United States Patent and Trademark Office

Before the Patent Trial and Appeal Board

Google LLC, Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., LG Electronics Inc., and LG Electronics U.S.A., Inc.

(Petitioners)

v.

Parus Holdings Inc.

(Patent Owner)

Inter Partes Review

No. IPR2020-00846 | **U.S. Patent No. 7,076,431**

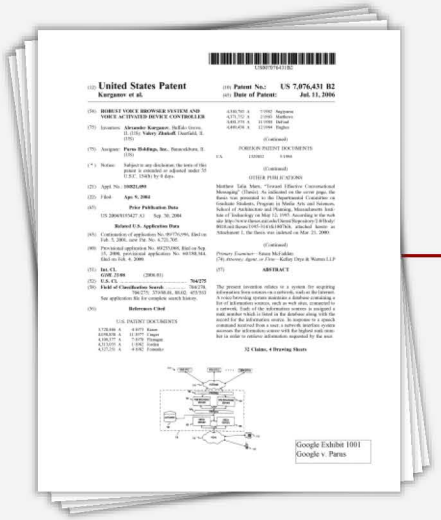
No. IPR2020-00847 | **U.S. Patent No. 9,451,084**

Petitioners' Demonstrative Exhibits

Google Exhibit 1058
Google v. Parus
IPR2020-00846

July 27, 2021

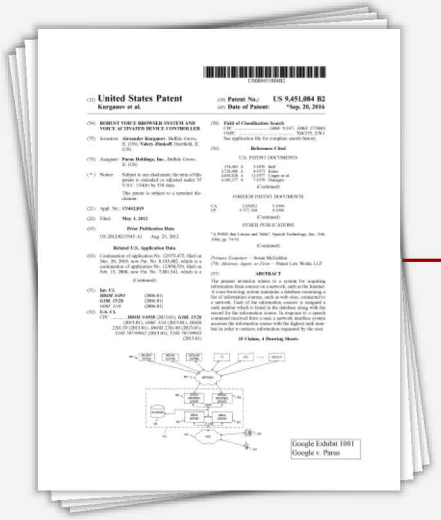
The Parus Patents



The ’431 Patent

(57) **ABSTRACT**

The present invention relates to a system for acquiring information from sources on a network, such as the Internet. A voice browsing system maintains a database containing a list of information sources, such as web sites, connected to a network. Each of the information sources is assigned a rank number which is listed in the database along with the record for the information source. In response to a speech command received from a user, a network interface system accesses the information source with the highest rank number in order to retrieve information requested by the user.



The ’084 Patent

Disputed Issues

Kovatch-based grounds

- Whether Kovatch modified based on Neal meets the independent claims' sequential access limitation
- Whether there is motivation for modifying Kovatch based on Neal
- Whether Parus met its burden to antedate Kovatch

Kurganov-262-based grounds

- Whether there is written description for the claims reciting periodically searching for new web sites ('084 claim 1; '431 claim 9) for entitlement to priority claim

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Kovatch/Neal Combination:
Sequential Access Limitation

Kovatch-Based Grounds – Sole Disputed Limitation

’431 Patent Claim 1

1. A system for retrieving information from pre-selected web sites by uttering speech commands into a voice enabled device and for providing to users retrieved information in an audio form via said voice enabled device, said system comprising:

a computer, said computer operatively connected to the internet;

a voice enabled device operatively connected to said computer, said voice enabled device configured to receive speech commands from users;

at least one speaker-independent speech recognition device, said speaker-independent speech recognition device operatively connected to said computer and to said voice enabled device;

at least one speech synthesis device, said speech synthesis device operatively connected to said computer and to said voice enabled device;

at least one instruction set for identifying said information to be retrieved, said instruction set being associated with said computer, said instruction set comprising:

a plurality of pre-selected web site addresses, each said web site address identifying a web site containing said information to be retrieved;

said plurality of web sites and, if said information to be retrieved is not found at said first web site, said computer configured to sequentially access said plurality of web sites until said information to be retrieved is found or until said plurality of web sites has been accessed;

set to obtain said information to be retrieved, said computer configured to first access said first web site of said plurality of web sites and, if said information to be retrieved is not found at said first web site, said computer configured to sequentially access said plurality of web sites until said information to be retrieved is found or until said plurality of web sites has been accessed;

said speech synthesis device configured to produce an audio message containing any retrieved information from said pre-selected web sites, and said speech synthesis device further configured to transmit said audio message to said users via said voice enabled device.

