and which recipient PDA/cell phones have not automatically

acknowledged the forced message alert," as recited in limitation 1.7 (PO Resp. 22–27), and (4) Kubala and Hammond do not disclose "displaying a listing of which recipient PDA/cell phones have transmitted a manual response to said forced message alert and details the responses from each recipient PDA/cell phone that responded," as recited in limitation 1.9 (PO Resp. 27–28).

Upon review of the record, we determine Petitioner has shown, by a preponderance of the evidence, that claim 1 is unpatentable as obvious over the combination of Kubala with Hammond.

a) Preamble and Limitations 1.1–1.4 and 1.8

Petitioner sets forth where Kubala teaches the preamble and each of limitations 1.1–1.4, and where Kubala, alone or in combination with Hammond, teaches limitation 1.8. Pet. 23–27, 35–37. Petitioner also articulates a rationale to combine Kubala with Hammond. *See, e.g., id.* at 21–23; *see also id.* at 20 ("Like Kubala, Hammond discloses methods and systems for enhancing reliability of electronic messaging"). Patent Owner does not provide argument in the Response contesting Petitioner's assertions regarding the preamble and limitations 1.1–1.4 and 1.8.¹²

¹² In the Sur-reply, Patent Owner asserts for the first time that its arguments in the Response regarding limitation 1.5's recitation of "a forced message alert," PO Resp. 14–18, applies to other claim limitations that recite either "a forced message alert software application program" or "forced message alert," Sur-reply 7–10. We address Patent Owner's arguments regarding the phrase "forced message alert" in our discussion of limitation 1.5, *infra* Sec. III.D.3.b.1.

(1) (preamble) "[a] communication system for transmitting, receiving, confirming receipt, and responding to an electronic message"

Petitioner persuasively argues Kubala teaches the preamble of claim 1, because Kubala relates to sending and receiving e-mail messages (e.g., communication system for transmitting and receiving an electronic message) and teaches confirming receipt and responding to an electronic message, disclosing "that it was known to 'generate return receipts to the sender when the sender's e-mail message is received at its intended destination or when the recipient opens the email message, thereby providing an acknowledgement that a particular message has been received and/or opened." Pet. 23 (citing Ex. 1005 ¶ 6).

For the foregoing reasons, we determine Petitioner has made a persuasive showing as to the preamble of claim 1.

(2) (limitation 1.1) "a predetermined network of participants, wherein each participant has a similarly equipped PDA/cell phone that includes a CPU and a touch screen display a CPU and memory"

Petitioner persuasively argues Kubala teaches limitation 1.1 because Kubala shows, in Figure 1A, a plurality of PDAs 107 and 112 connected through wireless link 116, and connected through network 101 through various other links shown in Figure 1A, that form a predetermined network. Pet. 24. Kubala further discloses that each PDA includes at least one CPU 22, a memory 124, 126, and a user interface adapter 148 that can be coupled to a touch-screen display, as can be seen in Figure 1B. *Id.* at 24–25 (citing Ex. 1005 ¶¶ 26, 27, 29–30, Fig. 1A, Fig. 1B; Ex. 1003 ¶¶ 92–93).

For the foregoing reasons, we determine Petitioner has made a persuasive showing as to limitation 1.1.

(3) (limitation 1.2) "a data transmission means that facilitates the transmission of electronic files between said PDA/cell phones in different locations"

Petitioner argues, based on its construction of "data transmission means," that the structure corresponding to the function specified in limitation 1.2 is a server that communicates according to certain enumerated messaging protocols. Pet. 10. However, as we discussed above, we disagree with Petitioner's construction and determine that the pertinent corresponding structure is "a PDA/cell phone programmed to implement transmission of a forced message alert using TCP/IP or another communications protocol, and equivalents thereof." Supra Sec. II.C.3. Although Petitioner's proposed construction differs from ours, Petitioner nonetheless sets forth a sufficient showing for this limitation. Petitioner argues that the server in Kubala communicates according to, inter alia, peer-to-peer communications (e.g., WiFi or WiMax) or other messaging protocols (e.g., SMS or TCP/IP). Pet. 25. In particular, Petitioner argues that the asserted PDA/cell phones in Kubala communicate with one another using, for example, "Transport Control Protocol/Internet Protocol (TCP/IP)" or WiFi technology (IEEE 802.11), id. (citing Ex. 1006 ¶ 27, Fig. 1A), both of which teach or suggest a PDA/cell phone implementing transmission of a forced message alert using a communications protocol, such as TCP/IP.¹³

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¹³ The outcome of this Final Decision would not be affected had we adopted the district court's construction. Petitioner shows, and Patent Owner does not dispute, that the asserted prior art teaches a communications network server. Pet. 25 ("In Kubala, a server supports a network 109 and a client 110, allowing the PDAs/cell phones to (1) 'communicate with one another' using, for example, 'Transport Control Protocol/Internet Protocol (TCP/IP)' or (2) 'directly transfer data between themselves' using, for example, 'BluetoothTM wireless technology or WiFi technology (IEEE 802.11).'

For the foregoing reasons, we determine Petitioner has made a persuasive showing as to limitation 1.2.

(4) (limitation 1.3) "a sender PDA/cell phone and at least one recipient PDA/cell phone for each electronic message" (limitation 1.3)

Petitioner persuasively argues Kubala teaches limitation 1.3, because Kubala discloses a plurality of PDAs that communicate with each other, wherein one PDA (i.e., the sender PDA) sends an electronic message to another PDA (i.e., the recipient PDA). Pet. 26 (citing Ex. 1006 ¶¶ 27, 32, 33, Fig. 1A; Ex. 1003 ¶ 95).

For the foregoing reasons, we determine Petitioner has made a persuasive showing as to limitation 1.3.

(5) (limitation 1.4) "a forced message alert software application program including a list of required possible responses to be selected by a participant recipient of a forced message response loaded on each participating PDA/cell phone"

Petitioner persuasively argues Kubala teaches limitation 1.4, because Kubala discloses an enhanced email application (asserted forced message alert software application program) that includes mandatory-response functional unit 212 that sends email messages, and embedding in a sender email message a menu of possible responses 1120 to the sender's message (asserted list of required possible responses to be selected by a recipient), as shown in Figure 11C. Pet. 26–27 (citing Ex. 1005 ¶¶ 13, 22, 33, 35, 36, 47, 54, 55, 57, 60, Fig. 2, Fig. 11C; Ex. 1003 ¶¶ 96–98).

For the foregoing reasons, we determine Petitioner has made a persuasive showing as to limitation 1.4.

⁽Kubala, ¶0027, FIG. 1A.) Kubala therefore expressly discloses this limitation. (See Williams, ¶94.)"); *see generally* PO Resp.

(6) (limitation 1.8) "means for periodically resending said forced message alert to said recipient PDA/cell phones that have not automatically acknowledged the forced message alert"

Petitioner has not shown Kubala alone teaches limitation 1.8; however, Petitioner argues persuasively that Kubala combined with Hammond teaches this limitation. Petitioner relies on Kubala's description with reference to Figure 10 of resending an email message that has a mandatory-response flag (i.e, the asserted forced message alert) if a reply to the email message has not been made. Pet. 35–36 (citing Ex. 1005 ¶ 53, Fig. 10). With reference to Figure 10, Kubala appears to disclose neither (1) the reply to the e-mail message is an *automatic* acknowledgement of receipt rather than, for example, a manual response, nor (2) the e-mail message is sent *periodically*. Ex. 1005 ¶ 53, Fig. 10. Petitioner does not explain how Kubala's disclosure teaches *automatic* acknowledgement that is sent *periodically*. Pet. 35–36.

However, Petitioner contends that to the extent Kubala does not teach limitation 1.8, Hammond provides the missing disclosure, and a skilled artisan would have been motivated to combine Kubala with Hammond. Pet. 36–37 (citing Ex. 1006, Abstract, 2:1–8, 4:21–28, 5:5–6:19. 6:66–7:63, Fig. 2, Fig. 3A, Fig. 3B, Fig. 4, Fig. 5A, Fig. 5B; Ex. 1003 ¶¶ 117–118). We are persuaded Hammond provides the missing disclosure because Hammond teaches a recipient "[provid[ing] receipts when messages are received," Ex. 1006, 5:20–23, and resending messages periodically (every specified Resend Time period) until the recipient sends a receipt of delivery notification, Ex. 1006, 7:7–13 (setting Resend Times to 1 hour or 2 hours), 7:14–17 (explaining that when a message is received by recipient in less that the specified Resend Time, the message is not resent). Hammond also

explains the benefit of periodically resending messages for which a return receipt has not been received, namely to help ensure that each message has been successfully delivered. Ex. 1006, 2:1–10.

Petitioner also provides a rationale to combine Hammond with Kubala, arguing that a skilled artisan would have been motivated to combine these references because both are directed to tracking responses to mandatory-response messages, and both disclose use of acknowledgement receipts. Pet. 36–37 (citing the discussion regarding limitation 1.7 at Pet. 34–35 and Ex. 1003 ¶¶ 117–118). We find Petitioner's arguments persuasive. We find that both Hammond and Kubala relate to enhancing communication that involves electronic messages such as email, both are directed to the same field of endeavor, and both address the same problem i.e., to ensure that important email messages receive timely responses. Pet. 20-22; Ex. 1005, code (57); Ex. 1006, code (57). Moreover, as Petitioner points out, Kubala already discloses the use of automatic acknowledgement receipts (although not in connection with Figure 10), explaining that such was well known in the art. Id. at 30 (citing Ex. 1005) ¶ 6). Hammond further confirms that use of return receipts was well known in the art, see, e.g., Ex. 1006, 1:21-26, 2:1-10, and confirms Mr. Williams' assertion that due to uncertainty as to whether an e-mail message was received, return receipts provided a well-known benefit, Ex. 1003 ¶ 103.

Accordingly, we are persuaded that "implementing Hammond's tracking features in Kubala's system would have been an obvious design choice," and "represents no more than 'the predictable use of prior art elements according to their established functions." Pet. 22–23. Moreover, we are persuaded that "[b]ecause Hammond merely discloses details about tracking features that are already suggested by Kubala's system that collects

and records information about the recipients response to a message, this combination of Kubala and Hammond would not 'result in a difference in function or give unexpected results." *Id.* (citing *In re Rice*, 341 F.2d 309, 314 (CCPA 1965)).

Therefore, we are persuaded a skilled artisan would have been motivated to modify Kubala to periodically resend messages for which a return receipt has not been received to help ensure that each message has been successfully delivered, as taught by Hammond.

For the foregoing reasons, we determine Petitioner has made a persuasive showing as to limitation 1.8

b) Limitations 1.5–1.7 *and* 1.9

Petitioner sets forth where Kubala teaches each of limitations 1.5 and 1.6, and where Kubala, alone or in combination with Hammond, teaches limitations 1.7 and 1.9. Pet. 28–35, 37–40. Petitioner also articulates a rationale to combine Kubala with Hammond. *See, e.g., id.* at 20–23. As noted above, Patent Owner disputes Petitioner's assertions regarding limitations 1.5–1.7 and 1.9. PO Resp. 14–28; Sur-reply 7–15.

(1) (limitation 1.5) "means for attaching a forced message alert software packet to a voice or text message creating a forced message alert that is transmitted by said sender PDA/cell phone to the recipient PDA/cell phone, said forced message alert software packet containing a list of possible required responses and requiring the forced message alert software on said recipient PDA/cell phone to transmit an automatic acknowledgment to the sender PDA/cell phone as soon as said forced message alert is received by the recipient PDA/cell phone"

As we determined in our claim construction, limitation 1.5 is construed as means-plus-function under $\S 112, \P 6$. *Supra* Sec. II.C.2. The function is the entire recitation of limitation 1.5 following the words "means for." *Supra* Sec. II.C.4.a.1.a. The corresponding structure is a PDA/cell

phone programmed to carry out the algorithm disclosed at Ex. 1001, 2:11–13, 7:8–20, 7:43–63, 8:25–30, and Fig. 3A, and equivalents thereof. *Supra* Sec. III.C.4.a.1.a.

Petitioner persuasively argues that the corresponding structure in Kubala is, e.g., computing device 202, which may be a PDA, with enhanced email application 206 installed on it. Pet. 28 (citing Ex. 1005 ¶¶ 33–36; Ex. 1003 ¶ 99).

Petitioner also persuasively argues that Kubala's enhanced email application software performs the functions specified in limitation 1.5. *Id.* at 28–30. In particular, Petitioner shows Kubala teaches a voice or text message, based on Kubala's disclosure that message 214—i.e., the message transmitted from the asserted PDA/cell phone to the asserted recipient PDA/cell phone—may be a text message, audio message, video message, or other type of message. *Id.* at 29 (citing Ex. 1005 ¶ 32).

Petitioner also shows Kubala teaches a forced message alert software packet, based on Kubala's mandatory response flag 216 that indicates to the enhanced email application on the recipient computing device that email message 214 should be handled as an important message requiring a mandatory response. *Id.* at 28–29 (citing Ex. 1005 ¶¶ 35–41, 54–61, Fig. 3, Fig. 4; Ex. 1003 ¶ 100).

Furthermore, Petitioner shows Kubala teaches attaching a forced message alert software packet to a voice or text message, because Kubala discloses that the mandatory response flag 214 is attached to email message 214, and "may be implemented in a variety of data formats." *Id.* at 28–29 (quoting Ex. 1005 ¶ 35 and citing *id.* ¶¶ 36, 41, 54–61).

Petitioner also shows Kubala teaches "a list of possible required responses," based on menu 1120 displayed on the recipient device, which is

shown in the exemplary embodiment in Figure 11C to include as responses, "too busy right now," "looks okay," and "request declined." Id. at 29 (citing Ex. 1005 ¶¶ 22, 47, 57, Fig. 11C). We are persuaded that Kubala teaches or suggests attaching the asserted list of possible responses, e.g., text strings such as "too busy right now" that are used as menu items, to the asserted forced message alert software packet, i.e., flag 216, based on Kubala's disclosure that the responses may be "extracted from the original e-mail message that was received from the sender." Id. (quoting Ex. 1005 ¶ 57, and citing id. ¶¶ 40–41).

Petitioner shows, furthermore, that Kubala teaches "requiring the forced message alert software on said recipient PDA/cell phone to transmit an automatic acknowledgement to the sender PDA/cell phone as soon as said forced message alert is received by the recipient PDA/cell phone," based on Kubala's disclosure that it was known in the art to transmit automatic acknowledgements to a sender of a voice or text message:

Kubala discloses that it was known "to generate return receipts to the sender when the sender's email message is received at its intended destination or when the recipient opens the e-mail message, thereby providing an acknowledgment that a particular message has been received."

Pet. 30 (quoting Ex. 1005 ¶ 6). Mr. Williams agrees that the need for acknowledgement of email messages was well understood. Ex. 1003 ¶ 102–103. He explains that at the time, email systems were not completely reliable, and there was uncertainty as to whether, and if, an email message would "get through" to a recipient. *Id.* He states that it would have been obvious, therefore, to include a return receipt to provide the sender with confirmation that the email message has been received by the recipient so the sender would not have "to worry about whether a message was received

or not." *Id.* We credit Mr. Williams testimony, in light of Kubala's disclosure that use of return receipts was well known in order to provide a sender with confirmation that a message had been received. Ex. 1005 ¶ 6.

For the foregoing reasons, Petitioner has shown that Kubala teaches or suggests the subject matter of limitation 1.5.

Patent Owner contends Petitioner has not shown that Kubala, alone or in combination with Hammond, teaches or suggests a "forced message alert," arguing the e-mail messages with attached flag 216 (asserted forced message alerts) in Kubala are not *forced*. PO Resp. 14–18; Sur-reply 11–15. To arrive at this conclusion, Patent Owner asserts that a *forced* message is one in which the message is "forced to the display without any action on the part of the recipient." *Id.* at 15. According to Patent Owner, Kubala does not satisfy this requirement because a user of a recipient PDA/cell phone in Kubala must manually open a received e-mail message. *Id.* at 15. For the reasons discussed in our claim construction, we reject Patent Owner's contention that a "forced message alert" must be "forced to the display without any action on the part of the recipient." *Supra* Sec. II.C.4.a.1.a.

For the foregoing reasons, we determine Petitioner has made a persuasive showing as to limitation 1.5.

(2) (limitation 1.6) "means for requiring a required manual response from the response list by the recipient in order to clear the recipient's response list from recipient's cell phone display"

As we determined in our claim construction, limitation 1.6 is construed as means-plus-function under $\S 112$, $\P 6$. Supra Sec. II.C.2. The function is the entire recitation of limitation 1.6 following the words "means for." Supra Sec. II.C.4.a. The corresponding structure is a PDA/cell phone programmed to carry out the algorithm disclosed at Ex. 1001, 8:39–46 and

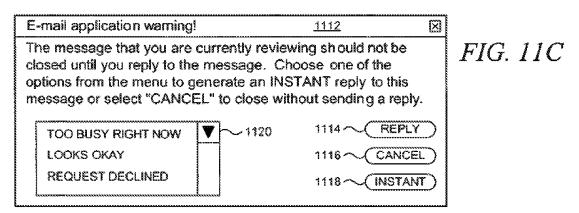
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the portions of Figure 4 described at 8:39–46, and equivalents thereof. *Supra* Sec. III.C.4.a.1.b.

Petitioner persuasively argues that the corresponding structure in Kubala is, e.g., computing device 202, which may be a PDA, with enhanced email application 206 installed on it. Pet. 30–31 (citing Ex. 1005 ¶¶ 33–36, Fig. 2; Ex. 1003 \P 106).

Petitioner also persuasively argues that Kubala's enhanced email application software performs the functions specified in limitation 1.6. *Id.* at 30–32.

Petitioner persuasively argues Figure 11C of Kubala teaches the specified function of requiring a manual response by the recipient from the response list in order to clear the response list from the recipient's cell phone display. Petitioner relies on disclosure that menu 1120 includes a list of possible responses from which a recipient can choose, and argues that this list is a "response list" as recited in limitation 1.6. *Id.* at 31. We find Petitioner's argument persuasive in light of Figure 11C, reproduced below, and Figure 11A.



"Fig. 11C showing GUI display window 112"

Ex. 1005, Fig. 11C. Figure 11C illustrates GUI display window 1112 that is displayed on a recipient device if a user attempts to close an email without

replying to it. *Id.* ¶ 57. Window 1112 contains an error message informing the recipient that a reply is needed before closing the email. Window 1112 also includes menu 1120 comprising a list of responses from which a recipient can select a response to provide to the sender (e.g., a response list). Id. Although window 1112 also includes CANCEL button 1116, that allows a user to close an email message without selecting and sending a response message to the sender, Kubala also teaches explicitly that a user of a recipient PDA/cell phone can be prevented from closing, exiting, or deleting the e-mail message until the recipient has responded to the message. Pet. 31–32 (citing Ex. 1005 \P 9, 55). This is shown in Figure 11A, where the error message in window 1102 states the message cannot be closed until the user replies to the message. Ex. 1005, Figure 11A ("[t]he message that you are currently viewing cannot be closed until you reply to the message"); id. Fig. 11C. The description of Figure 11A explains the message in window 1102 may be displayed in "a strict process in which a user is not permitted to perform another action with respect to a message that contains a mandatory response flag unless the user first responds or replies to the message, thereby fulfilling the request of the sender of the message that the user must respond to the message." Ex, 1005 ¶ 55. The Summary of the Invention in Kubala also describes this strict process, in which "actions are required by the recipient with respect to usage of a data processing system until the recipient uses the data processing system to send a response for the received electronic message to the sender." *Id.* ¶ 9 (emphasis added). Kubala explains, "the recipient can be prevented from closing a review of the received e-mail message, from deleting the received e-mail message, and from exiting the e-mail application until the recipient has responded to the received email message." Id.

We are persuaded a skilled artisan viewing Kubala's disclosure of (1) a response list from which a user selects a response, and (2) a feature preventing a user from exiting or deleting an e-mail or exiting the application until a response is sent, would have been motivated to combine these features, because the Summary of Invention of Kubala just discussed describes using a strict process requiring a recipient to respond and preventing a recipient from closing/deleting an e-mail or exiting the e-mail application until the recipient responds as the invention. *Id.* Moreover, Kubala explicitly teaches that the features of Figures 11A through 11D can be combined in different ways, *see*, *e.g.*, Pet. 19–20, 31–32, Pet. Reply 10:

FIGS. 11A-11D may be used in different scenarios depending upon the manner in which the enhanced e-mail application is implemented or configured to handle an e-mail message that contains a mandatory response flag. Other scenarios could be handled in different ways that are not illustrated within FIGS. 11A-11D, and these different processes would also be considered as embodiments of the present invention because each different process would represent a different way of attempting to fulfill a request from the sender of the original message that the recipient should or must provide a reply message in response to the original message.

Ex. 1005 ¶ 54. This teaching provides further persuasive evidence that a skilled artisan would have been motivated to combine the feature in Figure 11A of window 1102 stating the message cannot be closed until the user replies to the message, with a response list (e.g., menu 1120) as shown in Figure 11C.

For the foregoing reasons, we find based on Kubala's teachings it would have been obvious to have a window that displays a response list that cannot be cleared until the user replies.

Patent Owner submits that Kubala does not disclose a single embodiment in which selection of a response from the response list is required in order to clear the response list from the recipient's cell phone display. PO Resp. 18–20. Patent Owner erroneously states that "Petitioner elects a single embodiment that corresponds to Figure 11C." Id. at 18. This argument is unavailing because, as we discussed above, Petitioner does not rely solely on Figure 11C as teaching limitation 1.6. Pet. 30–32; Pet. Reply 10. Patent Owner, a few pages later, contradicts its earlier argument that Petitioner relies solely on Figure 11C, acknowledging that Petitioner relies on disclosures in Kubala in addition to Figure 11C. PO Resp. 20 (citing Pet. 31) (asserting Petitioner "acknowledges this missing element [from Figure 11C] and alleges generally that other embodiments disclose preventing the recipient from closing a review of the received e-mail message, from deleting the e-mail message, and from exiting the e-mail application until the recipient has responded to the message."). Patent Owner argues the Petition is deficient, nonetheless, on grounds that the Petition presents no obviousness analysis or motivation to combine the distinct embodiments in Kubala. *Id.* at 20–21. However, as argued by Petitioner and discussed above, Kubala itself teaches that the scenarios shown in Figures 11A through 11D can be combined in different ways. Pet. Reply 10–11; Ex. 1005 ¶ 54. Petitioner explains "Kubala explicitly provide[s] the motivation to combine," citing to numerous disclosures in Kubala describing, for example, combining Figures 11A–11D, and describing preventing closing review of a received e-mail message and exiting the e-mail application until the recipient has responded. Pet. Reply 10–11 (citing Ex. 1005 ¶¶ 9, 54, 55, 59–60).