’084 Patent Claim 1

1. A system for acquiring information from one or more sources maintaining a listing of web sites by receiving speech commands uttered by users into a voice-enabled device and for providing information retrieved from the web sites to the users in an audio form via the voice-enabled device, the system comprising:

at least one computing device, the computing device operatively coupled to one or more networks;

at least one speaker-independent speech-recognition device, the speaker-independent speech-recognition device operatively connected to the computing device and configured to receive the speech commands;

at least one speech-synthesis device, the speech-synthesis device operatively connected to the computing device;

memory operatively associated with the computing device with at least one instruction set for identifying the information to be retrieved, the instruction set being associated with the computing device, the instruction set comprising:

a plurality of web site addresses for the listing of web sites, each web site address identifying a web site containing the information to be retrieved;

at least one recognition grammar associated with the

sites and, if the information to be retrieved is not found at the first web site, the computer configured to access the plurality of web sites remaining in an order defined for accessing the listing of web sites until the information to be retrieved is found in at least one of the plurality of web sites or until the plurality of web sites have been accessed;

identify new web sites and to add the new web sites to the plurality of web sites, the computing device configured to access a first web site of the plurality of web sites and, if the information to be retrieved is not found at the first web site, the computer configured to access the plurality of web sites remaining in an order defined for accessing the listing of web sites until the information to be retrieved is found in at least one of the plurality of web sites or until the plurality of web sites have been accessed;

the speech synthesis device configured to produce an audio message containing any retrieved information from the plurality of web sites, and

the speech synthesis device further configured to transmit the audio message to the users via the voice-enabled device.

Kovatch Discloses Retrieving Desired Information From Supplier Web Sites

'431 Petition at 13-17, 32;
'084 Petition at 42-45, 59;
'431 Reply at 17; '084 Reply at 21

Kovatch

d. Anita Query Engine (4)

Maps commands to an application defined using the HeyAnita Speech Objects 110 and Speech Applications 114, or HeyAnita function library (see example in Appendix A) and state machine definition language. An example of an application would be to obtain weather information using Yahoo! Web site. This would provide a user of the system the capability of listening to weather information for a set of cities or zip codes. The Anita Query Engine does the following:

1) Play voice prompts for the user to exactly identify an application
2) Generate web URLs to initiate execution of the selected application
3) Hand over control to the Anita State Machine and Web Parser, described below

* * * *

Example 2: Buying a CD

Assistant: How can I help you?
User: I want to buy the new Guns and Roses CD
Assistant: Please wait while I find the cheapest price for you. CD-now has it for eleven dollars and ten cents. Would you like to buy it now? ….