As we discussed above, we agree with Petitioner that Kubala teaches combining features, because it explicitly teaches combining features such as those shown in Figures 11A–11D and described in paragraph 9, and because Kubala teaches "strict" scenarios in which a user is not permitted to perform another action with respect to a message unless the user first responds to the message. See, e.g., Ex. $1005 \, \P \, 9$, 54, 55, 59–60. We find these explicit teachings provide sufficient rationale to combine a response list from which a user selects a response with a feature preventing a user from exiting or deleting an e-mail or exiting the application until a response is sent.

Patent Owner also asserts that even if the Board accepts that Figures 11A through 11D can be combined, Petitioner fails to show how the combination discloses a response list because "these embodiments lack menu 1120 [e.g., a response list]." PO Resp. 22. Patent Owner does not explain this single sentence assertion. This assertion is incorrect, because Figure 11C includes menu 1120. Moreover, in the very next sentence, Patent Owner acknowledges the embodiments upon which Petitioner relies include a response list. *Id*.

Finally, Patent Owner asserts that "the additional embodiments" cited by Petitioner pertain to clearing the *received message* from the display, rather than clearing the *response list* from the display. *Id.* This argument, too, is unavailing because the response list is part of the received message, and therefore would be cleared from the display when the message is closed. *See, e.g.*, Fig. 11C (showing menu 1120 is part of the message being viewed by the recipient); *see also* Pet. Reply 11–12 (explaining that neither the Petition, Kubala's teachings, nor Mr. Williams' testimony are limited to clearing a received message from the display).

For the foregoing reasons, we determine Petitioner has made a persuasive showing as to limitation 1.6.

(a) New Argument

We note that during the oral hearing, Patent Owner attempted to introduce a new argument regarding limitation 1.6 found nowhere in the Patent Owner Response or Sur-reply. Patent Owner argued for the first time that Petitioner failed to demonstrate that the prior art teaches "taking control" of a PDA until a response is made, then releasing control of the PDA. *See*, *e.g.*, Tr. 27:23–28:6. Patent Owner explained that to show unpatentability the art must teach "taking control," arguing that the algorithm for performing the function recited in limitation 1.6 requires "taking control of the device until a response is made, and then releasing control of the device." *See*, *e.g.*, Tr. 28:4–6; 28:25–30.

Parties are not permitted to present new evidence or arguments during the oral hearing. 37 C.F.R. § 42.70 (a) ("A party may request oral argument on *an issue raised in a paper* at a time set by the Board") (emphasis added); Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,768 (Aug. 12, 2012) ("A party may rely upon evidence that has been previously submitted in the proceeding and may only present arguments relied upon in the papers previously submitted. No new evidence or arguments may be presented at the oral argument.").

In an attempt to pass the new argument as previously submitted, Patent Owner's counsel indicated for the first time its interpretation of the construction proposed in the Petition and adopted in the Board's preliminary construction in the Institution Decision as requiring taking and releasing control of a PDA. Tr. 29:12–30:10. Specifically, at the hearing Patent Owner expressed for the first time that because we identified Figure 4 as

providing disclosure of the algorithm corresponding to the function specified in limitation 1.6, we intended to include every feature shown in Figure 4 including taking and releasing control of a PDA. *Id.*

Patent Owner's argument strains credibility. In the Institution Decision, we identified written description of algorithms by column and line numbers, and to the extent we identified Figures, it is evident that we intended to include only the portion[s] of the Figures described in the identified column and line numbers. Inst. Dec. 13–16. For limitation 1.6, our intent to include in the algorithm only certain steps shown in Figure 4 is clear. *Id.* at 14. We did not identify the Specification's entire description of Figure 4, but rather identified only the column and line numbers we considered to disclose the algorithm, which excluded the explicit disclosure of taking and releasing control. Specifically, we identified Ex. 1001, 8:39–46. *Id.* Had we intended to include description of taking and releasing control of the PDA, we would have also identified the disclosure at Ex. 1001, 8:37–39 and 8:52–57, which explicitly mentions taking and releasing control of the PDA.

Our intent to include in the algorithm only portions of Figures that correspond to descriptions in the Specification that we explicitly identified by column and line numbers is also evident in view of our construction of other limitations. For example, for limitation 1.7, we identified Figures 3A and 3B, Inst. Dec. 15, even though certain steps in the Figures clearly relate not to limitation 1.7, but to other limitations. *See*, *e.g.*, Ex. 1001, Fig. 3A, Fig. 3B. For example, the second step of Figure 3B describes periodically resending message alerts, which clearly pertains to limitation 1.8 (reciting means for periodically resending said forced message alert), and the third step in Figure 3B describes receiving and displaying an indication of

responses (rather than *automatic acknowledgements* as recited in limitation 1.7), which clearly pertains to limitation 1.9. *Id.* Fig. 3B. Accordingly, for limitation 1.7 we identified the column and line numbers corresponding to the first step of Figure 3B, Ex. 1001, 7:64–8:5, which describes the function recited in limitation 1.7 (i.e., receiving and displaying automatic acknowledgements); however, we did not identify the column and lines numbers describing the second and third steps of Figure 3B, i.e., Ex. 1001, 8:6–15, describing the functions recited in limitations 1.8 and 1.9. Inst. Dec. 15. Therefore, we identified algorithms by column and line numbers, and to the extent we identified Figures, it is evident that we intended to include only the portion[s] of the Figures corresponding to the identified column and line numbers.

Even if we were to credit Patent Owner's assertion at the hearing as to its understanding of our preliminary construction, this does not address the fact that Patent Owner neither expressed its understanding nor argued Kubala does not teach taking and releasing control of a PDA, prior to the hearing. *See generally* PO Resp.; *see generally* Sur-reply. In the Response, Patent Owner's proposed construction for limitation 1.6 identified the disclosure at Ex. 1001, 8:37–57 as disclosing the algorithm. PO Resp. 12. Notably, Patent Owner included lines not included in our preliminary construction, namely Ex. 1001, 8:37–39 and 8:52–57 describing taking and releasing control. *Id.* However, Patent Owner did not express an understanding that our preliminary construction is consistent with requiring taking and releasing control. *Id.* at 11–12. Patent Owner did not argue that taking and releasing control of a PDA is a requirement of limitation 1.6, much less explain why it should be a requirement. *Id.* Indeed, Patent Owner's only commentary and argument concerning construction of this

limitation was that we should adopt the construction adopted in district court. *Id.* Patent Owner's failure to argue that taking and releasing control should be written into limitation 1.6, coupled with the lack of any argument by Patent Owner that Kubala fails to teach taking and releasing control, *see generally* PO Resp. and Sur-reply, left Petitioner and the Board entirely in the dark as to Patent Owner's positions until the oral hearing, thereby depriving Petitioner the opportunity to develop a response.

For the foregoing reasons, we do not consider Patent Owner's untimely arguments in rendering our Final Decision. However, had we considered Patent Owner's new arguments made at the hearing, it would not have affected the outcome of this Final Decision.

The claim construction adopted in this Final Decision renders moot Patent Owner's new argument. As we discussed above, Patent Owner's argument assumes the construction of limitation 1.6 includes, as part of the algorithm, the discussion in the Specification of taking and releasing control of a PDA. However, our construction does not include such description as part of the algorithm. As we clarified above, *supra* Sec. II.C.4.a.1.b, we do not adopt Patent Owner's proposed construction of limitation 1.6. Namely, unlike in Patent Owner's proposal, we do not include in the algorithm the description of taking and releasing control at Ex. 1001, 8:37–39, 8:52–57, and portions of Figure 4 not described at 8:39–51. We do not read into limitation 1.6 a requirement of taking control of a PDA/cell phone—a requirement that is not expressly stated in claim 1, *supra* Sec. II.C.4.a.1.b.

Our interpretation is consistent with the '970 patent disclosure taken as a whole. Claim 2, which depends directly from claim 1, explicitly recites means for controlling a PDA/cell phone, supporting our determination that claim 1 does not require taking control of a PDA/cell phone. Ex. 1001,

9:46–54, Claim 2 ("means for controlling of the recipient PDA/cell phone upon transmitting said automatic acknowledgment and causing, in cases where the force message alert is a text message, the text message and a response list to be shown on the display of the recipient PDA/cell phone or causes, in cases where the forced message alert is a voice message, the voice message being periodically repeated by the speakers of the recipient PDA/cell phone while said response list is shown on the display").

Even if we were to agree with Patent Owner that claim 1 requires taking control of a PDA/cell phone, this would not alter the outcome of our Final Decision. In light of the claim language and Specification, we would interpret the forced message alert software application program "effectively tak[ing] control" of a PDA/cell phone to mean that the application program does not allow a recipient to clear a text message and response list or stop a voice message from repeating until the recipient selects a response, because this is the only written description associated with taking control of a PDA/cell phone. *Id.*; *see also id. at* 8:52–57 (explaining that when the recipient selects a response, the application program "releases control" of the recipient device, clearing the display and stopping repeating the voice message). The Specification offers no support for a broader interpretation of taking control of a PDA/cell phone.

Under the hypothetical interpretation in the preceding paragraph, we would find Petitioner has made a persuasive showing because, as we discussed above, Petitioner has shown Kubala teaches requiring a required manual response from the response list by the recipient in order to clear recipient's response list from recipient's cell phone display. We note that a finding that Kubala teaches e-mail application 206 taking control of a PDA/cell phone would be further supported by Kubala's disclosure that "the

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user must reply to the received e-mail in some manner *before the e-mail* application will allow the user to perform some other action." Ex. 1005 ¶ 53 (emphasis added).

We note that at the hearing, when asked if how the algorithm takes control of a PDA is limited to the description in the Specification, Patent Owner took the untenable position that taking control includes physically grabbing someone's PDA out of their hands:

JUDGE TROCK: It [the algorithm] explains how it takes control. It's very limited in how it takes control; is it not?

MR RUBINO: No Your Honor. It says –

JUDGE TROCK: It doesn't say it grabs the cell phone out of the recipient's hand, does it?

MR. RUBINO: It does, Your Honor.

Tr. 30:14–20; *see also* Tr. 34:17–35:14. When asked why a skilled artisan wouldn't have understood "taking control" to be limited to the only written description in the Specification of what happens when the application program effectively takes control of a PDA (i.e., Ex. 1001, 8:39–51 and corresponding portion of Figure 4), Patent Owner responded that "taking control" must mean more because Figure 4 states "the forced voice alert software takes control of the recipient's cell phone . . . *and* causes" display of the text message or repeating the voice message until a response is sent—the "and" indicating taking control must mean something other than displaying the text message or repeating the voice message until a response is sent, according to Patent Owner. Tr. 36:18–37:25. Patent Owner's position appeared to be that because "taking control" must mean more than what is described at 8:39–51 and corresponding portion of Figure 4, and

because the Specification doesn't explicitly describe any other form of taking control, taking control could be so broad as to include physically grabbing a phone away from someone's hands. *Id.* If we were to consider this belated argument, we would reject Patent Owner's conclusion that "take control" is so broad. The broadest reasonable interpretation of a claim that invokes 35 U.S.C. § 112, \P 6 is the structure, material, or act described in the specification as performing the entire claimed function and equivalents thereof. *In re Donaldson Co.*, 16 F.3d 1189, 1193 (Fed. Cir. 1994) (en banc). Therefore, we would not interpret limitation 1.6 more broadly than what is described in the Specification as taking control of a PDA. As we discussed above, the only possible description of taking control of a PDA/cell phone is at 8:39–51 and the corresponding portion of Figure 4.

For the foregoing reasons, even if we had considered Patent Owner's new argument, it would not have altered the outcome of our Final Decision.

(3) "means for receiving and displaying a listing of which recipient PDA/cell phones have automatically acknowledged the forced message alert and which recipient PDA/cell phones have not automatically acknowledged the forced message alert" (limitation 1.7); "means for receiving and displaying a listing of which recipient PDA/cell phones have transmitted a manual response to said forced message alert and details the responses from each recipient PDA/cell phone that responded" (limitation 1.9)

Petitioner persuasively argues that Kubala teaches limitations 1.7 and 1.9. Although Petitioner's analysis is based on a construction different from that adopted above, *supra* Sec. II.C.4.a.2, Petitioner still shows Kubala teaches limitations 1.7 and 1.9 under our construction. We determined that the structure corresponding to the functions recited in limitations 1.7 and 1.9 is PDA/cell phone hardware including a display, such as display 16, and a wireless receiver and/or transceiver, and equivalents thereof. *Supra*

Sec. II.C.4.a.2. Petitioner has shown Kubala discloses a hardware display because Petitioner shows each PDA/cell phone in Kubala includes a touch screen display. Pet. 24 (citing Ex. 1005 ¶¶ 29–30; Ex. 1003 ¶ 93). Petitioner has shown Kubala discloses a wireless receiver and/or transceiver because Petitioner shows the PDA/cell phones in Kubala communicate using wireless technology. *Id.* at 25 (citing Ex. 1005 ¶ 27, Figure 1A). Patent Owner does not dispute that Kubala discloses a PDA/cell phone hardware including a display, such as display 16, and a wireless receiver and/or transceiver. *See generally* PO Resp.

Petitioner also shows, for reasons discussed below, that the structures in Kubala perform the functions specified in limitations 1.7 and 1.9 through its showing that the software application program (e.g., enhanced email application 206, 208) in Kubala results in the functions being performed on Kubala's touch screen display and wireless receiver and/or transceiver. Pet. 32–35, 37–40.

(a) Limitation 1.7

Petitioner persuasively shows that Kubala teaches receiving "a listing of which recipient PDA/cell phones have automatically acknowledged the forced message alert and which recipient PDA/cell phones have not automatically acknowledged the forced message alert," as recited in limitation 1.7, because Kubala discloses that prior art solutions "have provided the ability to generate return receipts to the sender when the sender's e-mail message is received at its intended destination or when the recipient opens the e-mail message, thereby providing an acknowledgement that a particular message has been received and/or opened." Pet. 32 (quoting Ex. 1005 ¶ 6). Furthermore, we are persuaded that a skilled artisan would have understood that the listing is accessible, e.g., available for display, on

the sender PDA/cell phone because the user of the sender PDA/cell phone would have wanted to access the information regarding acknowledgement receipts. *Id.* at 33 (citing Ex. 1003 ¶ 111); *see also* Tr. 18:8–15 (Petitioner's counsel explaining "accessible" means accessible by the user and the only way a user could access the information would be to view it).

Petitioner also presents a contingent argument in the event "it is argued that Kubala doesn't teach this limitation [1.7]." *Id.* Petitioner argues that in the event we find Kubala does not teach use of acknowledgement receipts, Hammond, like Kubala, also teaches this feature. Pet. 33. (citing Ex. 1006, Abstract, 2:11–18, 5:20–23). Petitioner persuasively shows Hammond teaches use of such receipts. *Id.* at 33–35 (citing Ex. 1006, 3:1–4:28, 5:31–37, 6:56–8:45, 10:6–22, Fig. 2). Indeed, Hammond discloses that the sender of an electronic message supplies a message to a Message Sender component, and can specify optional message tracking information, including message delivery (e.g., receipt) information. Ex. 1006, 4:48–56. In one embodiment a recipient "provide[s] receipts when messages are received" and a Message Receipt Tracker is notified of these receipts. *Id.* at 5:20–23. The Message Receipt Tracker in turn stores information, such as notification of receipts, in a Message Tracking Table, such as that shown in Figure 2 of Hammond. *Id.* at 5:32–37.

Petitioner also provides a rationale to combine Hammond with Kubala, arguing that a skilled artisan would have been motivated to combine these references because both are directed to tracking responses to mandatory-response messages, and both disclose use of acknowledgement receipts. Pet. 34–35. We find Petitioner's argument persuasive. Hammond, like Kubala, relates to enhancing communication that involves electronic messages such as e-mail. Ex. 1005, code at (57); Ex. 1006, code (57). As

Petitioner points out, Kubala already discloses the use of automatic acknowledgement receipts, explaining that such was well known in the art. *Id.* (citing Ex. 1005 ¶ 6). Hammond further confirms Kubala's teaching that use of return receipts was well known in the art, *see*, *e.g.*, Ex. 1006, 1:21–26, 2:1–10, and confirms Mr. Williams' assertion that due to uncertainty as to whether an e-mail message was received, return receipts provided a well-known benefit, Ex. 1003 ¶ 103. For the foregoing reasons, we find persuasive Petitioner's assertion that the combination of Kubala with Hammond teaches receiving "a listing of which recipient PDA/cell phones have automatically acknowledged the forced message alert and which recipient PDA/cell phones have not automatically acknowledged the forced message alert," as recited in limitation 1.7.

Patent Owner's contentions and arguments do not undermine Petitioner's showing. Patent Owner contends that "Petitioner does not rely on Kubala to disclose the recited function," but instead "Petitioner submits that Hammond discloses the claim elements required by the recited function of displaying the required listing." PO Resp. 23. Patent Owner is incorrect. Petitioner unambiguously asserts that Kubala alone teaches the recited function. Pet. 32–33 ("Kubala discloses the claimed structure and the claimed function of this [1.7] limitation."); Pet. Reply 13–15. As we discussed above, Petitioner relies on Hammond only for a contingent argument, stating explicitly that Hammond is relied on "[t]o the extent it is argued that Kubala doesn't teach this [1.7] limitation." Pet. 33.

Accordingly, Patent Owner's assertion that Petitioner does not rely on Kubala to disclose the recited function is incorrect.

Patent Owner also criticizes an argument that is not made by Petitioner. Patent Owner argues that Hammond's Message Tracking Table

(as shown in Figure 2) does not depict a display screen, but rather illustrates a data structure stored in memory. PO Resp. 23–27. However, Petitioner never asserts that the Message Tracking Table shown in Figure 2 depicts a display screen. Pet. 33–35. Rather, Petitioner explains that (1) Hammond's Message Tracking Tables show tracking of acknowledgement receipts, (2) Hammond is relied on for its teaching of tracking acknowledgement receipts, and (3) a skilled artisan would have combined Hammond based on its disclosure as it relates to exchanging and tracking recipient-devices. *Id.* (citing Ex. 1006, 3:1–4:28, 5:31–37, 6:56–8:45, 10:6–22, Fig. 2; Ex. 1003) ¶ 112). Nowhere does the Petition argue that the Message Tracking Table in Figure 2 depicts a display. *Id.* Accordingly, Patent Owner's argument that Petitioner's expert, Mr. Williams, "conceded during his deposition that Hammond's 'Message Tracking Table' depicted in Figure 2 is located and stored in the server's memory," is irrelevant. PO Resp. 24 (citing Ex. 2007, 63:13–65:1, 66:16–6:22). Nor do we find persuasive Patent Owner's argument that Mr. Williams testified that the existence of the Message Tracking Table itself is not sufficient to show how the table is displayed. PO Resp. 24 (citing Ex. 2007, 75:14–76:8). Nowhere does Petitioner assert that Hammond is relied on for displaying information. Pet. 33–35. As we discussed above, Petitioner relies on Kubala for displaying tracked information, and relies on Hammond for its teaching of the kind of information that is tracked, namely return receipt information. *Id.* at 32–35.

Even if we were to find Patent Owner's arguments regarding Hammond to be persuasive, and we do not, they relate to a contingency in the event we find Kubala does not teach the function recited in limitation 1.7. However, for reasons discussed above, we find Petitioner has shown Kubala teaches limitation 1.7.

For the foregoing reasons, we determine Petitioner has made a persuasive showing as to limitation 1.7 in view of Kubala, either alone or in combination with Hammond.

(b) Limitation 1.9

Petitioner persuasively shows that Kubala teaches receiving "a listing of which recipient PDA/cell phones have transmitted a manual response to said forced message alert and details the responses from each recipient PDA/cell phone that responded," as recited in limitation 1.9. Pet. 37–38. Kubala discloses that a sending PDA (e.g., computing device 202) can receive and display a response from a recipient PDA (e.g. computing device 204). *Id.* at 37 (citing Ex. 1005 ¶¶ 26–41, Fig. 2; Ex. 1003 ¶ 121). Petitioner argues that a skilled artisan would have known, in addition to receiving and displaying responses from recipient PDAs, also to display a listing of which recipient PDA's have transmitted a response. *Id.* at 27–30. We find this persuasive because, as noted by Petitioner, Kubala discloses that receiving e-mail application 208 may collect and record information about the manner in which the recipient responds to an e-mail message that has a mandatory-response flag, wherein the information may include mandatory-response return-status codes included within the reply e-mail. Pet. 38 (citing Ex. 1005 \P 50, 51, 61, Fig 9). We are persuaded by Petitioner's argument that a skilled artisan would have known that the collected information regarding which recipients have responded to the email messages was available and accessible, e.g., available for display, on the sender PDA/cell phone because the user of the sender PDA/cell phone would have wanted to access the information regarding acknowledgement receipts. Id. (citing Ex. 1003 ¶ 122); see also Tr. 18:8–15 (Petitioner's

counsel explaining "accessible" means accessible by the user and the only way a user could access the information would be to view it).

Patent Owner does not provide argument specific to limitation 1.9.

For the foregoing reasons, we find Petitioner has made a persuasive showing as to limitation 1.9 in view of Kubala.

Although Petitioner provides argument that Kubala alone teaches "receiving and displaying a listing of which recipient PDA/cell phones have transmitted a manual response to said forced message alert," Petitioner also argues that "Hammond also provides this disclosure." *Id.* at 38. Petitioner provides evidence and argument that Hammond, like Kubala, teaches tracking information about electronic messages that have been read by recipients. *Id.* at 38–39 (citing Ex. 1006, 5:17–8:45, 10:5–11:48, Fig. 4, Fig. 5A, Fig. 5B; Ex. 1003 ¶ 123). However, Petitioner does not explain how Kubala is being combined with Hammond. *Id.* at 40. Rather, Petitioner refers to its argument regarding limitation 1.7; but, limitations 1.7 and 1.9 are distinct, and Petitioner fails to address the differences in the limitations and explain how limitation 1.9 is taught by the combination. *Id.* at 40.

For the foregoing reasons, we are not persuaded as to Petitioner's arguments regarding the combination of Kubala with Hammond.

c) Conclusion

For the foregoing reasons, Petitioner has demonstrated, by a preponderance of the evidence, that claim 1 of the '970 patent is unpatentable under § 103 as obvious over the combination of Kubala with Hammond.

4. Claim 3

Claim 3 depends directly from claim 1, and recites the system as in claim 1, "wherein said data transmission means is TCP/IP or another communication protocol." Ex. 1001, 9:64–65.

Petitioner argues persuasively that Kubala discloses the limitation of claim 3 because Kubala discloses PDAs/cell phones communicating according to TCP/IP or another communication protocol, such as Wi-Fi. Pet. 40 (citing Ex. 1005 ¶ 27, Fig. 1A; Ex. 1003 ¶ 127).

Patent Owner does not dispute Petitioner's contentions as to claim 3. *See generally* PO Resp.

For the foregoing reasons, Petitioner has demonstrated, by a preponderance of the evidence, that claim 3 of the '970 patent is unpatentable under § 103 over the combination of Kubala with Hammond.

5. Claim 4

Claim 4 depends directly from claim 1, and recites the system as in claim 1, "wherein the response list that is transmitted within the forced message alter software packet is a default response list that is embedded in the forced message alert software application program." Ex. 1001, 9:66–10:2.

As we discussed above with regard to limitation 1.4 of claim 1, Petitioner argues persuasively that Kubala's menu 1120 in Figure 11C teaches a response list that is transmitted within the forced message alert software packet. *Supra* Sec. II.D.3.a.5. Petitioner argues that Kubala teaches that the responses in the transmitted list of possible responses, e.g., the text strings "too busy right now," "looks okay," and "requested declined," can be default responses. Pet. 40–41 (citing Ex. 1005 ¶ 57, Fig. 11C). We are persuaded that Kubala teaches the text string that are

used as menu items can be default responses because, as Petitioner points out, "Kubala also explains that the text strings may be 'required and standardized within a data format specification, e.g., in a standard similar to RFC 2822." *Id.* at 41 (citing Ex. 1005 ¶¶ 57, 60; Ex. 1003 ¶¶ 129–130). Patent Owner does not dispute Petitioner's contentions as to claim 4. *See generally* PO Resp.

For the foregoing reasons, Petitioner has demonstrated, by a preponderance of the evidence, that claim 4 of the '970 patent is unpatentable under § 103 over the combination of Kubala with Hammond.

6. Claim 5

Claim 5 depends directly from claim 1, and recites the system as in claim 1, "wherein the response list that is transmitted within the forced message alert software packet is a custom response list that is created at the time the specific forced message alert is created on the sender PDA/cell phone." Ex. 1001, 10:3–6.

As we discussed above with regard to limitation 1.4 of claim 1, Petitioner argues persuasively that Kubala's menu 1120 in Figure 11C teaches a response list that is transmitted within the forced message alert software packet. *Supra* Sec. II.D.3.a.5. Petitioner argues that Kubala teaches that the text strings used as menu items in the response list can be configurable. Pet. 41–42 (citing Ex. 1003 ¶¶ 132–133). We find Petitioner's argument persuasive because Kubala discloses "[t]he text strings that are used as menu items may be obtained in a variety of manners," and discloses an example in which the text strings are configurable:

the text strings may be configurable through the enhanced e-mail application by allowing user-specifiable or system-administrator-specifiable parameters. As another alternative, the text strings may be extracted from the original e-mail message

that was received from the sender, in which case the text strings may have been configured as user-specifiable or systemadministrator-specifiable parameters in the sender's instance of the enhanced e-mail application.

Id. (quoting Ex. 1005 \P 57). Patent Owner does not dispute Petitioner's contentions as to claim 5. *See generally* PO Resp.

For the foregoing reasons, Petitioner has demonstrated, by a preponderance of the evidence, that claim 4 of the '970 patent is unpatentable under § 103 over the combination of Kubala with Hammond.

7. *Claim* 6

Claim 6 is similar to claim 1. However, claim 6 recites a method, whereas claim 1 recites a communication system. Petitioner sets forth where the preamble and each limitation of claim 6 is taught by the combination of Kubala and Hammond. Pet. 42–47. Patent Owner disputes Petitioner's contentions. Patent Owner's arguments are made together with, and are the same, as those for claim 1. PO Resp. 14–28.

Regarding the preamble of claim 6, Petitioner argues that, as set forth in its arguments and evidence for limitations 1.1 and 1.3 of claim 1, "Kubala discloses a method for sending a forced-message alert to one or more recipient PDA/cell phones within a predetermined communication network." Pet. 42 (citing Ex. 1005 ¶¶ 26–27, 32–33, Fig. 1A; Ex. 1003 ¶ 135). Moreover, for the reasons argued for limitation 1.7, Petitioner argues Hammond discloses the ability to track the receipt and response to forced-message alerts. *Id.* (citing Ex. 1006, code (57), 2:11–18, 3:1–4:28, 5:20–37, 10:6–22, 6:56–8:45, FIG. 2). For our reasons stated above for limitations 1.1, 1.3, and 1.7, we are persuaded Petitioner has shown the combination of Kubala and Hammond teaches or suggests the preamble of claim 6.

For limitation 6.1, Petitioner shows persuasively that Kubala teaches "accessing a forced message alert software application program on a sender PDA/cell phone," relying on Kubala's enhanced email application program on a sender PDA and its arguments for limitation 1.4 of claim 1 as to why Kubala's enhanced email application program teaches a forced message alert software application program. Pet. 43 (citing Ex. 1005 ¶¶ 13, 33–36, Fig. 2; Ex. 1003 ¶ 136). For the same reasons we stated above for limitation 1.4, we are persuaded Kubala's enhanced email application teaches a forced message alert software application program on a sender PDA/cell phone.

For limitation 6.2, Petitioner shows persuasively that Kubala teaches "creating the forced message alert on said sender PDA/cell phone by attaching a voice or text message to a forced message alert application software packet to said voice or text message," relying on its evidence and arguments for limitation 1.5 that Kubala's email message 214 with mandatory response flag 216 created on the sender PDA is a forced message alert. Pet. 43 (citing Ex. 1005 ¶¶ 32–41, 54–61, Fig. 1A, 1B, 2–4; Ex. 1003 ¶ 137). For the same reasons we stated above for limitation 1.5, we are persuaded Kubala's email message with mandatory response flag created on the sender PDA is a forced message alert, and that Kubala teaches limitation 6.2

For limitation 6.3, Petitioner shows persuasively that Kubala teaches "designating one or more recipient PDA/cell phones in the communication network," relying on disclosure in Kubala that email messages are sent to a recipient. Pet. 43 (citing Ex. 1005 ¶¶ 32–44, 54–61, Fig. 1A, 1B, 2–5; Ex. 1003 ¶ 138). We credit Mr. William's testimony that a person of ordinary skill in the art would have recognized that an email messaging application to which recipients receive an email involves designating a

recipient within the communication network. Ex. $1003 \, \P \, 138$. Indeed, Kubala discloses that emails have message headers that provide information about the recipient of a message, suggesting a recipient has been designated. Ex. $1005 \, \P \, 37$. For the reasons stated above, we are persuaded Kubala teaches limitation 6.3

For limitation 6.4, Petitioner shows persuasively that Kubala teaches "electronically transmitting the forced message alert to said recipient PDA/cell phones," relying on Kubala's disclosure of sending outgoing email messages flagged as a message to which a recipient is required to provide a mandatory response. Pet. 44 (citing Ex. 1005 ¶¶ 32–44, 54–61, Fig. 1A, 1B, 2–5; Ex. 1003 ¶ 139). We are persuaded that Kubala teaches limitation 6.4 because the email (i.e., electronic mail) message is transmitted electronically to a recipient PDA. *See, e.g.*, Ex. 1005 ¶ 35.

For limitation 6.5, we are persuaded by Petitioner's showing. Petitioner relies on its evidence and arguments for limitation 1.5 of claim 1, Pet. 44, for which we find, above, Petitioner shows Kubala teaches requiring the recipient PDA/cell phone to transmit an automatic acknowledgement to the sender PDA/cell phone as soon as the forced message alert is received by the recipient PDA/cell phone, *supra* Sec. II.D.3.b.1. Petitioner further relies on its evidence and argument for limitation 1.7 of claim 1, Pet. 44, for which we find, above, Petitioner shows Kubala, either alone or in combination with Hammond, teaches receiving and displaying a listing of which recipient PDA/cell phones have automatically acknowledged the forced message alert and which recipient PDA/cell phones have not automatically acknowledged the forced message alert, *supra* Sec. II.D.3.b.3.a. For our reasons stated above as to limitation 1.5 and 1.7, we are persuaded Kubala, either alone or in combination with Hammond, teaches limitation 6.5.

For limitation 6.6, Petitioner shows persuasively that the combination of Kubala and Hammond teach "periodically resending the forced message alert to the recipient PDA/cell phones that have not acknowledged receipt," relying on its evidence and arguments for limitation 1.8 of claim 1. Pet. 44. As we discussed for limitation 1.8, we are persuaded the combination of Kubala and Hammond teach "periodically resending said forced message alert to said recipient PDA/cell phones that have not automatically acknowledged the forced message alert. *Supra* Sec. II.D.3.a.6. For the same reasons, we are persuaded the combination of Kubala and Hammond teaches limitation 6.6.

For limitation 6.7, Petitioner shows persuasively that Kubala teaches "receiving responses to the forced message alert from the recipient PDA/cell phones and displaying the response from each recipient PDA/cell phone," relying on Kubala's disclosure that the sending PDA (e.g., computing device 202) may receive an email message 218 from a recipient PDA (e.g., computing device) in response to email message 214 with mandatory response flag 216. Pet. 45 (citing Ex. 1005 ¶¶ 33–36; Ex. 1003 ¶ 142). Petitioner argues persuasively that the received email would have been displayed on the PDA, relying on Mr. William's testimony that the ability to display email has been in place at least since 1993 with the IBM Simon. *Id.* (citing Ex. 1003 ¶ 143). We credit Mr. William's testimony. Indeed, Kubala depicts PDAs as having display screens in Figure 1A, Ex. 1005, Fig. 1A, and we find credible Mr. William's assertion that emails were displayed, based on our observation that the message comprises text, which we find indicates the message would be viewed on a display. For the foregoing reasons, we are persuaded Kubala teaches limitation 6.7.

For limitation 6.8, Petitioner shows persuasively that Kubala teaches "providing a manual response list on the display of the recipient PDA/cell phone that can only be cleared by the recipient providing a required response from the list," relying on its evidence and arguments for limitations 1.5 and 1.6 of claim 1. Pet. 46 (citing Ex. 1005 ¶¶ 9, 33–36, 40, 41, 47, 54–60. Fig. 2, 8, 10, 11A, 11C; Ex. 1003 ¶ 144). For reasons we discussed above for limitation 1.5, we are persuaded Kubala teaches providing a manual response list on the display of a recipient PDA, as is illustrated in Figure 11C. For reasons we discussed above for limitation 1.6, we are persuaded Kubala teaches requiring a required manual response from the response list by the recipient in order to clear recipient's response list from recipient's cell phone display. Therefore, we are persuaded Kubala teaches limitation 6.8

For limitation 6.9, Petitioner persuasively shows Kubala teaches "clearing the recipient's display screen or causing the repeating voice alert to cease upon recipient selecting a response from the response list required that can only be cleared by manually selecting and transmitting a response to the manual response list," because Kubala discloses that a user can select a response from a menu of responses, and after selecting a response, a user presses the INSTANT button, thereby closing the window and clearing the display and generating a reply message. Pet. 46–47 (citing Ex. 1005 ¶ 57, Fig. 11C; Ex. 1003 ¶ 145–147). Petitioner points out that although the embodiment illustrated in Figure 11C shows that a user can select CANCEL to close the window without sending a reply, Kubala also teaches that a recipient can be prevented from closing a review of the received email message, from deleting the received email message, and from exiting the email application until the recipient has responded to the received email

message. *Id.* at 47 (citing Ex. $1005 \, \P \, 9$). Furthermore, as we discussed above for limitation 1.6, Petitioner has shown persuasively that Kubala teaches combining these features. For the foregoing reasons, Petitioner has shown that Kubala teaches limitation 6.9.

Patent Owner disputes Petitioner has shown unpatentability, but its arguments are made together with claim 1, PO Resp. 14–28, and we addressed such arguments in our discussion above for claim 1. For the same reasons as above, we find Patent Owner's arguments unavailing.

For the foregoing reasons, Petitioner has demonstrated, by a preponderance of the evidence, that claim 6 of the '970 patent is unpatentable under § 103 over the combination of Kubala with Hammond.

8. *Claim 7*

Claim 7 depends directly from claim 6, and recites the method as in claim 1, "wherein each PDA/cell phone within a predetermined communication network is similarly equipped and has the forced message alert software application program loaded on it." Ex. 1001, 10:42–45.

As we discussed above with regard to limitations 1.1 and 1.4 of claim 1, Petitioner argues persuasively that Kubala teaches a predetermined network of participants, wherein each participant has a similarly equipped PDA/cell phone (limitation 1.1) and a forced message alert application software application program loaded on each participating PDA/cell phone (limitation 1.4). *Supra* Sec. II.D.3.a.2, II.D.3.a.5; Pet. 48–50. Patent Owner does not dispute Petitioner's contentions as to claim 7. *See generally* PO Resp.

For the foregoing reasons, Petitioner has demonstrated, by a preponderance of the evidence, that claim 7 of the '970 patent is unpatentable under § 103 over the combination of Kubala with Hammond.

9. Claim 8

Claim 8 depends directly from claim 6, and recites the method as in claim 1, "wherein said forced message alert application software packet contains a response list, wherein said response list is a default list embedded in the forced message alert software application program." Ex. 1001, 10:46–49.

As we discussed above with regard to claim 4, Petitioner argues persuasively that Kubala teaches a response list that is transmitted within the forced message alert software packet that is a default list that is embedded in the forced message alert software application program. *Supra* Sec. II.D.5; Pet. 50. Patent Owner does not dispute Petitioner's contentions as to claim 8. *See generally* PO Resp.

For the foregoing reasons, Petitioner has demonstrated, by a preponderance of the evidence, that claim 8 of the '970 patent is unpatentable under § 103 over the combination of Kubala with Hammond.

10. Claim 9

Claim 9 depends directly from claim 6, and recites the method as in claim 1, "wherein said forced message alert application software packet contains a response list, wherein said response list is a custom response list that is created at the time the specific forced message alert is created on the sender PDA/cell phone." Ex. 1001, 10:50–54.

As we discussed above with regard to claim 5, Petitioner argues persuasively that Kubala teaches a response list that is transmitted within the forced message alert software packet that is a custom response list that is created at the time the specific forced message alert is created on the sender PDA/cell phone. *Supra* Sec. II.D.6; Pet. 50–51. Patent Owner does not dispute Petitioner's contentions as to claim 9. *See generally* PO Resp.

For the foregoing reasons, Petitioner has demonstrated, by a preponderance of the evidence, that claim 9 of the '970 patent is unpatentable under § 103 over the combination of Kubala with Hammond.

E. Asserted Obviousness Over Hammond, Johnson, and Pepe; Asserted Obviousness Over Hammond, Johnson, Pepe, and Banerjee

Petitioner contends that claims 1 and 3–9 are unpatentable under 35 U.S.C. § 103 as obvious over the combination of Hammond, Johnson, and Pepe, or alternatively, over the combination of Hammond, Johnson, and Pepe with Banerjee. Pet. 12, 51–78. Patent Owner disputes Petitioner's contentions. PO Resp. 28–39.

1. Johnson (Ex. 1007)

Johnson generally discloses a method and system having a plurality of enrolled users and electronic mail objects that may be transmitted and received between users. Ex. 1007, [57]. The method and system include designating an electronic mail object as requiring a specific response and transmitting the electronic mail object to a recipient. *Id.* The recipient of the electronic mail object is prompted for a specific response when the recipient opens the electronic mail object and is prohibited from performing other actions until the required specific response it entered by the recipient. *Id.*

2. Pepe (Ex. 1008)

Pepe generally discloses a personal communications internetwork ("PCI") that provides a network subscriber with the ability to remotely control receipt and delivery of wireless and wireline voice and text messages. Ex. 1008, 3:45–48. The PCI operates as an interface between various wireless and wireline networks, and also performs media translation where necessary. *Id.* at 3:48–51. The PCI permits the subscriber to send

and receive messages between disparate networks and messaging systems. *Id.* at 5:56–59. A database maintains the subscriber's message receipt and delivery options. *Id.* at 3:51–54.

3. Analysis

After considering the arguments and evidence submitted by the parties, we determine Petitioner has not shown claims 1 and 3–9 would have been obvious over the combination of Hammond, Johnson, and Pepe, or alternatively, over the combination of Hammond, Johnson, and Pepe with Banerjee, because the Petition fails to specify with particularity what element in the prior art discloses a "forced message alert software packet," as recited in independent claim 1, and a "forced message alert application software packet," as recited in independent claim 6. Petitioner's showing as to claims 3–5 and 7–9, which depend either from claim 1 or 6, are deficient for the same reasons.

Claims 1 and 6 recite that a "forced message alert" is created by attaching a "forced message alert [application] software packet" to a voice or text message. Ex. 1001, 9:14–23, 10:14–17. For claim 1, Petitioner asserts that Hammond, Johnson, and Pepe alone each disclose transmission to a recipient computer of a forced message alert, but does not specify what element in the prior art it contends is the asserted forced message alert, much less how the forced message alert includes a *forced message alert* [application] software packet. Pet. 60. Petitioner's argument is reproduced below:

The combination of Hammond, Johnson, and Pepe disclose this limitation [limitation 1.5]. In particular, Hammond and Johnson each alone disclose the transmission of forced message alerts to recipient computers. (See Hammond at Abstract, 1:66-2:50, 3:1-

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4:28, 5:17-61, 6:3-19; Johnson, 1:58-61, 2:1-35, 3:64-4:42, 6:60-65.)

Id. Petitioner's argument for claim 6 merely refers to the argument for claim 1, and therefore is likewise deficient:

As set forth above (supra claim [1.5]), the combination of Hammond, Johnson, and Pepe teaches or suggests the features of this limitation. (See Hammond, Abstract, 1:66-2:50, 3:1-4:28, 5:17-61; Johnson, 1:58-61, 2:1-35, 3:64-4:42, 6:60-65; Pepe, 34:8-36:51, 5:17-20, FIGS. 28-45.)

Id. at 71.

Petitioner's contentions are insufficient for two reasons. First, Petitioner does not identify what element in each reference it contends is the "forced message alert." Instead, Petitioner places the burden on Patent Owner and the Board to sift through several columns of text to guess what Petitioner contends is a "forced message alert." Second, even if we were to identify a potential candidate "forced message alert," we would next have to speculate as to which part Petitioner contends is the "message" and which part is the "packet"—a task which we do not undertake. Our rules require that a petition specify with particularity where each element of a claim is found in the prior art, and include a detailed explanation of the relevance of the prior art to the claim. 37 C.F.R. § 42.104(b)(4) ("[t]he petition must specify where each element of the claim is found in the prior art patents or printed publications relied upon"); id. § 42.22(a)(2) ("[e]ach petition . . . must include . . . a detailed explanation of the significance of the evidence including material facts"); id. § 42.104(b)(5) ("[t]he petition must set forth ... the relevance of the evidence to the challenge raised, including identifying specific portions of the evidence that support the challenge"). As the Federal Circuit has explained, "[i]n an IPR, the petitioner has the burden

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from the onset to show with particularity why the patent it challenges is unpatentable." *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016). Petitioner's citation to several columns of text is not sufficient to specify where the claimed "packet" is found in the prior art. 37 C.F.R. §§ 42.22(a)(2), 42.104(b)(4), 42.104(b)(5).

Therefore, we find the Petition fails to show with particularity why the challenged claims are unpatentable.

In the Institution Decision, we identified the deficiency in the Petition:

We do not discern any identification in the Petition of where or how the asserted references disclose a "forced message alert software packet." Petitioner asserts that Hammond, Johnson, and Pepe alone each disclose transmission of a forced message alert to a recipient computer. Pet. 60. Petitioner cites to various disclosure in each reference. *Id.* However, Petitioner does not explain how the messages transmitted in these references comprise a voice or text message and a forced message alert software packet attached thereto. *Id.*

Inst. Dec. 36. Patent Owner agrees in the Response that the Petition is deficient:

Patent Owner agrees with and adopts the Board's findings that each and every element is not disclosed or suggested by the prior art references in Grounds 2–3 [Hammond, Johnson, and Pepe, with or without Banerjee], and that the Petition neither identifies nor describes how the references in Grounds 2–3 comprise a voice or text message and a forced message alert software packet. Paper 9 at 36; Ex. 2005, ¶ 48.

PO Resp. 29.

Petitioner attempts, improperly, to cure the defect in the Petition by introducing more specific contentions in the Reply. The Reply specifies with particularity Petitioner's contentions, for the first time, regarding what elements in the prior art disclose the claimed "packet," and provides at least

some indication as to how the packet is attached to a message. Pet. Reply 19. Petitioner explicitly identifies Hammond's "message delivery information" as disclosing the claimed "packet," explaining that the "message delivery information" can be stored with a message as a header. *Id.* Petitioner also explicitly identifies Johnson's "persistent reply attribute" as disclosing the claimed "packet," explaining that the "persistent reply attribute" is described as a mechanism for forcing a recipient to reply to an electronic mail object. Id. These contentions in the Reply exemplify the level of specificity that could have been, but were not, in the Petition. Moreover, these contentions illustrate the challenge we would have faced had we tried to speculate, based on the Petition, as to Petitioner's positions on what constitutes the claimed "packet." Neither Hammond nor Johnson use the term "forced message alert [application] software packet," and there is need for identification, and an explanation as to why Hammond's "message delivery information" and Johnson's "persistent reply attributes," would have been considered to be the claimed "packet." See id. Petitioner's identification and explanation for the first time in the Reply comes too late.