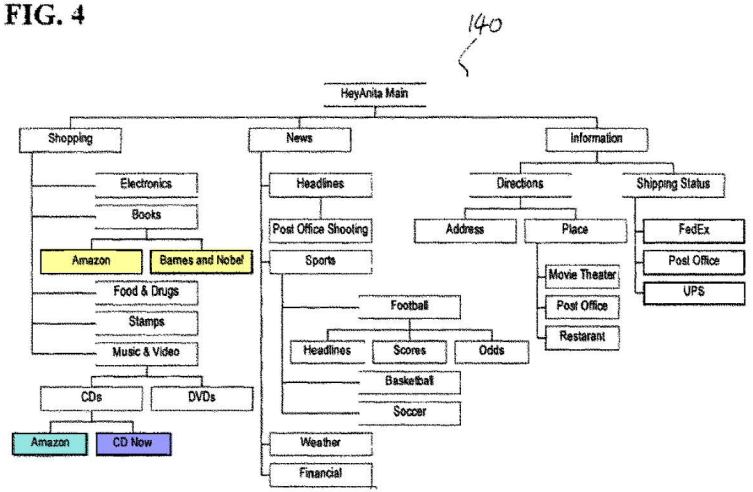
* * * *

Example 2: Buying a CD

Assistant: How can I help you?
User: I want to buy CDs
Assistant: Would you like to buy CDs from Amazon, CD Now or find the cheapest price.
User: I like Amazon.
Assistant: Please tell me the name of the CD or the artist…

Kovatch (Ex. 1005) at 15, 20-21, cited at '431 Petition at 14-15; '084 Petition at 42-43

FIG. 4



Kovatch (Ex. 1005) at Fig. 4, annotated in '431 Petition at 17; '084 Petition at 45

Feature: User Preferences

HeyAnita is a learning system. It keeps on accumulating information about how users interact with it and modifies its search mechanism based on users' navigational history and preferences.

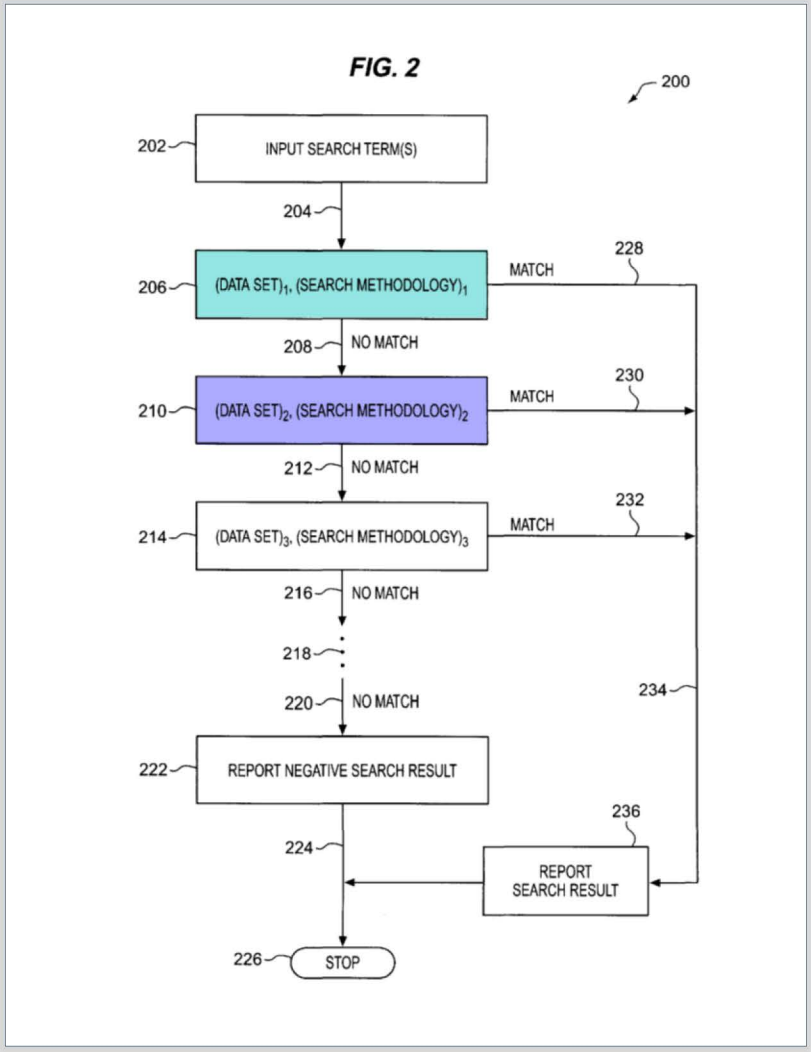
Example: If it finds that a particular user always buys books from Amazon, it will take him directly to "Buy Books from Amazon" when he says, "Buy Books"