The Reply may only respond to argument raised in the Patent Owner Response. 37 C.F.R. § 42.23(b) ("A reply may only respond to arguments raised in the corresponding opposition, patent owner preliminary response, or other patent owner response"). However, even if responsive, a reply is not an opportunity to cure a deficiency in the petition, such as by providing the argument necessary to make out a prima facie case of unpatentability. *See* Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756 at 48,767 (Aug. 14, 2012) ("Patent Trial Practice Guide"). ("While replies can help crystalize issues for decision, a reply that raises a new issue or belatedly presents evidence will not be considered and may be returned . . . [e]xamples

of indications that a new issue has been raised in a reply include new evidence necessary to make out a *prima facie* case for the patentability or unpatentability of an original or proposed substitute claim, and new evidence that could have been presented in a prior filing").

Because the new contentions in the Reply are introduced belatedly, to make out a prima facie case of unpatentability that could have been presented in the Petition, we do not consider them in issuing our Final Decision. Patent Trial Practice Guide at 48,767; *Harmonic Inc.*, 815 F.3d at 1363.

For the foregoing reasons, Petitioner has not demonstrated, by a preponderance of the evidence, that claims 1 and 3–9 of the '970 patent are unpatentable under § 103 over the combination of Hammond, Johnson, and Pepe or over the combination of Hammond, Johnson, Pepe, and Banerjee.¹⁴

III. CONCLUSION¹⁵

In summary:

Claims	35 U.S.C. §		Shown	Claims Not shown Unpatentable
1, 3–9	§ 103(a)	Kubala, Hammond	1, 3–9	

¹⁴ Petitioner relies on Banerjee for the teaching of a touchscreen display only, and does not provide arguments that alter our analysis. Pet. 77–78.

¹⁵ Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this Final Decision, we draw Patent Owner's attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding. See* 84 Fed. Reg. 16,654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. *See* 37 C.F.R. § 42.8(a)(3), (b)(2).

1, 3–9	§ 103(a)	Kubala, Hammond,	ubala, Hammond,	
		Johnson, Pepe		
1, 3–9 § 103(a)		Kubala, Hammond,		1, 3–9
		Johnson, Pepe,		
		Banerjee		
Overall			1, 3–9	
Outcome				

IV. ORDER

In consideration of the foregoing, it is hereby

ORDERED that Petitioner has demonstrated by a preponderance of the evidence that claims 1 and 3–9 of U.S. Patent No. 8,213,970 B2 are *unpatentable*; and

FURTHER ORDERED that because this is a Final Written Decision, any party to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2

IPR2018-01079 Patent 8,213,970 B2

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re reexamination of:

Confirmation No.: To Be Assigned

BEYER

Art Unit: To Be Assigned

U.S. Patent. No. 8,213,970 (issued from *Appl. No. 12/324,122*)

Examiner: To Be Assigned

Issued: July 3, 2012 (filed on November 26, 2008)

Third Party Requester Docket No.: 2525.993REX0

For: Method of Utilizing Forced Alerts

for Interactive Remote
Communications

Request for Ex Parte Reexamination of U.S. Patent No. 8,213,970 under 35 U.S.C. § 302 and 37 C.F.R. § 1.510

Mail Stop "Ex Parte Reexam"

Attn: Central Reexamination Unit Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Commissioner:

Requester submits this Request for *ex parte* reexamination under 35 U.S.C. § 302 and 37 C.F.R. § 1.510 of United States Patent No. 8,213,970 to Beyer, titled "Method of Utilizing Forced Alerts for Interactive Remote Communications" ("the '970 patent"). In accordance with 37 C.F.R. § 1.510(b)(4), a copy of the '970 patent is attached hereto as EX1001. The '970 patent is assigned to AGIS Software Development ("AGIS") according to United States Patent and Trademark Office ("USPTO") records at the time of this request.

Pursuant to 37 C.F.R. § 1.510, this Request for Reexamination includes:

- a statement pointing out each substantial new question of patentability based on prior art patents and printed publications;
- an identification of every claim for which reexamination is requested;
- a detailed explanation of the pertinence and manner of applying the cited prior art to

every claim for which reexamination is requested;

- a copy of each of the cited prior art patents and printed publications, attached as Exhibits EX1005, EX1006, EX1007, EX1008;
- a certification that a copy of the request filed has been served in its entirety on the patent owner at the address as provided for in 37 C.F.R. § 1.33(c);
- a certification that the statutory estoppel provisions of 35 U.S.C. § 315(e)(1) or 35
 U.S.C. § 325(e)(1) do not prohibit the requester from filing the *ex parte* reexamination request; and
- the appropriate fee of \$12,000.00 under 37 C.F.R. § 1.20(c)(1).

The Commissioner is authorized to charge any additional fees, or to credit any overpayment, to Deposit Account No. 19-0036.

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Request for Reexamination of U.S. Patent No. 8,213,970

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EXHIBIT LIST

Exhibit No.	Description
1001	U.S. Patent No. 8,213,970 B2 to Beyer ("'970 patent")
1001	0.5. 1 atent 10. 0,213,570 B2 to Beyer (570 patent)
1002	Prosecution History of U.S. Patent No. 8,213,970 (Application No.
	12/324,122) ("'970 Prosecution History")
1003	Declaration of David H. Williams
1004	Curriculum Vitae of David H. Williams
1005	U.S. Patent Application Publication No. 2006/0218232 to Kubala <i>et al.</i> ("Kubala")
1006	U.S. Patent No. 6,854,007 to Hammond ("Hammond")
1007	U.S. Patent No. 5,325,310 to Johnson et al. ("Johnson")
1008	U.S. Patent No. 5,742,905 to Pepe et al. ("Pepe")
1009	U.S. Publication No. 2003/0128195 to Banerjee et al. ("Banerjee")
1010	Simon Says "Here's How!" Simon TM Mobile Communications Made Simple,
1011	Simon Users Manual, IBM Corp., 1994. ("Simon") Prosecution History of U.S. Patent Application No. 10/711,490 ("'490
	application")
1012	Prosecution History of U.S. Application No. 11/308,648 ("'648 application")
1013	Prosecution History of U.S. Application No. 11/612,830 ("'830 application")
1014	McKinsey & Company, The McKinsey Report: FDNY 9/11 Response (2002) ("The McKinsey Report")
1015	Apple Newton, Wikipedia.com, https://en.wikipedia.org/wiki/Apple_Newton (last visited May 10, 2018) ("Apple")
1016	From touch displays to the Surface: A brief history of touchscreen technology, Arstechnica.com https://arstechnica.com/gadgets/2013/04/from-touch-displays-to-the-surface-a-brief-history-of-touchscreen-technology/ (last visited May 10, 2018) ("Arstechnica")
1017	Reexamination Control No. 90/006,572 (Decision dated June 30, 2010) ("'572 Reexamination Decision")
1018	Reexamination Control No. 90/013,808 (Decision dated June 15, 2018) ("'808 Reexamination Decision")
1019	Reexamination Control No. 90/014,071 (Decision dated November 13, 2018) ("'071 Reexamination Decision")

Request for Reexamination of U.S. Patent No. 8,213,970

Exhibit No.	Description				
1020	Reexamination Control No. 95/000,185 (Decision dated August 22, 2008 ("'185 Reexamination Decision")				
1021	SDI Technologies v. Bose Corp., IPR2013-00350, Paper 36, Final Written				
	Decision (P.T.A.B. Nov. 7, 2014)				
1022	Google LLC v. AGIS Software Development, LLC, IPR2018-01079, Paper 2,				
	Petition (P.T.A.B. May 15, 2018)				
1023	Google LLC v. AGIS Software Development, LLC, IPR2018-01079, Paper 8,				
	Petitioner's Reply (P.T.A.B. Sept. 19, 2018)				
1024	Google LLC v. AGIS Software Development, LLC, IPR2018-01079, Paper 34,				
	Final Written Decision (P.T.A.B. Nov. 19, 2019)				

I. INTRODUCTION

The Patent Trial and Appeals Board ("P.T.A.B.") already determined in a Final Written Decision that claims 1 and 3-9 of the U.S. Patent No. 8,213,970 ("'970 patent") are unpatentable in view of Kubala¹ and Hammond.² (*See Google LLC v. AGIS Software Dev., LLC*, IPR2018-01079, Final Written Decision ("FWD") (P.T.A.B. Nov. 19, 2019) (EX1024).) Despite that unpatentability decision, AGIS sued Google for infringement of the '970 patent, asserting the previously unchallenged claims 2 and 10-13. Previously unchallenged claims 2 and 10-13 are each substantially similar to claims of the '970 patent that the PTAB found to be unpatentable in IPR2018-01079³. AGIS is therefore precluded from taking action at the PTO that is inconsistent with the PTAB's Final Written Decision in IPR2018-01079. *See* 37 CFR § 42.73(d)(3) (precluding a patent owner "from taking action inconsistent with the adverse judgment, including obtaining in any patent: (i) [a] claim that is not patentably distinct from a finally refused or canceled claim").

As set forth in detail below, all of the previously unchallenged claims are unpatentable in view of the prior art considered by the PTAB in IPR2018-01079—namely, Kubala and Hammond.

The primary difference between previously unchallenged claim 2 and previously challenged claim 1 is a so-called "take control" limitation. (*See Google*, IPR2018-01079, FWD at 51-54.) A similar "take control" limitation also appears in previously unchallenged claim 10. The Board noted, however, that Kubala teaches this "take control" limitation. (*Id.*) Thus, as set forth in more detail below, claims 2 and 10-13 are obvious in view of Kubala and Hammond.

¹ U.S. Patent Publication No. 2006/0218232 A1 to Kubala et al.

² U.S. Patent No. 6,854,007 B1 to Hammond.

³ Claim 2 is substantially similar to claim 1, claim 10 is substantially similar to claim 6, claim 11 is substantially similar to claim 7, claim 12 is substantially similar to claim 8, and claim 13 is substantially similar to claim 9.

In addition, Hammond, Johnson⁴, and Pepe⁵ also teach or suggest all of the limitations of claims 2 and 10-13, including the "take control" limitation. Thus, claims 2 and 10-13 are also obvious in view of Hammond, Johnson, and Pepe.

The Office never previously considered the patentability of (1) claims 2 and 10-13 in view of Kubala and Hammond; or (2) claims 2 and 10-13 in view of Hammond, Johnson, and Pepe. Thus, these two combinations of references establish two different substantial new questions of patentability for these previously unchallenged claims. Accordingly, for the reasons set forth in this reexamination request, claims 2 and 10-13 should be reexamined and canceled. (*See* Williams, ¶¶101-106.)

II. REQUIREMENTS FOR EX PARTE REEXAMINATION

A. Identification of Claims for which Reexamination is Requested—37 C.F.R. § 1.510(b)(2)

The Requester submits this Request for reexamination of claims 2 and 10-13 of the '970 patent. These claims may be referred to in this *ex parte* request individually, or collectively, as the "Requested Claims" or claims or the claims subject to reexamination.

B. Citation of Prior Patents and Printed Publications and Other Patents Presented to Show Substantial New Questions of Patentability

Reexamination of the '970 patent is requested in view of the below-listed publications, which are also listed on the attached Form PTO/SB/08A. (See also Williams, ¶5.)

("Kubala"), entitled "Method and System for Accommodating Mandatory Responses in Electronic Messaging," and published September 28, 2006 (attached hereto as EX1005). This reference was not cited or applied in the original prosecution of the '970 patent. But the Final Written Decision (FWD) of IPR2018-01079 determined that Kubala (in combination with Hammond below) rendered

⁴ U.S. Patent No. 5,325,310 to Johnson *et al*.

⁵ U.S. Patent No. 5,742,905 to Pepe *et al*.

claims 1 and 3-9 of the '970 patent unpatentable. Kubala is being applied to the Requested Claims for the first time herein.

(2) **Hammond**—U.S. Patent No. 6,854,007 B1 to Hammond ("Hammond"), entitled "Method and System for Enhancing Reliability of Communication with Electronic Messages" (attached hereto as EX1006). This reference was not cited or applied in the original prosecution of the '970 patent. But the FWD of IPR2018-01079 determined that Hammond (in combination with Kubala) renders claims 1 and 3-9 of the '970 patent unpatentable.

The FWD of IPR2018-01079 states, however, that the Petition, (*Google*, IPR2018-01079, Pet. (EX1022)), did not specify what portion of Hammond discloses a "forced message alert software packet" as recited in independent claim 1 and a "forced message alert application software packet" as recited in independent claim 6. Google disagreed and even explained, in the Petitioner's Reply, (*Google*, IPR2018-01079, Pet. Reply at 19 (EX1023)), how the Petition showed that Hammond teaches these claim elements. But the P.T.A.B. did not consider these teachings in issuing the FWD with regard to the combination of Hammond, Johnson, and Pepe. (*Google*, IPR2018-01079, FWD at 71-75.) The explanations are included in this reexamination Request. Hammond is being applied to the Requested Claims for the first time herein.

- (3) **Johnson**—U.S. Patent No. 5,325,310 to Johnson *et al.* ("Johnson"), entitled "Method and System for Persistant Electronic Mail Reply Processing" (attached hereto as EX1007). This reference was not cited or applied in the original prosecution. The FWD of IPR2018-01079 states that the Petition (*Google*, IPR2018-01079, Pet.) did not specify what portion of Johnson discloses a "forced message alert software packet" as recited in independent claim 1 and a "forced message alert application software packet" as recited in independent claim 6. Google disagreed and even explained, in the Petitioner's Reply, (*Google*, IPR2018-01079, Pet. Reply at 19), how the Petition showed that Johnson teaches these claim elements. But the P.T.A.B. did not consider these teachings in issuing the FWD with regard to the combination of Hammond, Johnson, and Pepe. (*Google*, IPR2018-01079, FWD at 71-75.) The explanations are included in this reexamination Request. Johnson is being applied to the Requested Claims for the first time herein.
- (4) **Pepe**—U.S. Patent No. 5,742,905 to Pepe *et al.* ("Pepe"), entitled "Personal Communications Internetworking" (attached hereto as EX1008). This reference was not cited or applied in the original prosecution. The FWD of IPR2018-01079 states that the Petition, (*Google*,

IPR2018-01079, Pet.), did not specify what portion of Hammond or Johnson discloses a "forced message alert software packet" as recited in independent claim 1 and a "forced message alert application software packet" as recited in independent claim 6. Google disagreed and even explained, in the Petitioner's Reply (*Google*, IPR2018-01079, Pet. Reply at 19), how the Petition showed that both Hammond and Johnson teach these claim elements. But the P.T.A.B. did not consider these teachings in issuing the FWD with regard to the combination of Hammond, Johnson, and Pepe. (*Google*, IPR2018-01079, FWD at 71-75.) The explanations are included in this reexamination Request. Pepe is being applied to the Requested Claims for the first time herein.

These prior-art references present substantial new questions of patentability. The table below summarizes the substantial new questions of patentability (SNQs) and the manner and pertinency of applying the cited prior art in this Request.

SNQ# Statute		Cited Prior Art	Claims
1	§ 103	Kubala and Hammond	2 and 10-13
2	§ 103	Hammond, Johnson, and Pepe	2 and 10-13

C. Statement Pointing Out Each Substantial New Question of Patentability Based on Prior Patents and Printed Publications—37 C.F.R. § 1.510(b)(1)

1. The cited combinations each provide a substantial new question of patentability

As discussed above, and expanded on below, the allegedly patentable subject matter of the '970 patent is entirely taught by the combination of Kubala and Hammond, and the combination of Hammond, Johnson, and Pepe. The Requester also shows that a person of ordinary skill in the art (POSA) would have been motivated to combine the cited prior art references in the various manners prescribed herein.

It is undisputed that the Office has yet to consider any of the combinations presented here (1) Kubala in view of Hammond; and (2) Hammond in view of Johnson and further in view of Pepe for the Requested Claims. Therefore, the prior art and combinations presented here include non-

cumulative information that is being used for the first time that is material to, and raises substantial new questions of patentability for the Requested Claims of the '970 patent.

(a) Relevant legal principles

The presence or absence of "a substantial new question of patentability" determines whether or not the Office orders reexamination. (M.P.E.P. § 2242.) For a substantial new question of patentability to exist, there must also exist a substantial question of patentability. A substantial question of patentability exists "where there is a substantial likelihood that a reasonable examiner would consider the prior art patent or printed publication important in deciding whether or not the claim is patentable." (Id.) Where a substantial question of patentability exists for a claim, a substantial new question of patentability also exists as to the claim unless the same question of patentability has already been: (A) decided as to the claim in a final holding of invalidity by a federal court in a decision on the merits involving the claim, after all appeals; (B) decided as to the claim in an earlier concluded examination or review of the patent by the Office; or (C) raised to or by the Office in a pending reexamination or supplemental examination of the patent. (Id.) An earlier concluded examination or review of the patent includes "the original examination of the application which matured into the patent" and "the review of the patent in an earlier concluded trial by the Patent Trial and Appeal Board, such as a post-grant review, inter partes review, or covered business method review of the patent." (Id.) A trial is "a contested case instituted by the Board based upon a petition. A trial begins with a written decision notifying the petitioner and patent owner of the institution of the trial." (37 C.F.R. § 42.2.)

The purpose of *ex parte* reexamination is to permit the Office to reexamine a patent based on prior art that was not previously considered, or was not fully considered with respect to the specific claims of the patent, during an earlier examination or review of the patent. (Reexamination Control No. 90/014,071, '071 Reexamination Decision, (Decision dated Nov. 13, 2018), 25; M.P.E.P. § 2242.) The Federal Circuit has stated that "the existence of a substantial new question of patentability is not precluded by the fact that a patent or printed publication was previously cited by or to the Office or considered by the Office." (*In re Swanson*, 540 F.3d 1368, 1379-80 (Fed. Cir. 2008).) Instead, the focus is "whether the particular question of patentability presented by the reference in reexamination was previously evaluated by the PTO." (*Id.* at 1380.) "[T]o decide whether a reference that was previously considered by the PTO creates a substantial new question

of patentability, the PTO should evaluate the context in which the reference was previously considered and the scope of the prior consideration and determine whether the reference is now being considered for a substantially different purpose." (*Id.*)

In Ex parte Samsung Display Devices Co., the Board of Patent Appeals and Interferences (the "Board") applied Swanson and confirmed that in order to be considered cumulative, specific teachings of a reference must be considered and discussed on the record by an examiner. (BPAI Appeal No. 2008-005992, Reexamination Control No. 90/006,572 (Decision dated June 30, 2010), 36-37 (EX1017).) In Samsung, the Board affirmed a substantial new question of patentability ("SNQ") based on a reference previously considered by the Office during the original prosecution because it was viewed in a new light during reexamination. The Board based this decision on the fact that in the original prosecution, the examiners limited their consideration of the reference at issue to simply whether it provided a certain limitation, but did not "provide any indication that [the reference at issue] had been considered as a principal prior art reference." Thus, the Board stated that, "[i]t follows then that reexamination . . . cannot constitute an old question of patentability because Appellant is not relying on the sole reasoning of the prior Examiner and Supervisory Patent Examiner" (Id.)

The Office has also stated that for art to be considered cumulative, the art must be cited on the record by the Examiner. For example, the Director of the Office of Legal Administration found a substantial new question of patentability based on references that had previously been cited in a properly filed IDS and purportedly discussed in an Examiner Interview when, "the record of the prior . . . proceeding contain[ed] no identification of precisely which specific teachings of [the references at issue] were considered in, and to what extent such specific teachings appreciated." (*In re Diversi-Plast Products, Inc.* (U.S. Control No. 95/000,185, '185 Reexamination Decision (Decision dated August 22, 2008), 9) (EX1020).) Even though the examiner was required to consider the references cited on the IDS, the examiner made no indication in the record that he gave special or detailed consideration to a particular teaching of the references. Thus, an examiner's silence in the record with respect to certain references "does **not** support patent owner's position that the SNQs based on those documents were not proper." (*Id.*) (emphasis in original.) In order to be considered cumulative, the **specific teachings** of the art must be "considered and discussed on the record **by those examiners**." (*Id.* at 16.) (emphasis added.)

(b) The combination of Kubala and Hammond presents a first SNQ of patentability.

The P.T.A.B. previously held that these references in combination render obvious at least claims 1 and 3-9. The primary difference between previously unchallenged claim 2 and previously challenged claim 1 is a so-called "take control" limitation. (*See Google*, IPR2018-01079, FWD at 51-54.) This "take control" limitation also distinguishes previously unchallenged claim 10 from previously challenged claim 6. The Board noted, however, that Kubala teaches this "take control" limitation. (*Id.*) Thus, as set forth in more detail below, claims 2 and 10-13 are obvious in view of Kubala and Hammond.

The substantial question of patentability presented by Kubala and Hammond is a new one. These references are being considered for the Requested Claims for the first time. These references were not considered for the Requested Claims during any prior proceeding before the P.T.A.B. Thus, the same question of patentability has not already been decided *as to the Requested Claims* by the Office in an earlier concluded examination or review of the patent. (M.P.E.P. § 2242.)

Further, neither Kubala nor Hammond was before the Examiner during prosecution and were not substantively considered by the Examiner. Thus, Kubala and Hammond are not cumulative to prior art considered during prosecution. Indeed, the Examiner that allowed the '970 patent claims provided a statement of reasons for allowance:

The following is an examiner's statement of reasons for allowance: claims 2-14 have been found to be novel and the inventive because prior art record fails to show or teach means for attaching a forced message alert software packet to a voice or text message creating a forced message alert that is transmitted by said sender PDA/cell phone to the recipient PDA/cell phone, said forced message alert software packet containing a list of possible required responses and requiring the forced message alert software on said recipient PDA/cell phone to transmit an automatic acknowledgment to the sender PDA/cell phone as soon as said forced message alert is received by the recipient PDA/cell phone; means for requiring a required manual response from the response list by the recipient in order to clear recipient's response list from recipient's cell phone display; means for receiving and displaying a listing of which recipient PDA/cell phones have automatically

acknowledged the forced message alert and which recipient PDA/cell phones have not automatically acknowledged the forced message alert.

('970 Prosecution History, 158, emphasis added.)