Kovatch (Ex. 1005) at 23-24, cited at '431 Petition at 14-15; '084 Petition at 42-43

Neal Teaches to Access Sequentially to Efficiently Use Resources and Obtain the Desired Item

'431 Petition at 12-13;
'084 Petition at 40-41

Neal



Neal (Ex. 1007) at Fig. 2, cited at '431 Petition at 13; '084 Petition at 41

catalog. If the preferred supplier has the exact item, a match will be recognized by the algorithm **200** and the logic will proceed along schematic lines **228** and **234** until the results of the match are reported to the user in block **236**. The algorithm then preferably terminates in block **226**, although there may be additional steps associated with payment and order fulfillment.

If the first search methodology, as applied to the first data set, does not yield a match, the algorithm **200** proceeds along schematic line **208** to the second search strategy in block **210**. The second search strategy has a second data set and a second search methodology. In general, there is no requirement that the second data set must be different from the first data set. For example, if the first search strategy in **206** failed because there was no exact string match, it may be desirable to perform a stem search on the same data set. In that way, the preferred supplier may have more than one chance of identifying the desired item within its catalog.

Similarly, in the preferred embodiment there is no requirement that the second search methodology in **210** must be different from the first search methodology in **206**. For example, if the first preferred supplier did not yield an exact string match to the input search term, the same search methodology could be applied to a second preferred supplier's catalog.

* * * *

Continuing with FIG. **2**, if the second search strategy in **210** fails to yield a match, the algorithm **200** continues along **212** to the third search strategy in **214**, and thereafter along line **216** until a match is found. The three vertical dots shown in **218** are meant to schematically illustrate that the number of search strategies is arbitrary.

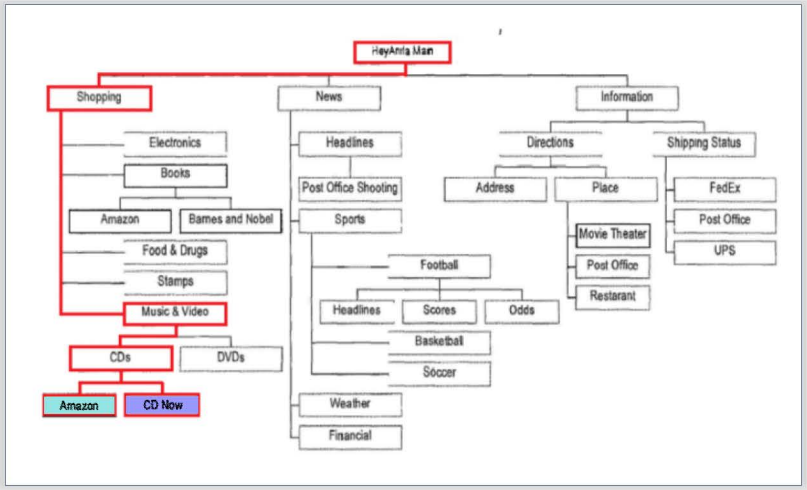
Neal (Ex. 1007) at 6:40-7:14, cited at '431 Petition at 12; '084 Petition at 40-41

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

The Kovatch/Neal Combination Applies Neal's Teaching to Search Suppliers Sequentially in Order