As explained below, the combination of Kubala and Hammond teaches or suggests this limitation. Thus, these references disclose new subject matter compared to the references applied during prosecution, and the combination presents a substantial new question of patentability for the Requested Claims. Thus, a reasonable examiner would consider Kubala and Hammond important in deciding whether or not the Requested Claims are patentable.

(c) The combination of Hammond, Johnson, and Pepe presents a second SNQ of patentability.

The P.T.A.B. previously held in the FWD of IPR2018-01079 that the Petition (*Google*, IPR2018-01079, Pet.) did not specify what portion of Hammond or Johnson discloses a "forced message alert software packet" as recited in independent claim 1 and a "forced message alert application software packet" as recited in independent claim 6. Even though Google explained, in the Petitioner's Reply (*Google*, IPR2018-01079, Pet. Reply at 19), how the Petition showed that both Hammond and Johnson teach these claim limitation, the P.T.A.B. did not consider these teachings in issuing the FWD with regard to the combination of Hammond, Johnson, and Pepe. (*Google*, IPR2018-01079, FWD at 71-75.) The explanations are included in this reexamination Request.

The primary difference between previously unchallenged claim 2 and previously challenged claim 1 is a so-called "take control" limitation. (*See Google*, IPR2018-01079, FWD at 51-54.) This "take control" limitation also distinguishes previously unchallenged claim 10 from previously challenged claim 6. As set forth in more detail below, claims 2 and 10-13 are obvious in view of Hammond, Johnson, and Pepe.

The substantial question of patentability presented by Hammond, Johnson, and Pepe is a new one. These references are being considered for the Requested Claims for the first time. These references were not considered for the Requested Claims during any prior proceeding before the P.T.A.B. Thus, the same question of patentability has not already been decided *as to the Requested Claims* by the Office in an earlier concluded examination or review of the patent. (M.P.E.P. § 2242.)

Further, Hammond, Johnson, or Pepe was not before the Examiner during prosecution and were not substantively considered by the Examiner. Thus, Hammond, Johnson, and Pepe are not cumulative to prior art considered during prosecution.

The Examiner that allowed the '970 patent claims provided a statement of reasons for allowance:

The following is an examiner's statement of reasons for allowance: claims 2-14 have been found to be novel and the inventive because prior art record fails to show or teach means for attaching a forced message alert software packet to a voice or text message creating a forced message alert that is transmitted by said sender PDA/cell phone to the recipient PDA/cell phone, said forced message alert software packet containing a list of possible required responses and requiring the forced message alert software on said recipient PDA/cell phone to transmit an automatic acknowledgment to the sender PDA/cell phone as soon as said forced message alert is received by the recipient PDA/cell phone; means for requiring a required manual response from the response list by the recipient in order to clear recipient's response list from recipient's cell phone display; means for receiving and displaying a listing of which recipient PDA/cell phones have automatically acknowledged the forced message alert.

('970 Prosecution History, 158, emphasis added.)

As described below, the combination of Hammond, Johnson, and Pepe teaches the features that the Examiner described in the examiner's statement of reasons for allowance that allowed the '970 patent claims. These references disclose new subject matter compared to the references applied during prosecution, and the combination presents a substantial new question of patentability for the Requested Claims. Thus, a reasonable examiner would consider Hammond, Johnson, and Pepe important in deciding whether or not the Requested Claims are patentable.

2. The Office should exercise its discretion under 35 U.S.C. §§ 303(a) and 325(d) to grant this reexamination request.

While the provisions of 35 U.S.C. § 325(d) are discretionary, not mandatory, the Office should exercise its discretion under 35 U.S.C. §§ 303(a) and 325(d) to grant this reexamination

request because Kubala, Hammond, Johnson, and Pepe are non-cumulative prior art and because the arguments here have not previously been considered by the Office for the requested claims.

The statute states that "the Director **may** take into account whether, and reject the . . . request because" (emphasis added). ('071 Reexamination Decision, 16 (EX1019).) The provisions of 35 U.S.C. § 325(d) were intended to *complement* the protections already provided by the substantial new question of patentability standard set forth in 35 U.S.C. § 303(a). (*Ex Parte* Reexamination Control No. 90/013,808, '808 Reexamination Decision (Decision dated June 15, 2018), 31 (EX1018).) The determination pursuant to 35 U.S.C. § 325(d) in an *ex parte* reexamination proceeding is conducted on a case-by-case basis. ('071 Reexamination Decision, 21.) When determining whether to exercise its discretion under 35 U.S.C. § 325(d) in an *ex parte* reexamination proceeding, the Office balances the protection of the patent owner against harassment with the public interest in ensuring the validity of patent claims. ('808 Reexamination Decision, 15.)

There is no such harassment here. Indeed, the Office has yet to substantively consider any of Kubala, Hammond, Johnson, and Pepe for the Requested Claims. It is not harassment to request reexamination of the Requested Claims, especially when the primary difference between previously unchallenged claim 2 and previously challenged claim 1 is a so-called "take control" limitation. (*See Google*, IPR2018-01079, FWD at 51-54.) This "take control" limitation also distinguishes previously unchallenged claim 10 from previously challenged claim 6. The Board noted that Kubala teaches this "take control" limitation. Thus, the Office should grant reexamination of the Requested Claims of the '970 patent based on SNQ1 and SNQ2 for at least these reasons.

3. Summary of the Substantial New Questions of Patentability for the Requested Claims of the '970 patent.

Kubala, Hammond, Johnson, and Pepe, alone or in combination with one another, provide non-cumulative information about preexisting technology that is being used either for the first time that is material to, and raises substantial new questions of, patentability for the Requested Claims of the '970 patent. The table below summarizes the substantial new questions of patentability (SNQs) and the manner and pertinence of applying the cited prior art (as described in detail in Section IX.) (Williams, ¶¶36-37.)

SNQ #	Statute	References	Lack of Consideration in '970 Prosecution History and Previous IPRs	Claims
1	§ 103(a)	Kubala and	Kubala was not applied during	2 and 10-13
		Hammond	prosecution or not applied against the	
			Requested Claims in IPR2018-01079.	
			Hammond was not applied during	
			prosecution or not applied against the	
			Requested Claims in IPR2018-01079.	
			The combination of Kubala and	
			Hammond presents new and non-	
			cumulative information about preexisting	
			technology.	
2	§ 103(a)	Hammond,	Hammond was not applied during	2 and 10-13
		Johnson, and	prosecution or not applied against the	
		Pepe	Requested Claims in IPR2018-01079.	
			Johnson was not applied during	
			prosecution or not applied against the	
			Requested Claims in IPR2018-01079.	
			Pepe was not applied during prosecution	
			or not applied against the Requested	
			Claims in IPR2018-01079.	
			The combination of Hammond, Johnson,	
			and Pepe presents new and non-	
			cumulative information about preexisting	
			technology.	

III. OVERVIEW OF THE '970 PATENT

A. The '970 patent describes sending and receiving responses to forced message alerts.

The '970 patent is directed to sending and receiving responses to "forced message alert[s]." ('970 patent, 1:19-23; *see* also Williams, ¶¶7, 38-40.) The '970 patent explains, "[t]he heart of the invention lies in the forced message alert software application program provided in each PC or PDA/cell phone." ('970 patent, 4:47-49; *see also id.*, 7:8-16.) The '970 patent describes sending the forced-message alerts to a receiving device, (*see id.*, 7:43-8:15, FIGS. 3A-3B), and then receiving, acknowledging, and responding to the forced-message alerts received from the sending device. (*See id.*, 8:16-57, FIG. 4.) And, when the sending device receives no acknowledgment from the receiving device, the '970 patent explains that the sending device can continue to transmit the forced-message alert until acknowledged. (*Id.*, 8:25-39.) Before describing the intrinsic record in detail, however, a brief overview of the '970 patent family is provided.

The '970 patent is directed to a system and method for a personal computer (PC) or PDA/cell phone with a specialized software application that creates and sends a forced message alert, as well as receive a forced message alert. (*Id.*, Abstract.) A forced message alert is comprised of a text or voice message and a forced alert software packet. (*Id.*, 2:9-13, 8:20-25.)

The specification states that it is desirable for a user to be able to simultaneously send a message to cell phones or PCs using Digital Smart Message Service (SMS) and TCP/IP messages that are transmitted using cellular technology such as the various versions of GSM and CDMA or via a WiFi local area network. The specification indicates that what is needed is a method in which a sender of a text or voice message can force an automatic acknowledgement upon receipt from a recipient's cell phone or PC, and a manual response from the recipient via the recipient's cell phone or PC. (*Id.*, 1:51-67.) The specification discloses that "[t]he heart of the invention lies in the forced message alert software application program provided in each PC or PDA/cell phone." (*Id.*, 4:47-49.) The specialized software application provides the ability to:

(a) allow an operator to create and transmit a forced message alert from a sender PDA/ cell phone to one or more recipient PCs and PDA/cell phones within the communication network; (b) automatically transmit an acknowledgement of receipt to the sender PDA cell phone upon the receipt of the forced message alert; (c)

periodically resend the message to the recipient PCs and PDA/cell phones that have not sent an acknowledgement; (d) provide an indication of which recipient PCs and PDA/cell phones have acknowledged the forced message alert; (e) provide a manual response list on the display of the recipient PC and PDA/cell phone's display that can only be cleared by manually transmitting a response; and (f) provide an indication on the sender PDA/cell phone of the status and content the manual responses.

(Id., Abstract.)

B. Prosecution History

The application that led to the '970 patent was filed on November 26, 2008. The '970 Prosecution History is attached hereto as EX1002. Unlike the previous applications in the priority chain, the application that led to the '970 patent was directed to "forced message alerts"—i.e., electronic messages that required the recipient to respond. The '970 patent explains that "[t]he heart of the invention lies in the forced message alert software application program provided in each PC or PDA/cell phone." ('970 patent, 4:47-49.) These forced message alerts "allow[] a participant to send a text or voice message to a group of people and force an automatic acknowledgment of receipt and a manual response." (*Id.*, 3:22-28; *see* also Williams, ¶¶41-45.)

About two years after the application was filed, the Examiner issued a Non-Final Office Action on September 20, 2010. In reply, the Applicant amended certain claims to require that "a manual response list" is displayed on "the recipient PC or PDA/cell phone" and that the received message "can only be cleared by manually selecting and transmitting a response to the manual response list." ('970 Prosecution History, 81-92.) The Examiner then issued a new rejection in a Final Office Action on March 11, 2011.

In response to the Final Office Action, the Applicant amended the independent claims to include "requiring a required manual response from the response list by the recipient in order to clear recipient's response list from recipient's cell phone display." (*Id.*, 120-131.) After an Advisory Action mailed on October 7, 2011, the Applicant and the Examiner had an interview and the Examiner allowed after-final claim amendments. (*Id.*, 142-145.) Thereafter, a Notice of Allowance was mailed on April 25, 2012 with an Examiner's amendment to remove "PC" from the claims.

In the Notice of Allowance, the examiner included a statement of reasons for allowance for the allowed claims 2-14 which correspond to claims 1-13 of the '970 patent:

The following is an examiner's statement of reasons for allowance: claims 2-14 have been found to be novel and the inventive because prior art record fails to show or teach means for attaching a forced message alert software packet to a voice or text message creating a forced message alert that is transmitted by said sender PDA/cell phone to the recipient PDA/cell phone, said forced message alert software packet containing a list of possible required responses and requiring the forced message alert software on said recipient PDA/cell phone to transmit an automatic acknowledgment to the sender PDA/cell phone as soon as said forced message alert is received by the recipient PDA/cell phone; means for requiring a required manual response from the response list by the recipient in order to clear recipient's response list from recipient's cell phone display; means for receiving and displaying a listing of which recipient PDA/cell phones have automatically acknowledged the forced message alert.

(*Id.*, 158, emphasis added.)

The Examiner did not cite or review any of the references relied on here. As will be seen, the references in combination meet the above claim limitations in the appropriate context.

C. Patent Trial and Appeals Board (P.T.A.B.) History

Google LLC filed a Petition for *inter partes* review of different claims than the Requested Claims, but with overlapping prior art cited in this reexamination request. The P.T.A.B. granted institution of the Petition for claims 1 and 3–9 of the '970 patent (*see Google*, IPR2018-01079, Pet.) and ultimately issued a FWD concluding: "For the foregoing reasons, Petitioner has demonstrated, by a preponderance of the evidence, that claim 1 of the '970 patent is unpatentable under § 103 as obvious over the combination of Kubala with Hammond." (*Id.*, FWD at 60; *see* also Williams, ¶¶46-47.)

The FWD included decisions with regard to the priority date of the '970 patent, claim construction, and prior art analysis as described below.

1. The FWD concluded that Kubala and Hammond are prior art to the the '970 Patent, thus Johnson and Pepe are also prior art to the '970 patent.

The P.T.A.B. already determined in a Final Written Decision that claims 1 and 3-9 of the '970 patent are unpatentable in view of Kubala and Hammond. (*Google*, IPR2018-01079, FWD.) Thus, the P.T.A.B. confirmed that Kubala and Hammond are prior art to the '970 patent that was filed on November 26, 2008. Since Johnson and Pepe issued before Kubala and Hammond were even filed, Johnson and Pepe are also prior art to the '970 patent. (Williams, ¶48-50).

Kubala published on September 28, 2006—more than one year before the '970 patent filing date of November 26, 2008. (*See* Kubala, (43).) Thus, Kubala is prior art under 35 U.S.C. § 102(b). Hammond issued on February 8, 2005—more than one year before November 26, 2008. (*See* Hammond, (45).) Thus, Hammond is also prior art under 35 U.S.C. § 102(b) with respect to the '970 patent's actual filing date. Johnson issued on June 28, 1994 (*see* Johnson, (45)) and is, therefore, prior art under 35 U.S.C. § 102(b). Pepe issued on April 21, 1998 (*see* Pepe, (45)) and is, therefore, also prior art under 35 U.S.C. § 102(b).

Accordingly, Kubala, Hammond, Johnson, and Pepe all pre-date the '970 patent's actual filing date and are prior art to the '970 patent.

2. The FWD construed constructions for claim limitations 1.2 and 1.5-1.9.

The FWD also issued claim constructions for claim limitations 1.2 and 1.5-1.9 (*Google*, IPR2018-01079, FWD at 11-29; *see* also Williams, ¶51) that are consistent with the claim constructions in Section VI below.

3. The FWD concluded that Kubala teaches the "take control" limitation.

The Requested Claims are claims 2 and 10-13. The primary difference between previously unchallenged claim 2 and previously challenged claim 1 is a so-called "take control" limitation. (*See Google*, IPR2018-01079, FWD at 51-54.) This "take control" limitation also distinguishes previously unchallenged claim 10 from previously challenged claim 6. The Board noted, however, that Kubala teaches this "take control" limitation. (*Id.*) Thus, as set forth in more detail below, claims 2 and 10-13 are obvious in view of Kubala and Hammond. (Williams, ¶¶52-53).

In addition, Hammond, Johnson, and Pepe also teach or suggest all of the limitations of claims 2 and 10-13, including the "take control" limitation. But, this combination was not considered by the P.T.A.B. in the FWD of IPR2018-01079 because, according to the Board, the

Petition (*Google*, IPR2018-01079, Pet.) did not distinctly specify what portion of Hammond or Johnson discloses a "forced message alert software packet" as recited in independent claim 1 and a "forced message alert application software packet" as recited in independent claim 6. Even though Google explained, in the Petitioner's Reply (*Google*, IPR2018-01079, Pet. Reply at 19), how the Petition showed that Hammond and Johnson teach these claim limitations, the P.T.A.B. did not consider these teachings in issuing the FWD with regard to the combination of Hammond, Johnson, and Pepe. (*See Google*, IPR2018-01079, FWD at 71-75.) In this reexamination Request, however, the explanations of the portions of Hammond and Johnson that disclose a "forced message alert software packet" as recited in independent claim 1 and a "forced message alert application software packet" as recited in independent claim 10 are included. Thus, as shown below in more detail, claims 2 and 10-13 are also obvious in view of Hammond, Johnson, and Pepe.

IV. The '970 patent is not entitled to priority to any earlier-filed applications.

A. Legal Background – Priority to an earlier-filed application

For a claim to be entitled to the benefit of an earlier-filed application, the earlier application must comply with the written description requirement of 35 U.S.C. § 112. (*See* 35 U.S.C. § 120; *Tronzo v. Biomet, Inc.*, 156 F.3d 1154, 1158 (Fed. Cir. 1998).) There must also be a continuity of disclosure: a continuous chain of co-pending applications, each supporting the presently claimed subject matter. (*Hollmer v. Harari*, 681 F.3d 1351, 1355 (Fed. Cir. 2012).)

The relevant inquiry is whether the specification "describe[s] an invention understandable to [a] skilled artisan and show[s] that the inventor actually invented the invention claimed." (*Novozymes A/S v. DuPont Nutrition Biosciences APS*, 723 F.3d 1336, 1349 (Fed. Cir. 2013).) This requirement is not satisfied by simply making a claim chart matching features to passages in the specification. To "isolate and combine aspects from various embodiments in the specifications (including patents incorporated by referenced involving a different [device])" does not demonstrate that the inventor was in possession of the purported invention. (*Purdue Pharma L.P. v. Recro Tech.*, *LLC*, 694 Fed. App'x. 794 (Fed. Cir. 2017).) Instead, the written-description analysis requires "[t]aking each claim . . . as an integrated whole rather than as a collection of independent limitations." (*Novozymes*, 723 F.3d at 1349.)

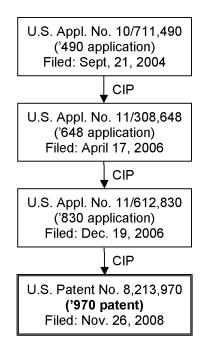
In addition, pointing to an obvious variation is not enough. "Entitlement to a filing date does not extend to subject matter which is not disclosed, but would be obvious over what is expressly disclosed." (*Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1571-72 (Fed. Cir. 1997).) "One shows that one is 'in possession' of *the invention* by describing *the invention*, with all its claimed limitations, not that which makes it obvious." (*Id.* at 1572 (emphasis in original).)

And, where, as here, continuity of disclosure for the claims cannot be established prior to the actual filing date, related patents that issued over one year before the actual filing date become prior art. 35 U.S.C. § 102(a)(1) (post-AIA).

B. None of the earlier-filed applications provide sufficient written-description support for at least a forced-message alert software-application program, as required by each independent claim of the '970 patent.

The Board previously agreed that the '970 patent is not entitled to priority to any earlier-filed applications, and is only entitled to a priority date of November 26, 2008—its actual filing date. (*Google*, IPR2018-01079, FWD at 6-8.) The '970 patent claims priority to three earlier-filed applications: (i) U.S. Application No. 10/711,490 (EX1011, '490 application), filed on September 21, 2004; (ii) U.S. Application No. 11/308,648 (EX1012, '648 application), filed on April 17, 2006; and (iii) U.S. Application No. 11/612,830 (EX1013,'830 application), filed on December 19, 2006. None of these earlier-filed applications provide sufficient written description support for at least a forced-message alert software-application program, as required by each independent claim of the '970 patent. (Williams, ¶¶4, 54-59.)

The following is a diagram illustrating the relationship of the three applications to the '970 patent:



The application that issued as the '970 patent was filed on November 26, 2008, and claims priority to U.S. Patent Application No. 10/711,490 ('490 application), filed September 21, 2004. The '970 patent is not entitled to this priority claim because the '490 application does not provide written-description support for the claimed "forced message alert software application program."

First, the '490 application is directed to employing cellular telephone communications to monitor locations, initiating cellular calls and conference calls with other cellular telephones of a plurality of communications net participants by touching a display screen, and causing a remote cellular phone to annunciate audio announcements or call another phone number. ('490 application, Abstract, 8-32.) The '490 application notes that each cellular phone can poll the other cell phones to transmit their location and status. But each of the cellular phones that poll does not include a "forced message alert" in the poll, nor do they track the poll responses. (*Id.*, 14, ¶14.) And, in contrast with the '970 patent, the '490 application allows a sending PDA/cell phone to remotely control a recipient PDA/cell phone *without action by the remote phone operator*:

In spite of the rapid advance in cellular phone technology, it would also be desirable to actuate a remote cellular phone to annunciate an audio message to alert the remote user that there is an emergency (or for another reason) . . . and cause the

remote phone to call another phone number (as an example, to automatically establish an 800 number conference call), to vibrate, or increase the loudness of an announcement *without any action by the remote phone operator*.

(*Id.*, 9, ¶4.6) Thus, the '490 application performs steps for remotely controlling recipient phones without a manual response from the recipient remote phone operator. The '490 application does not teach or suggest a "forced message alert software application program" as described and claimed in the '970 patent. Accordingly, the '970 patent is not entitled to the priority date of the '490 application, September 21, 2004. (*See* Williams, ¶56.)

Second, the '648 application also does not disclose a forced-message alert as required by the independent claims of the '970 patent. The '648 application is directed to automatically shifting from GPRS/EDGE/CDMA/1XEVDO to SMS when any cellular phone of a plurality of cellular phones of communication net participants makes or receives a voice call and shift back upon completion of the voice call. ('648 application, Abstract, 16-61.) Embodiments also cause an alert (audible voice alert, beep) to emanate from a user's device when an incoming message arrives, show a location of the sender of a message on the user's display, and cause an alert (verbal announcement, vibration, or text) when another participant of the communication net participants is within a predetermined distance. (*Id.*, 42-44, ¶69, 72, 74.) But nowhere does the '648 application teach or suggest at least a "forced message alert," let alone the "forced message alert software application program" as described and claimed in the '970 patent. Accordingly, the '970 patent is not entitled to the priority date of the '648 application, April 17, 2006. (*See* Williams, ¶57.)

Third, the '830 application also does not disclose a forced-message alert as required by the independent claims of the '970 patent. The '830 application is directed to a plurality of cellular phone/PDA/GPS devices of communication net participants with advanced communication software (ACS) application programs that can: poll other cell phone/PDA/GPS devices of the plurality for location, status, and identity; and remotely control one or more of the other cell phone/PDA/GPS devices of the plurality. ('830 application, 7-8 (spec. pages 3:6-4:2), 5-40.) At

⁶ All emphasis is added, except where otherwise indicated.

best, the '830 application generically mentions the ability of one phone to control *certain* functions on another phone:

Each cell phone has the ability to remotely control from one cellular phone/PDA/GPS any of the other cellular phone/PDA/GPS systems phones including the ability to control remote cellular phones to make verbal prerecorded announcements, place return calls, place calls to another phone number, vibrate, execute text to speech software, change sound intensity, remotely control software and functions resident on the remote phone and process and display information by touching the display screen at their location on the PDA display and selecting the appropriate soft switch; the ability to layer a sufficient number of switches or buttons on the PDA display to perform the above functions without overlaying the map; and the ability to change the nomenclature of a series of soft switches and symbology for different operating environments.

(*Id.*, 23 (spec. pages 19:11-20); *see also id.*, 6 (spec. pages 2:14-18).) But nowhere does the '830 application disclose the concepts of (i) a manual-response list or (ii) requiring a manual response from such a response list to clear the response list from the recipient's phone—two concepts that were explicitly added during prosecution to gain allowance of the independent claims of the '970 patent. (*See* '970 Prosecution History, 120-31; *see also infra* Section III.B.) Accordingly, the '970 patent is not entitled to the priority date of the '830 application, December 19, 2006. (*See* Williams, ¶58.)

Because the '970 patent is not entitled to priority to any of the earlier-filed applications, it is entitled to a priority date of only November 26, 2008—its actual filing date. Kubala, Hammond, Johnson, and Pepe all pre-date the '970 patent's actual filing date and are prior art to the '970 patent. (*See* Williams, ¶59)

V. Independent Claims

The '970 patent issued with three independent claims: claims 1, 6, and 10. Independent claim 1 has 4 dependent claims: claims 2-5. Independent claim 6 has 3 dependent claims: claims 7-9. Independent claim 10 has 3 dependent claims: claims 11-13. Independent claims 1 and 10 are discussed below. (Williams, ¶60.)

A. Independent Claim 1

For ease of reference, claim 1 is reproduced below:

- [1.P] A communication system for transmitting, receiving, confirming receipt, and responding to an electronic message, comprising:
- [1.1] a predetermined network of participants, wherein each participant has a similarly equipped PDA/cell phone that includes a CPU and a touch screen display a CPU [sic] and memory;
- [1.2] a data transmission means that facilitates the transmission of electronic files between said PDA/cell phones in different locations;
- [1.3] a sender PDA/cell phone and at least one recipient PDA/cell phone for each electronic message;
- [1.4] a forced message alert software application program including a list of required possible responses to be selected by a participant recipient of a forced message response loaded on each participating PDA/cell phone;
- [1.5] means for attaching a forced message alert software packet to a voice or text message creating a forced message alert that is transmitted by said sender PDA/cell phone to the recipient PDA/cell phone, said forced message alert software packet containing a list of possible required responses and requiring the forced message alert software on said recipient PDA/cell phone to transmit an automatic acknowledgment to the sender PDA/cell phone as soon as said forced message alert is received by the recipient PDA/cell phone;
- [1.6] means for requiring a required manual response from the response list by the recipient in order to clear recipient's response list from recipient's cell phone display;

[1.7] means for receiving and displaying a listing of which recipient PDA/cell phones have automatically acknowledged the forced message alert and which recipient PDA/cell phones have not automatically acknowledged the forced message alert;

[1.8] means for periodically resending said forced message alert to said recipient PDA/cell phones that have not automatically acknowledged the forced message alert; and

[1.9] means for receiving and displaying a listing of which recipient PDA/cell phones have transmitted a manual response to said forced message alert and details the response from each recipient PDA/cell phone that responded.

('970 patent, 8:65-9:39, brackets and numbering added.)

B. Independent Claim 10

Claim 10 is a claim to a method for a recipient PDA/cell phone. For ease of reference, claim 10 is reproduced below:

[10.P] A method of receiving, acknowledging and responding to a forced message alert from a sender PDA/cell phone to a recipient PDA/cell phone, wherein the receipt, acknowledgment, and response to said forced message alert is forced by a forced message alert software application program, said method comprising the steps of:

[10.1] receiving an electronically transmitted electronic message; identifying said electronic message as a forced message alert, wherein said forced message alert comprises of a voice or text message and a forced message alert application software packet, which triggers the activation of the forced message alert software application program within the recipient PDA/cell phone;

[10.2] transmitting an automatic acknowledgment of receipt to the sender PDA/cell phone, which triggers the forced message alert software application program to take control of the recipient PDA/cell phone and show the content of the text message and a required response list on the display recipient PDA/ cell phone or to repeat audibly the content of the voice message on the speakers of the recipient PDA/cell phone and show the required response list on the display recipient PDA/cell phone; and

[10.3] transmitting a selected required response from the response list in order to allow the message required response list to be cleared from the recipient's cell phone display, whether said selected response is a chosen option from the response list, causing the forced message alert software to release control of the recipient PDA/cell phone and stop showing the content of the text message and a response list on the display recipient PDA/cell phone and or stop repeating the content of the voice message on the speakers of the recipient PDA/cell phone;

[10.4] displaying the response received from the PDA[/]cell phone that transmitted the response on the sender of the forced alert PDA/cell phone; and

[10.5] providing a list of the recipient PDA/cell phones [that] have automatically acknowledged receipt of a forced alert message and their response to the forced alert message.

('970 patent, 10:55-12:6, brackets and numbering added.)

VI. Claim Construction

The claim constructions for claim 1 are consistent with those as noted in the FWD of IPR2018-01079 at 11-29.

For purposes of this Request, the claim terms are presented by the Requester in accordance with 37 C.F.R. § 1.555(b) and M.P.E.P. § 2111. Specifically, the claim terms herein are given their "broadest reasonable construction consistent with the specification." (*Id.; see also In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004); *In re Yamamoto*, 740 F.2d 1569, 1572 (Fed. Cir. 1984); M.P.E.P. § 2258(I)(G) (noting that the "ordinary and customary meaning" standard is only used during reexamination of claims of an expired patent).) The broadest reasonable interpretation must also be consistent with the interpretation that those skilled in the art would reach. (*In re Cortright*, 165 F.3d 1353, 1359 (Fed. Cir. 1999).) Thus, the inquiry regarding the meaning of a claim should focus on what would be reasonable from the perspective of one of ordinary skill in the art. (*In re Suitco Surface, Inc.*, 603 F.3d 1255, 1260 (Fed. Cir. 2010); *In re Buszard*, 504 F.3d 1364, 1367 (Fed. Cir. 2007).)

This Request presents the claim analysis in Section IX below in a manner that is consistent with the broadest reasonable interpretation consistent with the specification. The Requester reserves the right to advocate a different claim interpretation in district court or any other forum if necessary.

Here, a POSA would have had either: (1) a Bachelor of Science degree in Electrical Engineering or an equivalent field, with three to five years of academic or industry experience in the field of electronic communications; or (2) a Master of Science degree in Electrical Engineering or an equivalent field, with two to four years of academic or industry experience in the same field. (*See* Williams, ¶17-19, 33-35, 61.)

A. "data transmission means"

The "data transmission means" is recited in independent claim 1. The function of the "data transmission means" is to facilitate the transmission of electronic files between said PDA/cell phones in different locations. (*See* '970 patent, 8:65-9:39 (claim 1), 9:64-65 (claim 3).) The corresponding structure is a PDA/cell phone with forced alert software installed that communicates a forced message alert using TCP/IP or another communications protocol. (*See id.*, 2:7-16, 3:43-45; *see also* Williams, ¶62.) This construction is consistent with the Final Written Decision of *Google*, IPR2018-01079, FWD at 14 and 28.

B. "means for attaching . . ."

The "means for attaching . . ." limitation is recited in independent claim 1. The recited function is to attach a forced-message alert software packet to a voice or text message, creating a forced message alert that is transmitted by a sender PDA/cell phone to a recipient PDA/cell phone, said forced message alert software packet containing a list of possible required responses, and requiring the forced message alert software on said recipient PDA/cell phone to transmit an automatic acknowledgement to the sender PDA/cell phone as soon as said forced message alert is received by the recipient PDA/cell phone. (*See* '970 patent, 8:65-9:39 (claim 1).) The corresponding structure is a PDA/cell phone configured to perform a portion of the forced-message alert software-application program that allows a user to create a message, select recipients of that message, select a default or new response list to be sent with the message, and then send the message to the recipients. (*See id.*, 2:7-16, 7:8-20, 7:43-63, 8:25-30, FIG. 3A; *see also* Williams, ¶63.) The P.T.A.B. agrees that this is the corresponding structure. (*See Google*, IPR2018-01079, FWD at 19 and 28.)

Further, a "forced message alert" is a message created by attaching a forced message alert software packet to a voice or text message. (*See* '970 patent, 2:7-16, 9:14-15 (claim 1), 10:62-65 (claim 10); *see* also Williams, ¶64.) The P.T.A.B. agrees with this definition of a forced message alert. (*See Google*, IPR2018-01079, FWD at 24-25.)

C. "means for requiring..."

This "means for requiring. . ." limitation is recited in independent claim 1. The recited function is to require a manual response from the response list by the recipient in order to clear the recipient's response list from the recipient's cell phone display. (*See* '970 patent, 8:65-9:39 (claim 1).) The corresponding structure is the forced-message alert software-application program on the recipient PDA/cellular phone that causes the message and manual response list to be displayed on the screen of the recipient PDA/cellular phone and clears the forced alert text data when a response is selected from the manual-response list. (*See id.*, 8:39-46, FIG. 4; *see also* Williams, ¶65.) The P.T.A.B. agrees that this is the corresponding structure. (*See Google*, IPR2018-01079, FWD at 20 and 28.)

D. "means for receiving and displaying a listing of which recipient PDA/cell phones have automatically acknowledged . . ."

This "means for receiving and displaying a listing of which PDA/cell phones have automatically acknowledge . . ." limitation is recited in independent claim 1. The recited function is to receive and display a listing of which recipient PDA/cell phones have automatically acknowledged the forced-message alert and which recipient PDA/cell phones have not automatically acknowledged the forced-message alert. (*See* '970 patent, 8:65-9:39 (claim 1).) The corresponding structure is hardware on the sender's PDA/cell phone including a display, such as display 16, and a wireless receiver and/or transceiver that receives electronic transmissions with acknowledgement receipts. (*See id.*, 4:7-11, 8:1-5, 8:12-15, FIG. 1; *see also* Williams, ¶66.) The P.T.A.B. agrees that this is the corresponding structure. (*See Google*, IPR2018-01079, FWD at 23, 28-29.)

E. "means for periodically resending..."

This "means for periodically resending. .." limitation is recited in independent claim 1. The recited function is periodically resending a forced-message alert to a recipient PDA/cell phone that has not automatically acknowledged the forced-message alert. (*See* '970 patent, 8:65-9:39 (claim 1).) The corresponding structure is the forced-message alert software-application program on the sender PDA/cell phone that will "periodically resend the forced message alert to the PC or PDA/cell phone that have [sic] not acknowledged receipt." (*Id.*, 8:6-8, FIG. 3B; *see also* Williams, ¶67.) The P.T.A.B. agrees that this is the corresponding structure. (*See Google*, IPR2018-01079, FWD at 22, 29.)

F. "means for receiving and displaying a listing of which recipient PDA/cell phones have transmitted . . ."

This "means for receiving and displaying a listing of which recipient PDA/cell phones have transmitted . . ." limitation is recited in independent claim 1. The recited function is receiving and displaying a listing of which recipient PDA/cell phones have transmitted a manual response to a forced-message alert and details the response from each recipient PDA/cell phone that responded. (*See* '970 patent, 8:65-9:39 (claim 1).) The corresponding structure is the hardware on the sender's PDA/cell phone including a display, such as display 16, and a wireless receiver and/or transceiver

that receives electronic transmissions with manual responses and displays those responses on the sender's PDA/cell phone. (*See id.*, 4:7-11, 8:1-5, 8:12-15, FIG. 1; *see also* Williams, ¶68.) The P.T.A.B. agrees that this is the corresponding structure. (*See Google*, IPR2018-01079, FWD at 23, 29.)

G. "means for transmitting the acknowledgment of receipt..."

This "means for transmitting the acknowledgement of receipt . ." limitation is recited in dependent claim 2. The recited function is to transmit the acknowledgment of receipt to the sender PDA/cell phone immediately upon receiving a forced message alert from the sender PDA/cell phone. (*See* '970 patent, 9:40-63 (claim 2).) The corresponding structure is the forced message alert software on the recipient PDA/cell phone. (*See id.*, 8:25-30, FIG. 4 at step 1; *see also* Williams, ¶69.)

H. "means for controlling of the recipient PDA/cell phone upon transmitting . . ."

This "means for controlling of the recipient PDA/cell phone upon transmitting. . . " limitation is recited in dependent claim 2. The recited function is to control the recipient PDA/cell phone upon transmitting the automatic acknowledgment and cause, in cases where the force message alert is a text message, the text message and a response list to be shown on the display of the recipient PDA/cell phone or cause, in cases where the forced message alert is a voice message, the voice message to be periodically repeated by the speakers of the recipient PDA/cell phone while the response list is shown on the display. (See '970 patent, 9:40-63 (claim 2).) The corresponding structure is the forced message alert software on the recipient PDA/cell phone. (See id., 8:37-44, 8:46-50, FIG. 4 at step 2; see also Williams, ¶70.)

I. "means for allowing a manual response to be manually selected from the response list or manually recorded . . . "

This "means for allowing a manual response to be manually selected from the response list or manually recorded. . ." limitation is recited in dependent claim 2. The recited function is to allow a manual response to be manually selected from the response list or manually recorded and to transmit the manual response to the sender PDA/cell phone. (*See* '970 patent, 9:40-63 (claim 2).) The corresponding structure is the forced message alert software on the recipient PDA/cell phone. (*See id.*, 8:52-57, FIG. 4 at step 3; *see also* Williams, ¶71.)

J. "means for clearing the text message and a response list from the display . . ."

This "means for clearing the text message and a response list from the display . . ." limitation is recited in dependent claim 2. The recited function is to clear the text message and a response list from the display of the recipient PDA/cell phone, or stop the repeating voice message and clear the response list from the display of the recipient PDA/cell phone once the manual response is transmitted. (*See* '970 patent, 9:40-63 (claim 2).) The corresponding structure is the forced message alert software on the recipient PDA/cell phone. (*See id.*, 8:44-46, 8:52-57, FIG. 4 at step 4; *see also* Williams, ¶72.)

VII. OVERVIEW OF APPLICABLE PATENT LAW

A. Overview of Obviousness

1. The Patent Statute (35 U.S.C. § 103)

A patent may not issue where "the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains." (35 U.S.C. § 103.) That is, the claimed invention must be nonobvious. The legal test to determine the question of obviousness is expansive and flexible, and there is "need for caution in granting a patent based on the combination of elements found in the prior art." (KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 415 (2007).)

2. KSR's Expansive, Flexible Obviousness Standard

The Supreme Court's *KSR* decision established the proper analysis for obviousness. (*KSR*, 550 U.S. at 415.) The Court loosened the standard for showing the obviousness of combining prior art references by overturning the Federal Circuit's teaching-suggestion-motivation test as too rigid and narrow and reaffirming the *Graham* factors. (*Id.* at 415, 419-21.) In place of the teaching-suggestion-motivation test, the Court held that a more expansive and flexible approach should be applied. (*Id.* at 415.) "Obviousness is a question of law based on underlying findings of fact." (*In re Kubin*, 561 F.3d 1351, 1355 (Fed. Cir. 2009).) The underlying factual inquiries are: (1) the scope and content of the prior art; (2) the differences between the prior art and the claims at issue; (3) the

level of ordinary skill in the pertinent art; and (4) secondary considerations of nonobviousness. (See KSR, 550 U.S. at 399 (citing Graham v. John Deere Co., 383 U.S. 1, 17-18 (1966)).)⁷

In defining the obviousness standard, the Court reminded the public that "the results of ordinary innovation are not the subject of exclusive rights under the patent laws. Were it otherwise patents might stifle, rather than promote, the progress of useful arts." (KSR, 550 U.S. at 427; see also id. at 402 ("Granting patent protection to advances that would occur in the ordinary course without real innovation retards progress and may, for patents combining previously known elements, deprive prior inventions of their value or utility.").) The Court also emphasized that its long-standing precedents confirm that "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." (Id. at 416-17 (citing Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62 (1969); Sakraida v. Ag Pro, Inc., 425 U.S. 273, 282 (1976); United States v. Adams, 383 U.S. 39, 50-51 (1966)).) Thus, when assessing the obviousness of a claim, the USPTO "must ask whether the improvement is more than the predictable use of prior art elements according to their established functions." (KSR, 550 U.S. at 417.) Significantly, "[a] person of ordinary skill is also a person of ordinary creativity, not an automaton." (Id. at 421.) Indeed, beyond simple cases that merely require the combination of two prior art references, "a person of ordinary skill [often] will be able to fit the teachings of multiple patents together like pieces of a puzzle." (Id. at 420.)

The motivation to combine prior-art references can come from a variety of sources, not just the prior art itself or the specific problem the patentee was trying to solve. (*Id.* at 420.) What is more, the Court's expansive approach encourages, rather than restricts, the use of common sense when addressing obviousness. (*Id.* at 421.) The references themselves need not provide a specific hint or suggestion of the alteration needed to arrive at the claimed invention; the analysis "may include recourse to logic, judgment, and common sense available to the person of ordinary skill that do not necessarily require explication in any reference or expert opinion." (*Perfect Web Techs. v. InfoUSA, Inc.*, 587 F.3d 1324, 1329 (Fed. Cir. 2009).) And the "reason, suggestion, or motivation to combine may be found explicitly or implicitly: (1) in the prior art references themselves; (2) in the knowledge of those of ordinary skill in the art that certain references, or disclosures in those

⁷ Requester is unaware of any secondary considerations of nonobvious in this case.

references, are of special interest or importance in the field; or (3) from the nature of the problem to be solved" *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 665 (Fed. Cir. 2000). A claim can also be proven obvious by showing that the combination of elements was obvious to try:

When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense. In that instance the fact that a combination was obvious to try might show that it was obvious under § 103.

(See KSR, 550 U.S. at 421.) And "[i]f a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability." (Id. at 417.)

Applying the obviousness test is particularly straightforward in cases that involve "the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for the improvement." (*Id.* at 417.) In such cases, the simple substitution of a single element must achieve unexpected results:

[W]hen a patent claims a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination *must* do more than yield a predictable result.

(Id. at 416 (citing Adams, 383 U.S. at 50-51).)

3. The USPTO's Obviousness Guidelines

The M.P.E.P.'s examination guidelines for obviousness, consistent with the above principles, identify multiple rationales for obviousness rejections including:

- 1. Combining prior art elements according to known methods to yield predictable results;
- 2. Simple substitution of one known element for another to obtain predictable results;
- 3. Use of known technique to improve similar devices (methods, or products) in the same way;
- 4. Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;

- 5. "Obvious to try" choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;
- 6. Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations are predictable to one of ordinary skill in the art;
- 7. Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

(M.P.E.P. § 2141(III).)

When determining obviousness of an invention, the M.P.E.P. instructs examiners to "first obtain a thorough understanding of the invention disclosed and claimed in the application under examination by reading the specification, including the claims, to understand what the applicant has invented. The scope of the claimed invention must be clearly determined by giving the claims the 'broadest reasonable interpretation consistent with the specification.'" *Id.* at 2141(II)(A).)

Any obviousness rejection then made by the examiner "should include, either explicitly or implicitly in view of the prior art applied, an indication of the level of ordinary skill [in the art]." (*Id.* at 2141(II)(C).) A person of ordinary skill in the art ("POSA") is a hypothetical person who is presumed to have known the relevant art at the time of the invention. (*Id.*) And a person of skill in the art has "ordinary creativity" and is "not an automaton." (*KSR*, 550 U.S. at 421.) The types of problems encountered in the art, prior art solutions to those problems, rapidity with which innovations are made, the sophistication of the technology, and the educational level of active workers in the field are factors that may be considered in determining the level of skill in the art. (*See* M.P.E.P. § 2141(II)(C) (*citing In re GPAC*, 57 F.3d 1573, 1579 (Fed. Cir. 1995); *Customer Accessories, Inc. v. Jeffrey-Allan Indus., Inc.*, 807 F.2d 955, 962 (Fed. Cir. 1986); *Envtl. Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 696 (Fed. Cir. 1983)).)

B. **Prior Art Under 35 U.S.C. § 102(b).**

Pre-AIA 35 U.S.C. § 102(b) states that a person shall be entitled to a patent unless "the invention was patented or described in a printed publication in this or a foreign country or in public

use or on sale in this country, more than one year prior to the date of application for patent in the United States."

The references in the above-mentioned Prior Art Section of the Exhibit List are prior art to the '970 patent—having an earliest priority date of November 26, 2008 (as discussed in Section IV.B)—for at least the reasons presented in the table below.

Reference	Statute	Date Predating the '970 Patent's Effective Filing Date
Kubala	§ 102(b)	Kubala published on September 28, 2006—more than one year before November 26, 2008 (see Kubala, (43).)
Hammond	§ 102(b)	Hammond issued on February 8, 2005 (see Hammond, (45).)
Johnson	§ 102(b)	Johnson issued on June 28, 1994 (see Johnson at (45).)
Pepe	§ 102(b)	Pepe issued on April 21, 1998 (see Pepe at (45).)

VIII. Overview of the Prior Art References

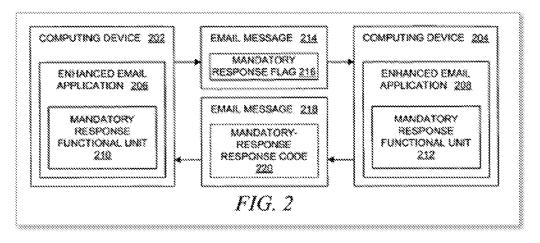
The references cited in this request are prior art to the '970 patent and were neither cited nor applied during prosecution of the '970 patent. (Williams, ¶108). As noted above, the Examiner in the original examination of the application that led to the '970 patent drafted a statement of reasons for allowance that identified specific claim limitations that were not found. Kubala, Hammond, Johnson, and Pepe each presents new information about preexisting technology that was neither considered nor applied during initial examination of the application that led to the '970 patent. (*Id.*). Each of these prior-art documents discloses portions of the specific claim limitations identified in the Examiner's statement of reasons for allowance in the Notice of Allowance ('970 Prosecution History, 158), that led to the '970 patent. (*Id.*). As discussed in detail below, these prior-art references in combination disclose each and every feature recited in claims 2 and 10-13 of the '970 patent, rendering these claims unpatentable under 35 U.S.C. § 103. (Williams, ¶¶20-32.)