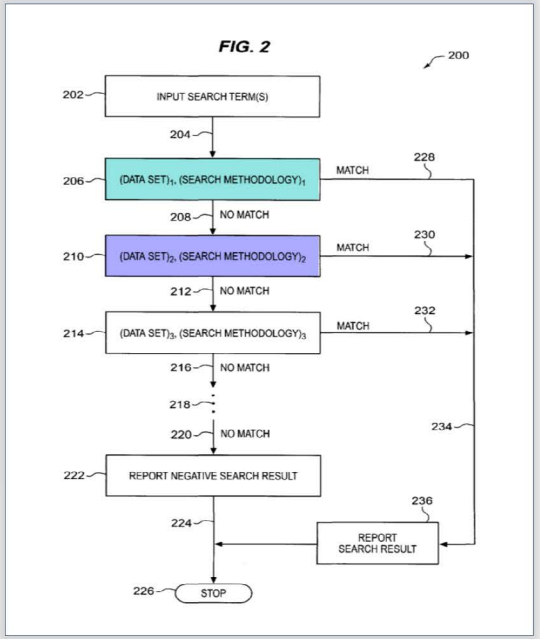
'431 Reply at 17;
'084 Reply at 21

Kovatch



Neal (Ex. 1007) at Fig. 2, cited at '431 Petition at 13; '084 Petition at 41

Neal



Kovatch (Ex. 1005) at Fig. 4, annotated in '431 Petition at 27; '084 Petition at 55

Petition

Neal teaches techniques for "optimiz[ing] [a] search process by identifying the desired item from the most advantageous supplier, while efficiently utilizing computing resources." *Neal*, Abstract. When, like in Kovatch, a user inputs a "search" for a "desired item" that may be "available from more than one supplier, Neal searches the suppliers' "data sets" "in a hierarchy" (*i.e.*, an ordered ranking) in which "more favored suppliers [are] searched first." *Neal*, 3:35-36, 2:54-57, 5:55-60; *Lipoff* ¶ 99. "If the preferred supplier" does not "ha[ve] the exact item," the search "proceeds… to the second" supplier, "and thereafter along [the hierarchy] until a match is found," as shown in FIG. 2 (reproduced below). *Neal*, 6:40-7:14; *Lipoff* ¶ 100. "Once the item has been found, the search… terminates…, thereby saving the computing resources from needless searches through the remaining data sets." *Neal*, 3:42-45. "[When] the search fails to identify the desired item from any [supplier],… a negative search result is reported to the user." *Neal*, 7:30-33; *Lipoff* ¶ 101.

* * * *

A POSA would have been motivated to apply Neal's above-described hierarchical ordering and search techniques when retrieving information from web sites in Kovatch's HeyAnita system, to achieve the benefits Neal describes of "maximiz[ing] the likelihood of finding the desired [information]" while "efficiently us[ing] computing resources" by "increasing the efficiency of the search process by first searching in the most desirable data sets." *Neal*, 4:65-5:2,

'431 Petition at 12-14 ('084 Petition at 40-42)

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

The Kovatch/Neal Combination Meets Limitation [1.j]

'431 Petition at 32-33;
'084 Petition at 60-61

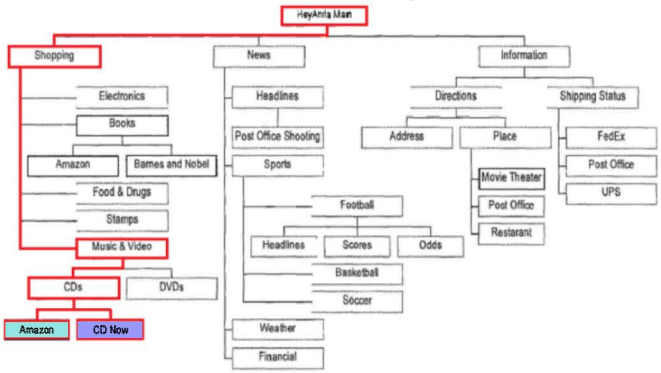
'431 Limitation [1.j]

said plurality of web sites and, if said information to be retrieved is not found at said first web site, said computer configured to sequentially access said plurality of web sites until said information to be retrieved is found or until said plurality of web sites has been accessed;

'084 Limitation [1.j]

sites and, if the information to be retrieved is not found at the first web site, the computer configured to access the plurality of web sites remaining in an order defined for accessing the listing of web sites until the information to be retrieved is found in at least one of the plurality of web sites or until the plurality of web sites have been accessed;