A. Kubala discloses PDAs that send and receive mandatory-response messages

Kubala (attached hereto as EX1005) presents new information about preexisting technology that was not considered during the initial examination of the '970 patent by the USPTO. Because it

was not considered by the Examiner, Kubala was not applied in any rejection of the application claims during prosecution of the '970 patent. Kubala published on September 28, 2006—more than one year before November 26, 2008. (*See* Kubala, (43).) Thus, Kubala is prior art under 35 U.S.C. § 102(b) with respect to all claims of the '970 patent. (Williams, ¶109).

Kubala discloses methods and systems for accommodating mandatory responses in electronic messaging. (Kubala, (54); *see* also Williams, ¶110.) For example, Kubala's Figure 2 (reproduced below) illustrates a computing device 202 that includes an enhanced email application 206 with a mandatory-response functional unit 210. (Kubala, ¶33.) The combined enhanced email application 206 and mandatory-response functional unit 210 reads on the claimed "forced message alert software application program." Enhanced email application 206 allows computing device 202 to send an email message 214 with a mandatory-response flag 216. (*Id.*, ¶¶35-36.) "The **recipient is alerted** to the detected request for the response for the received electronic message, and **after alerting the recipient, actions** are required by the recipient with respect to usage of a data processing system until the recipient uses the data processing system to *send* a response for the received electronic message to the sender." (*Id.*, Abstract; *see* also Williams, ¶110.)



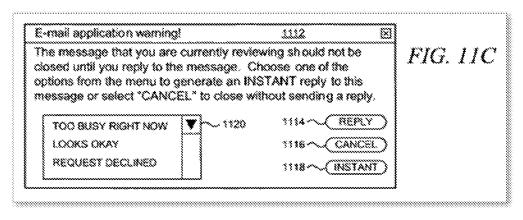
(Kubala, FIG. 2.)

Kubala explains that the computing devices 202, 204 can be PDAs as illustrated in Figure 1A, and that Kubala's use of the term "email message" includes "text messages, instant messages, fax messages, voicemail messages, video messages, audio messages, and other types of messages." (Kubala, ¶¶32-33.) Kubala's mandatory-response flag 216 reads on the claimed "forced message alert software packet" and Kubala creates the claimed "forced message alert." For example,

Kubala's mandatory-response flag 216 that is attached to email message 214 reads on "attaching a forced message alert software packet to a voice or text message creating a forced message alert" as claimed. (Williams, ¶111).

"FIGS. 11A-11D depicts a set of diagrams that represent a set of GUI windows *through* which an e-mail application alerts a user by displaying warning messages and error messages to the user as a result of a user action when the e-mail application has an e-mail message that contains a mandatory request flag." (Kubala, ¶22; Williams, ¶112.)

Kubala's Figure 11C (reproduced below) shows an example of alerting a user by displaying a menu 1120 of possible responses. (Kubala, ¶57; Williams, ¶113.) Kubala explains that "[t]he text strings that are used as menu items may be obtained in a variety of manners." (*Id.*) For example, Kubala explains that the text strings may be "required and standardized," "configurable," or "extracted from the original e-mail message." (*Id.*)



(Kubala, FIG. 11C.)

Kubala's Figure 11A (reproduced below) shows an example of alerting a user by displaying a warning message 1102 when an e-mail message that contains a mandatory request flag is received, and that the recipient "*must provide* a reply message in response to the original message." (Kubala, ¶54; Williams ¶114.)

 E-mail application warning!	1102	3
 The message that you are currentl until you reply to the message.	ly reviewing cannot be closed	FIG. 11A

(Kubala, FIG. 11A.)

Kubala also discloses collecting and recording information about the manner in which recipients respond to email messages that have a mandatory-response flag. (Kubala, ¶¶50-51, 61, FIG. 9; Williams, ¶115.)

In the Final Written Decision, the P.T.A.B. states: "[a]s noted above, Petitioner asserts claims 1 and 3–9 of the '970 patent would have been obvious over the combination of Kubala and Hammond. . . . For the reasons stated below, we determine Petitioner has demonstrated, by a preponderance of the evidence, that claims 1 and 3–9 are unpatentable under § 103 as obvious over the combination of Kubala with Hammond." (*Google*, IPR2018-01079, FWD at 29; *see* also Williams, ¶116.)

Because these teachings were not applied in any rejection of the application claims during prosecution of the application that led to the '970 patent, and because these teachings are not cumulative to the applied prior art, Kubala raises a substantial new question of patentability. (Williams, ¶117). A detailed explanation of the pertinency and manner of applying Kubala to claims 2 and 10-13 is provided below in Section IX.A.

B. Hammond tracks acknowledgements of and responses to mandatory-response messages

Hammond (attached hereto as EX1006)—when viewed in combination with Kubala—presents new information about preexisting technology that was not considered during the initial examination of the '970 patent by the USPTO. Because it was not considered by the Examiner, Hammond was not applied in any rejection of the application claims during prosecution of the '970 patent. Hammond issued on February 8, 2005—more than one year before November 26, 2008. (*See* Hammond, (45).) Thus, Hammond is also prior art under 35 U.S.C. § 102(b) with respect to the '970 patent's actual filing date, 8 for all claims of the '970 patent. (Williams, ¶118)

Like Kubala, Hammond discloses methods and systems for enhancing reliability of electronic messaging. (*See id.*, (54).) In particular, Hammond discloses a "Message Review Server (MRS) system [that] sends an electronic message to designated recipients, and then automatically

⁸ As set forth above (*see* Section IV), Hammond is also prior art under 35 U.S.C. § 102(e) with respect to the '970 patent's actual filing date which is the '970 patent's effective filing date.

helps ensure that each message has been successfully delivered and that each message has been reviewed." (*Id.*, 3:1-5.) To track these messages, Hammond discloses a Message Tracking Table that includes detailed information about electronic messages that have been read by recipients. (*See id.*, 6:56-8:45, FIG. 2 (reproduced below).) Hammond also discloses a Message Receipt Tracker routine (*id.*, 10:5-47, FIG. 4) and a Message Tracking Table Processor routine (*id.*, 6:3-19, 10:48-11:48, FIGS. 5A-5B) for managing the status of electronic messages transmitted in the system. (Williams, ¶119).

Hammond explains that "electronic messages" include "email, paging [text] messages, and voice mail." (*Id.*, 1:13-16, 1:21-26.) Hammond also discloses "message delivery information" that is attached to a message (*id.*, 3:31-43) that reads on the claimed "forced message alert software packet." Hammond creates the claimed "forced message alert." For example, Hammond's message delivery information that is attached to a message, reads on "attaching a forced message alert software packet to a voice or text message creating a forced message alert" as claimed. (Williams, ¶120)

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(Hammond, FIG. 2.)

In the Final Written Decision, the P.T.A.B. states "[a]s noted above, Petitioner asserts claims 1 and 3–9 of the '970 patent would have been obvious over the combination of Kubala and Hammond. . . . For the reasons stated below, we determine *Petitioner has demonstrated, by a preponderance of the evidence, that claims 1 and 3–9 are unpatentable under § 103 as obvious over the combination of Kubala with Hammond.*" (Google, IPR2018-01079, FWD at 29; see also Williams, ¶121.)

Because these teachings were not applied in any rejection of the application claims during prosecution of the application that led to the '970 patent, and because these teachings are not cumulative to the applied prior art, Hammond raises a substantial new question of patentability. (Williams, ¶122). A detailed explanation of the pertinency and manner of applying Hammond in combination with Kubala to claims 2 and 10-13 is provided below in Section IX.A.

C. Johnson prevents a user from closing a mandatory-response message that has not been responded to

Johnson (attached hereto as EX1007)—when viewed in combination with Hammond—presents new information about preexisting technology that was not considered during the initial examination of the '970 patent by the USPTO. Because it was not considered by the Examiner, Johnson was not applied in any rejection of the application claims during prosecution of the '970 patent. Johnson issued on June 28, 1994 (*see* Johnson, (45)) and is, therefore, prior art under 35 U.S.C. § 102(b). (Williams, ¶123)

Like Hammond, Johnson also discloses methods and systems for ensuring responses to outgoing electronic messages. (*See* Johnson, Abstract.) Specifically, Johnson discloses that a recipient of a message may be "prohibited from performing a selected action until the specific response has been entered by the recipient." (*Id.*; *see* also Williams, ¶124).

Johnson includes "a mechanism for **forcing** a recipient to reply to an electronic mail object with data." (Johnson, 4:3-6.) Johnson also states that "the sender of the electronic mail object may **mark or associate an attribute with the electronic mail object such that it** *cannot* **be exited out of** until the appropriate reply has been made. These attributes are called 'persistent reply attributes'." (*Id.*, 4:28-32.) And Johnson explains that "[t]he electronic mail object may be in the form of text, an image, or a voice message." (*Id.*, 4:1-2.) Thus, Johnson's persistent reply attributes that mark or attach to a message reads on the claimed "forced message alert software packet." Accordingly, Johnson creates the claimed "forced message alert" because Johnson's persistent reply attributes attaching to a message reads on "attaching a forced message alert software packet to a voice or text message creating a forced message alert," as claimed. (Williams, ¶125).

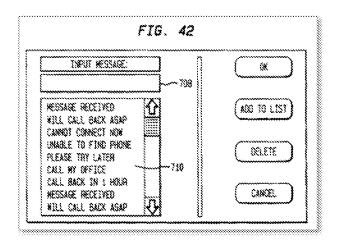
Because these teachings were not applied in any rejection of the application claims during prosecution of the application that led to the '970 patent, and because these teachings are not cumulative to the applied prior art, Johnson raises a substantial new question of patentability. (*Id.*,

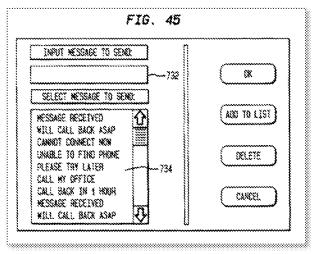
¶126). A detailed explanation of the pertinency and manner of applying Johnson in combination with Hammond to claims 1, 2, and 10-13 is provided below in Section IX.B.

D. Pepe discloses PDAs that provide an on-screen menu of possible responses to an incoming message

Pepe (attached hereto as EX1008)—when viewed in combination with Hammond and Johnson—presents new information about preexisting technology that was not considered during the initial examination of the '970 patent by the USPTO. Because it was not considered by the Examiner, Pepe was not applied in any rejection of the application claims during prosecution of the '970 patent. Pepe issued on April 21, 1998 (*see* Pepe, (45)) and is, therefore, also prior art under 35 U.S.C. § 102(b). (Williams, ¶127).

Pepe discloses PDAs that can send and receive electronic messages. For example, Pepe discloses "application software residing in the PDA" that is described in Pepe by "the screens displayed on a PCI subscriber's PDA." (Pepe., 34:10-15.) For example, Pepe's Figures 42 and 45 (reproduced below) are exemplary screens that may appear on a recipient's screen, including one with a list of possible responses (i.e., box 710 in Figure 42 and box 734 in Figure 45) to an incoming message. (*See id.*, 36:16-20, 36:38-51; *see* also Williams, ¶128.)





(Pepe, FIGS. 42, 45.)

Because these teachings were not applied in any rejection of the application claims during prosecution of the application that led to the '970 patent, and because these teachings are not

cumulative to the applied prior art, Pepe raises a substantial new question of patentability. (Williams, ¶129). A detailed explanation of the pertinency and manner of applying Pepe in combination with Hammond and Johnson to claims 1, 2, and 10-13 is provided below in Section IX.B.

IX. DETAILED EXPLANATION OF THE PERTINENCY AND MANNER OF APPLYING THE CITED PRIOR ART TO EVERY CLAIM FOR WHICH REEXAMINATION IS REQUESTED

The Office should grant reexamination of claims 2 and 10-13 of the '970 patent based on the two SNQs presented here: (1) Kubala in view of Hammond; and (2) Hammond and Johnson in view of Pepe. (Williams, ¶130).

A. SNQ 1: Kubala in view of Hammond renders claims 2 and 10-13 obvious.

Kubala in view of Hammond raises an SNQ as to whether claims 2 and 10-13 are unpatentable as being obvious under 35 U.S.C. § 103. As set forth above, the P.T.A.B. already determined in a Final Written Decision that claims 1 and 3-9 are unpatentable in view of Kubala and Hammond. (*Google*, IPR2018-01079, FWD.) And the Board concluded that Kubala teaches the "take control" limitation—the primary difference between the previously unchallenged claims and previously challenged claim 1 in IPR2018-01079. (*See id.*) Thus, as set forth in more detail below, claims 2 and 10-13 are obvious in view of Kubala and Hammond. (Williams, ¶131)

1. A skilled artisan would have been motivated to combine Kubala and Hammond to arrive at the claimed subject matter.

The FWD states that "Petitioner also articulates a rationale to combine Kubala with Hammond. See, e.g., Google, IPR2018-01079, FWD at 21–23; see also id. at 20 ("Like Kubala, Hammond discloses methods and systems for enhancing reliability of electronic messaging"), 33). And the P.T.A.B. agreed with Petitoner that "a skilled artisan would have been motivated to combine these references [Hammond with Kubala] because both are directed to tracking responses to mandatory-response messages, and both disclose use of acknowledgement receipts." (Id. at 38; see also id. at 37, 39, 56.)

The P.T.A.B. also states in the Final Written Decision:

As noted above, Petitioner asserts claims 1 and 3–9 of the '970 patent would have been obvious over the combination of Kubala and Hammond. Pet. 12; Pet. Reply

2–15. Patent Owner contends Petitioner has not shown unpatentability of claims 1 and 3–9 on this ground. PO Resp. 14–28; Surreply 7–15. For the reasons stated below, we determine Petitioner has demonstrated, by a preponderance of the evidence, that claims 1 and 3–9 are unpatentable under § 103 as obvious over the combination of Kubala with Hammond.

(*Id.* at 29.)

A POSA would have been motivated to combine Kubala and Hammond because they are both directed to the same field of endeavor and attempt to solve the same problem—i.e., to ensure that important electronic messages receive timely responses. (*See* Kubala, ¶72, Abstract; Hammond, 1:54-62, Abstract.) A POSA would have been further motivated to combine Kubala with Hammond because Kubala provides additional details for features that are mentioned as part of the system in Hammond; for example, Hammond discloses that electronic messages may be transmitted via "wireless RF" (*see* Hammond, 4:33-38), and Kubala provides details about these types of wireless communications. (*See* Kubala, ¶27, FIG. 1A; *see* Williams, ¶¶73-100, 132-134.)

Moreover, given that Kubala explicitly discloses that a receiving email application may collect and record information about the manner in which a recipient responds to an email message that has a mandatory-response flag (*see* Kubala, ¶¶50-51, 61, FIG. 9), implementing Hammond's tracking features in Kubala's system would have been an obvious design choice. (*See SDI Techs.*, *Inc.*, *v. Bose Corp.*, IPR2013-00350, FWD at 26 (P.T.A.B. Nov. 7, 2014) (holding that the use and arrangement of "known elements would have been an obvious matter of design choice") (EX1021).) Because Hammond merely discloses details about tracking features that are already suggested by Kubala's system that collects and records information about the recipients response to a message, this combination of Kubala and Hammond would not "result in a difference in function or give unexpected results," so this type of combination, which is recited in the claims, is unpatentable as an obvious design choice. (*See In re Rice*, 341 F.2d 309, 314 (C.C.P.A. 1965); *see also* Williams, ¶135.)

In fact, the combination of Kubala's email system with Hammond's tracking features "represents no more than 'the predictable use of prior art elements according to their established functions," of sending mandatory-response emails and tracking responses to such emails, which is

an obvious combination "as a matter of law." (*Wyers v. Master Lock Co.*, 616 F.3d 1231, 1245 (Fed. Cir. 2010) (quoting *KSR*, 550 U.S. at 417); *see also Ball Aerosol & Specialty Container, Inc. v. Ltd. Brands, Inc.*, 555 F.3d 984, 993 (Fed. Cir. 2009) (a "predictable variation" is obvious as a matter of law); *see also* Williams, ¶136.)

2. The combination of Kubala and Hammond renders claims 2 and 10-13 obvious.

(a) Dependent Claim 2

Kubala and Hammond teach or suggest each and every feature recited in dependent claim 2 and independent claim 1 from which claim 2 depends. A POSA would have been motivated to combine Kubala and Hammond for the reasons set forth above. Thus, dependent claim 2 is obvious over Kubala and Hammond. (Williams, ¶137-138).

While Patent Owner argued that Kubala and Hammond do not disclose portions of 1.5, 1.6, 1.7, and 1.9, in the Final Written Decision, the P.T.A.B. stated "[u]pon review of the record, we determine Petitioner has shown, by a preponderance of the evidence, that claim 1 is unpatentable as obvious over the combination of Kubala with Hammond." (*Google*, IPR2018-01079, FWD at 32-33; *see* also *id.* at 34-60.)

[1.P] A communication system for transmitting, receiving, confirming receipt, and responding to an electronic message, comprising:

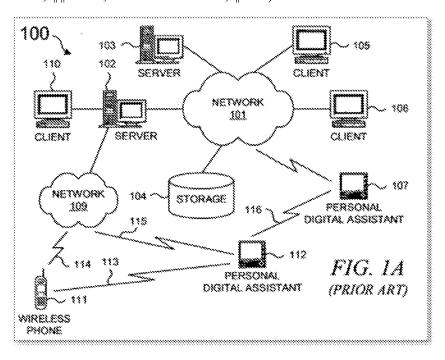
The Board agreed that Kubala teaches the preamble. (*See Google*, IPR2018-01079, FWD at 33-34.) The Board stated that Patent Owner did not provide arguments contesting Petitioner's assertions regarding the preamble. (*See id.* at 33; *see also* Williams, ¶139.)

To the extent the preamble is limiting, Kubala discloses a communication system for transmitting, receiving, and responding to an electronic message. (*See* Kubala, (54), Abstract.) Kubala also discloses that the communication system was known to "generate return receipts to the sender when the sender's e-mail message is received at its intended destination or when the recipient opens the e-mail message, thereby providing an acknowledgment that a particular message has been received and/or opened." (*Id.*, ¶6.) Kubala therefore expressly teaches or suggests this limitation. (*See* Williams, ¶140.)

[1.1] a predetermined network of participants, wherein each participant has a similarly equipped PDA/cell phone that includes a CPU and a touch screen display a CPU [sic] and memory;

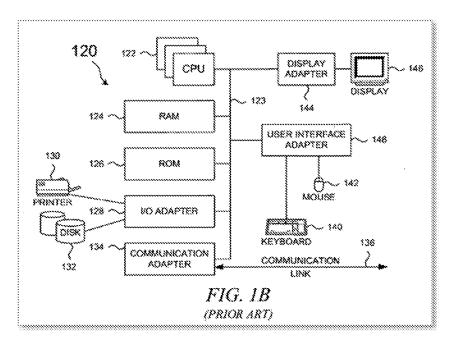
The Board agreed that Kubala teaches limitation 1.1. (*See Google*, IPR2018-01079, FWD at 33-34.) The Board stated that Patent Owner did not provide arguments contesting Petitioner's assertions regarding the limitation 1.1. (*See id.* at 33; *see also* Williams, ¶141.)

Kubala discloses this limitation. The predetermined network of participants is shown in Kubala's Figure 1A (reproduced below), which includes a plurality of personal digital assistants 107, 112. (*See* Kubala, ¶¶26-27; *see also* Williams, ¶142.)



(Kubala, FIG. 1A.)

Kubala's Figure 1B (reproduced below) illustrates that each PDA/cell phone includes at least one CPU 122, a memory 124, 126, and a user interface adapter 148, which Kubala describes as being coupled to a touch-screen display. (*See* Kubala, ¶¶29-30; *see also* Williams, ¶143.)



(Kubala, FIG. 1B.)

[1.2] a data transmission means that facilitates the transmission of electronic files between said PDA/cell phones in different locations;

The Board agreed that Kubala teaches limitation 1.2. (*See Google*, IPR2018-01079, FWD at 33, 35-36.) The Board stated that Patent Owner did not provide arguments contesting Petitioner's assertions regarding the limitation 1.2. (*See id.* at 33; *see also* Williams, ¶144.)

Kubala discloses this feature. The recited "data transmission means" encompasses a PDA that communicates according to peer-to-peer communications (e.g., WiFi or WiMax) or another messaging protocol (e.g., SMS or TCP/IP). (*See* Section VI.A.) Kubala supports a network 109, a client 110, and PDAs/cell phones 112 that (1) "communicate with one another" using, for example, "Transport Control Protocol/Internet Protocol (TCP/IP)" or (2) "directly transfer data between themselves" using, for example, "BluetoothTM wireless technology or WiFi technology (IEEE 802.11)." (Kubala, ¶¶26-27, FIG. 1A.) Kubala therefore expressly discloses this limitation. (*See* Williams, ¶145.)

[1.3] a sender PDA/cell phone and at least one recipient PDA/cell phone for each electronic message;

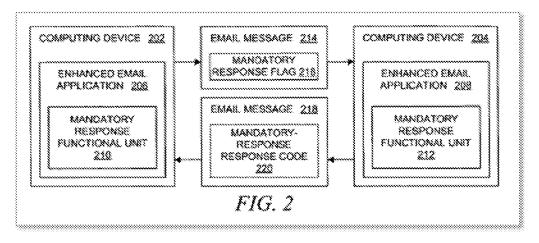
The Board agreed that Kubala teaches limitation 1.3. (*See Google*, IPR2018-01079, FWD at 33, 36.) The Board stated that Patent Owner did not provide arguments contesting Petitioner's assertions regarding the limitation 1.3. (*See id.* at 33; *see also* Williams, ¶146.)

Kubala discloses a plurality of PDAs/cell phones that communicate with each other. (Kubala, ¶¶27, 32-33, FIG. 1A.) In other words, one PDA/cell phone sends an electronic message (i.e., "a sender PDA/cell phone") and another PDA/cell phone receives it (i.e., a "recipient PDA/cell phone"). (*See* Williams, ¶147.)

[1.4] a forced message alert software application program including a list of required possible responses to be selected by a participant recipient of a forced message response loaded on each participating PDA/cell phone;

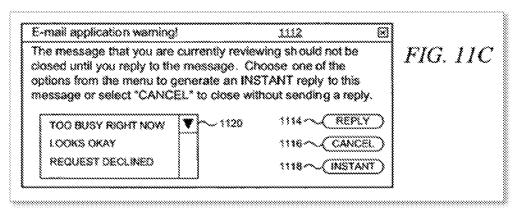
The Board agreed that Kubala teaches limitation 1.4. (*See Google*, IPR2018-01079, FWD at 33, 36.) The Board stated that Patent Owner did not provide arguments contesting Petitioner's assertions regarding the limitation 1.4. (*See id.* at 33; *see also* Williams, ¶148.)

Kubala discloses this limitation. Kubala's Figure 2 (reproduced below) illustrates an enhanced email application 208 that includes a mandatory-response functional unit 212. The combined enhanced email application 208 and mandatory-response functional unit 212 read on the claimed "forced message alert software application program." Referring to Figure 2, Kubala explains that the mandatory-response functional unit 212 provides an email message 218 in response to an email message 214 with a mandatory-response flag 216. (Kubala, ¶35; *see also id.*, ¶¶13, 33, 36; *see also* Williams, ¶149.)



(Kubala, FIG. 2.)

Kubala also discloses the claimed "list of required possible responses to be selected by a participant recipient of a forced message response loaded on each participating PDA/cell phone." Kubala's Figure 11C (reproduced below) shows an example of alerting a user by displaying a menu 1120 of possible responses to a sender's message. Kubala explains that a recipient's selection of one of the "quick response[s]" in menu 1120 fulfills "the sender's request that the recipient is required to provide a mandatory response." (Kubala, ¶¶22, 47, 57; see also id., ¶¶54-55, 60; Williams, ¶150.)



(Kubala, FIG. 11C.)

Kubala's Figure 11A (reproduced below) shows an example of alerting a user by displaying a warning message 1102 when an e-mail message that contains a mandatory request flag is received, and that the recipient "*must* provide a reply message in response to the original message." (Kubala, ¶54; *see also* Williams, ¶151-152.)

11A

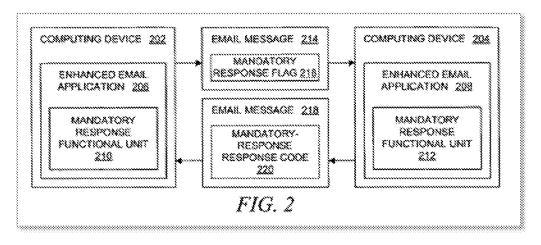
E-mail application warning!	1102	
The message that you are currently	reviewing cannot be closed	FIG.
until you reply to the message.	1104~(OK)	

(Kubala, FIG. 11A.)

[1.5] means for attaching a forced message alert software packet to a voice or text message creating a forced message alert that is transmitted by said sender PDA/cell phone to the recipient PDA/cell phone, said forced message alert software packet containing a list of possible required responses and requiring the forced message alert software on said recipient PDA/cell phone to transmit an automatic acknowledgment to the sender PDA/cell phone as soon as said forced message alert is received by the recipient PDA/cell phone;

The Board agreed that Kubala teaches limitation 1.5. Although Patent Owner contended that Kubala does not teach limitation 1.5 because a "forced message alert" must be "forced to the display without any action on the part of the recipient", the P.T.A.B. rejected that contention. (*See Google*, IPR2018-01079, FWD at 42; *id.* at 39-42; *see also* Williams, ¶153.)

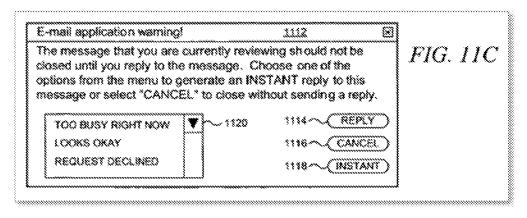
Kubala teaches or suggests both the structure and function required by this limitation. Again, the structure for the recited "means for attaching . . ." is a software application program on a PDA that performs the recited function. (*See supra* Section VI.B.) Like this structure, Kubala discloses an enhanced email application 206 on a computing device (e.g., PDA) 202, as illustrated in Figure 2 (reproduced below). (*See* Kubala, ¶¶33-36; *see also* Williams, ¶154.)



(Kubala, FIG. 2.)

Kubala also discloses the claimed functions. The claimed "forced message alert software packet" is met by Kubala's disclosure of a mandatory-response flag 216 that is attached to an email message 214, as illustrated in Figure 2 (above). Kubala explains that e-mail message 214 may be a text message, voicemail message, audio message, video message, or other type of message. (Kubala, ¶32.) Kubala also explains that "[m]andatory response flag 216 may be implemented in a variety of data formats" (*Id.*, ¶35; *see also id.*, ¶¶36-41, 54-61, FIGS. 3-4; *see also* Williams, ¶155.) Thus, Kubala creates the claimed "forced message alert." For example, Kubala's mandatory-response flag 216 that is attached to email message 214 reads on "attaching a forced message alert software packet to a voice or text message creating a forced message alert" as claimed.

Kubala also discloses the claimed "list of possible required responses." Kubala's Figure 11C (reproduced below) illustrates an example of alerting a user by displaying a menu 1120 of possible responses that a recipient may choose from in order to respond to a sender's message. (Kubala, ¶22, 47, 57.) And Kubala discloses that, in one embodiment, the "text strings that are used as menu items" may be "extracted from the original e-mail message that was received from the sender" (*Id.*, ¶57; *see also id.*, ¶40-41.) This disclosure from Kubala teaches or suggests the claimed function that the "forced message alert software packet contain[s] a list of possible required responses." (*See* Williams, ¶156.)



(Kubala, FIG. 11C.)

Moreover, Kubala teaches or suggests the claimed functionality of "requiring the forced message alert software on said recipient PDA/cell phone to transmit an automatic acknowledgment to the sender PDA/cell phone as soon as said forced message alert is received by the recipient PDA/cell phone." In fact, Kubala discloses that it was known "to generate return receipts to the sender *when* the sender's email message is received at its intended destination or *when* the recipient opens the e-mail message, thereby providing an acknowledgment that a particular message has been received." (Kubala, ¶6.) Based on these teachings in Kubala, a POSA would have understood that the condition that causes the acknowledgement to be sent back to the sender is a configurable parameter which could be set to occur when the sender's email message is received at its intended destination or, in other words, as soon as it is received at the recipient's device. (*See* Williams, ¶¶157-160.)

[1.6] means for requiring a required manual response from the response list by the recipient in order to clear recipient's response list from recipient's cell phone display;

The Board agreed that Kubala teaches limitation 1.6. Although Patent Owner argued that the Petition presents no obviousness analysis or motivation to combine distinct embodiments in Kubala, the Board disagreed, explaining that "Kubala itself teaches that the scenarios shown in Figures 11A through 11D can be combined in different ways." (*Google*, IPR2018-01079, FWD at 46; *id.* at 39, 42-48; *see also* Williams, ¶161.)

Kubala teaches or suggests both the structure and function required by this limitation. Again, the structure for the recited "means for requiring . . ." is a software application program on a PDA

that performs the recited function. (*See supra* Section VI.C.) Like this structure, Kubala discloses an enhanced email application 206 on a PDA. (Kubala, ¶¶33-36, FIG. 2; *see also* Williams, ¶162.)

Kubala also discloses the required functions. "The e-mail application may indicate the presence of a mandatory response flag: using a message within a pop-up window; other information within a status bar; through the use of colors on a display screen; or through **some other means of** *alerting the user*." (*See* Kubala, ¶47.) Again, Kubala discloses "diagrams that represent a set of GUI windows **through which** *an e-mail application alerts a user* by displaying warning messages and error messages to the user as a result of a user action when the e-mail application has an e-mail message that contains a mandatory request flag." (*See id.*, ¶22.) An example of the GUI window alert includes a menu of possible responses from which a recipient can choose (*see id.*, ¶47, 57, FIG. 11C (menu 1120)) which satisfy the claimed "response list." (Williams, ¶163).

Although the specific embodiment illustrated in Figure 11C shows that a user can "select 'CANCEL' to close without sending a reply," Kubala also explicitly teaches that "the recipient can be *prevented* from closing a review of the received e-mail message, from deleting the received e-mail message, and from exiting the e-mail application until the recipient has responded to the received email message." (*Id.*, ¶9, FIG. 11C; *see also id.*, ¶55.) Moreover, Kubala also discloses that a recipient being required to respond to a mandatory-response message is a configurable feature. (*See id.*, ¶¶9, 54-55, 59-60.) For example, the recipient may be required to respond "when the recipient first reviews the e-mail message." (*Id.*, ¶60.)

These disclosures teach or suggest the claimed requirement that a response is required "in order to clear recipient's response list from recipient's cell phone display." (*See* Williams, ¶¶161-166.)

[1.7] means for receiving and displaying a listing of which recipient PDA/cell phones have automatically acknowledged the forced message alert and which recipient PDA/cell phones have not automatically acknowledged the forced message alert;

Kubala discloses the claimed structure and the claimed function of this limitation. Hammond also discloses the claimed function of this limitation. The Board agreed, stating that "Patent Owner's contentions and arguments do not undermine Petitioner's showing" and concluding that

"Kubala teaches limitation 1.7." (See Google, IPR2018-01079, FWD at 57-58; see also id. at 39, 55-59; see also Williams, ¶167).

Again, the structure for the recited "means for receiving . . ." is a software application program on a PDA that performs the recited function. (*See supra* Section VI.D.) Like this structure, Kubala discloses an enhanced email application 206, 208 that includes mandatory-response functional unit 210, 212 on a PDA. (*See* Kubala, ¶¶33-36, FIG. 2.) Kubala further explains that it was known to automatically acknowledge receipt of an electronic message. (*See id.*, ¶6.) In addition, Kubala explicitly discloses that the receiving e-mail application may collect and record information about the manner in which the recipient responds to an e-mail message that has a mandatory-response flag. The information may include mandatory-response return-status codes included within the reply e-mail. (*Id.*, ¶¶50-51, 61, FIG. 9.) A POSA would have known that a listing of the recorded information regarding the responses or automatic acknowledgements were accessible. (*See* Williams, ¶168.)

To the extent it is argued that Kubala does not teach this limitation, Hammond also states that "the recipient computer systems provide receipts when messages are received and when messages are reviewed" (Hammond, 5:20-23; *see also id.*, Abstract, 2:11-18.) These acknowledgement receipts are tracked in Hammond's Message Tracking Tables, as depicted in Figure 2 (reproduced below), and are described throughout the specification. (*See id.*, 3:1-4:28, 5:31-37, 6:56-8:45, 10:6-22; *see* Williams, ¶169.)

						127		
Row/ Colum	1	2	3	1	5	7 6	7	8
33	Mossago ID	Recipien t ID	Sensi Time	Delisery Time	Review Time	Resend Time Period	Review Reminds r Time	Post- Review Tima
	<u> </u>						Period	Period
Ī	1	ABC	07/26/XX 18:26:33	97/26/XX 18/28:15	67/28/XX 10:12:33	1 hour	1 day	1 hour
2	1	BCD	97/26/XX 8:26:33	97/27/XX 99:15:12	87/ 27/XX 11:33:37	2 hours	18 hours	
3	1	CDE	97/28/XX 10:05:10		97/30/XX 99:08:13		2 days	i day
4	3	ABC	09/10/XX 09:16:13	08/10/XX 09:16:17	***************************************	minute		
į								
	1	3	Message To	eking Tabk	(continuo)	i	127	<u> </u>
	Row/	9	Visange Tra	icking Table	(continued	i) 	127	<u></u>
	Row/ Column	ġ	10	} }	13		14	
	i 9	9 Resend	10 Review	II Post-	12 Resend	13 Review	14 Fost-	
	Column	ġ	10	} }	13		14	
	Column	9 Resend	10 Review Reminder	II Post- Review	12 Resend Options High	13 Review Reminder	14 Post- Review	,
	Column	9 Resend	10 Review Reminder Record 97/27/XX	H Post- Review Record 07/28/XX	12 Resend Options	13 Review Reminder Options High	14 Fost- Review Options Message	,
	Colema \ \ 2	9 Resend Repord	10 Review Reminder Record 97/27/XX	H Post- Review Becord 07/28/XX 11:13:90	12 Resend Options High Priority Man	Review Reminder Options High Urgency Template X	Post- Review Options Message Y	,
	Column	9 Resend Record 07/26/XX 20:26/45 07/26/XX	10 Review Reminder Record 97/27/XX	H Post- Review Record 07/28/XX	12 Resend Options High Priority Man	Review Reminder Options High Urgency Template	Post- Review Options Message Y	
	Colema \ \ 2	9 Resend Record 07/26/XX 20:26/45 07/26/XX	10 Review Reminder Record 97/27/XX	Foat- Review Record 97/28/XX 11:13:00	12 Resend Options High Priority Man	Review Reminder Options High Urgency Template X	Post- Review Options Message Y	
	Colema \ \ 2	9 Resend Record 07/26/XX 20:26/45 07/26/XX	10 Review Reminder Record 97/27/XX	11 Foat- Review Record 97/28/XX 11:13:00 07/31/XX 69:30:00 08/01/XX	12 Resend Options High Priority Man	Review Reminder Options High Urgency Template X	Post-Review Options Message Y Templat 8 Templat	
	Coloms	9 Resend Record 07/26/XX 20:26/45 07/26/XX	10 Review Reminder Record 97/27/XX	11 Foat- Review Record 97/28/XX 11:13:00 07/31/XX 69:30:00 08/01/XX	12 Resend Options High Priority Man	Review Reminder Options High Urgency Template X	Post-Review Options Message Y Templat 8 Templat	

(Hammond, FIG. 2.)

A POSA would have been motivated to combine Hammond with Kubala based on the disclosures in the references themselves, particularly as they relate to exchanging and tracking recipient-device acknowledgements. (*See supra*, Section IX.A.1) Again, Kubala generally discloses that it was known to provide acknowledgement receipts (*see* Kubala, ¶6), and record details about the responses to the emails with mandatory-response flags. Hammond also discloses

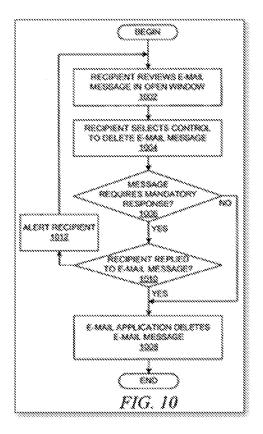
acknowledgement receipts and how to track these acknowledgement receipts. Because these disclosures in Kubala and Hammond are all directed to tracking responses to mandatory-responses messages, these disclosures would have motivated a POSA to combine Hammond and Kubala. (*See* Williams, ¶170-171.)

[1.8] means for periodically resending said forced message alert to said recipient PDA/cell phones that have not automatically acknowledged the forced message alert; and

The Board agreed that Kubala teaches limitation 1.8. (*See Google*, IPR2018-01079, FWD at 33, 37-39.) The Board stated that Patent Owner did not provide arguments contesting Petitioner's assertions regarding the limitation 1.8. (*See id.* at 33; *see also* Williams, ¶172.)

Kubala discloses the claimed structure, and Kubala and Hammond disclose the claimed function of this limitation. The structure for the recited "means for periodically . . . " is a software application program on a PDA that performs the recited function. (*See supra* Section VI.E.) Like this structure, Kubala discloses an enhanced email application 208 that includes mandatory-response functional unit 212 on a PDA. (*See* Kubala, ¶¶33-36, FIG. 2; *see* Williams, ¶173.)

Kubala discloses that when a reply to an email message with an associated mandatory-response flag has not been made, the enhanced email application 208 loops back to alert the recipient via 1012, as illustrated in Figure 10 (reproduced below). The looping back at 1012 has the effect of resending the message to the user until the user replies to the received e-mail message as required. (*See* Kubala, ¶53, FIG. 10.) Thus, Kubala teaches or suggests the claimed function of "periodically resending" a forced-message alert that was not acknowledged. (*See* Williams, ¶¶174-175.)



(Kubala, FIG. 10.)

To the extent that it is argued that Kubala does not teach this limitation, Hammond's "system tracks whether each message has been delivered and reviewed by to [sic] each recipient, and uses the message information to resend the messages whose delivery or review is not confirmed." (Hammond, 2:47-50; *see also id.*, Abstract, 2:1-8, 4:21-28, 5:5-6:20, 6:66-7:63, 10:48-63, FIGS. 2, 3A, 3B, 4, 5A, 5B; Williams, ¶176.)

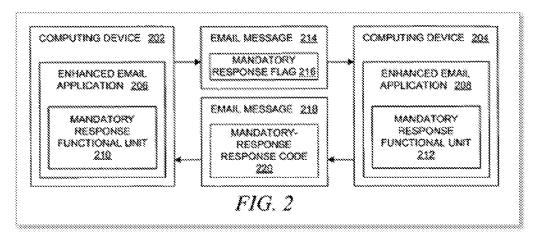
[1.9] means for receiving and displaying a listing of which recipient PDA/cell phones have transmitted a manual response to said forced message alert and details the response from each recipient PDA/cell phone that responded.

The Board stated that "Patent Owner does not provide argument specific to limitation 1.9. For the foregoing reasons, we find Petitioner has made a persuasive showing as to limitation 1.9 in view of Kubala." (See Google, IPR2018-01079, FWD at 60; see also id. at 39, 59-60; see also Williams, ¶177.)

Kubala and Hammond disclose this limitation. The structure for this "means for . . ." limitation is a software application program on a PDA that performs the recited function. (*See supra* Section VI.F.) Like this structure, Kubala discloses an enhanced email application 206, 208 and a mandatory-response functional unit 210, 212 on a PDA, which together are designed to receive and display a listing of which recipient PDA/cell phones have transmitted a manual response to said forced-message alert, and details the response from each recipient PDA/cell phone that responded. (*See* Kubala, ¶¶0033-0036, 0050-0051, 0061, FIG. 2; Williams, ¶178.)

Kubala's Figure 2 (reproduced below) shows that a sending PDA (e.g., computing device 202) can receive and display a response (e.g., email message 218) from a recipient PDA (e.g., computing device 204). (*See* Kubala, ¶¶26-41.) This disclosure from Kubala meets the claimed requirement to receive and display details of the response from each recipient PDA/cell phone that responded. (*See* Williams, ¶¶179-181.)

Kubala also discloses "receiving and displaying a listing of which recipient PDA/cell phones have transmitted a manual response to said forced message alert." For example, Kubala states that the receiving e-mail application 208 (shown above) may collect and record information about the manner in which the recipient responds to an e-mail message that has a mandatory-response flag. The information may include mandatory-response return-status codes included within the reply e-mail. (Kubala, ¶¶50-51, 61, FIG. 9.) Further, a POSA would know that a listing of the recorded information regarding the responses to e-mail messages were available and accessible. (*See* Williams, ¶182.)



(Kubala, FIG. 2.)

Hammond also provides this disclosure. Hammond discloses a "Message Receipt Tracker component [that] attempts to identify when sent messages have been delivered to recipients and when sent messages have been reviewed by recipients." (Hammond, 5:17-20; *see also id.*, 5:20-6:55.) Hammond's Figure 2 (reproduced below) shows a Message Tracking Table that includes detailed information about electronic messages that have been read by recipients. (*See id.*, 6:56-8:45.) And Hammond discloses a Message Receipt Tracker routine (*id.*, FIG. 4, 10:5-47) and a Message Tracking Table Processor routine. (*Id.*, FIGS. 5A and 5B, 10:48-11:48; *see* Williams, ¶183.)

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(Hammond, FIG. 2.)

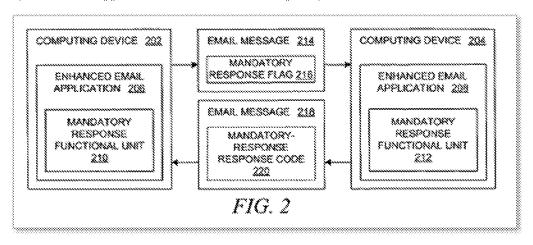
A POSA would have been motivated to combine Hammond with Kubala based on the disclosures in the references themselves, particularly as they relate to exchanging and tracking recipient-device acknowledgements. (*See supra*, Section IX.A.1) Again, Kubala generally discloses that it was known to provide acknowledgement receipts, (*see* Kubala, ¶6), and record details about the responses to the emails with mandatory-response flags. Hammond also discloses acknowledgement receipts and how to track these acknowledgement receipts. Because these

disclosures in Kubala and Hammond are all directed to tracking responses to mandatory-responses messages, these disclosures would have motivated a POSA to combine Hammond and Kubala. (*See Williams*, ¶184; *see supra* Section IX.A.1.)

[2.P] The system as in claim 1, wherein the forced message alert software application program on the recipient PDA/cell phone includes:

The primary difference between previously unchallenged claim 2 and previously challenged claim 1 is a so-called "take control" limitation of 2.2. (*See Google*, IPR2018-01079, FWD at 51-54.) The Board noted, however, that Kubala teaches this "take control" limitation. (*Id.*) Thus, as set forth in more detail below, claim 2 is obvious in view of Kubala and Hammond. (Williams, ¶185

To the extent the preamble is limiting, Kubala discloses the claimed "forced message alert software application program" as a combination of an enhanced email application 208 and mandatory response functional unit 212, on a receiving computing device (e.g., PDA) 204, as illustrated in Figure 2 (reproduced below). Kubala therefore expressly teaches or suggests this limitation. (*See* Kubala, ¶¶33-36; *see also* Williams, ¶186.)



(Kubala, FIG. 2.)

[2.1] means for transmitting the acknowledgment of receipt to said sender PDA/cell phone immediately upon receiving a forced message alert from the sender PDA/cell phone;

Kubala teaches or suggests both the structure and function required by this limitation. Again, the structure for the recited "means for transmitting . . ." is a software application program on the recipient PDA that performs the recited function. (*See supra*, Section VI.G.) Like this structure,