Kovatch



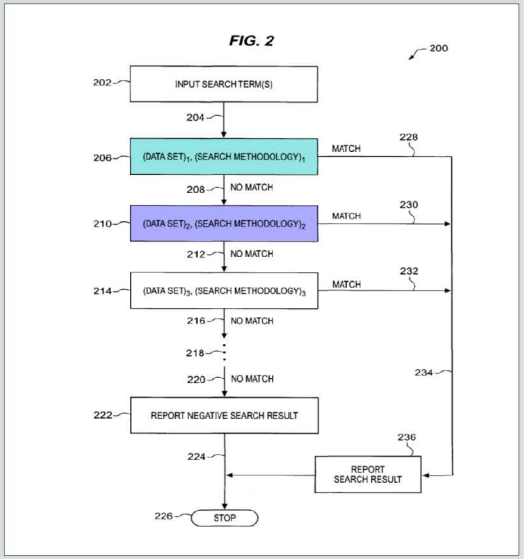
Kovatch (Ex. 1005) at Fig. 4, annotated in '431 Petition at 27; '084 Petition at 55

Petition

For instance, Kovatch describes an example where the user says, "I want to buy CDs," thereby requesting information (*e.g.*, price information) needed to buy CDs. *Kovatch*, 21:19-25, 20:29-21:3; *Lipoff* ¶ 105. Kovatch teaches that a plurality of web sites ("Amazon" and "CD Now") may contain the requested information, and the system learns that the user prefers Amazon. *Kovatch*, 21:22-24, 23:25-29, FIG. 4; *Lipoff* ¶ 105. In the Kovatch/Neal combination, the most preferred supplier (Amazon's web site) is accessed first (*Kovatch*, 21:19-25, 23:25-24:2), and if the requested information (*e.g.*, "the new Guns and Roses CD"—*Kovatch*, 20:31—analogous to Neal's search for "a red Bic pen"—*Neal*, 7:43-48) is not found at Amazon, then the next supplier in order of preference (CD Now's web site) is accessed. *See also Kovatch*, 24:1-2 with FIG. 4 (preferred Amazon web site searched first for books, before Barnes and Nobel); *Lipoff* ¶¶ 103-105.

'431 Petition at 14-15 ('084 Petition at 42-43)

Neal



Neal (Ex. 1007) at Fig. 2, cited at '431 Petition at 13; '084 Petition at 41

Parus's Arguments That Neal Does Not Teach Accessing Websites Fail to Address the Petition's Combination

'431 Reply at 16-20;
'084 Reply at 20-25

Parus's POR

First, as already noted, *Neal* does not teach accessing websites at all, and instead teaches accessing static datasets in a partitioned database. Ex. 1007 at Abstract. Ex. 2059 at ¶ 121. Neither the Petition, nor Mr. Lipoff, contend the contrary. Pet. at 12-15, Ex. 1002 at ¶¶ 98-106.

* * * *

In light of these explicit teachings from *Neal*, that a sequence of search algorithms should be used to avoid the drawbacks with the prior art, the Petition, and Mr. Lipoff propose a combination with *Neal* that employs a single keyword matching search strategy – which *Neal* explicitly teaches away from. Neither the Petition nor Mr. Lipoff's declaration explicitly say they are relying on the keyword search, but a close reading of the two demonstrates that is exactly what they are doing.

'431 POR at 37-38 ('084 POR at 43-45)

Board's Institution Decision:

Patent Owner contends that Neal does not teach claim limitation 1j because it does not disclose sequentially accessing web sites; rather, it describes accessing internal database files. Prelim. Resp. 46 (citing Ex. 1007, 4:6–12). This argument does not account for Petitioner's combination. As explained above, Petitioner cites Kovatch for a teaching of accessing web sites and Neal for a teaching of sequentially accessing data.

* * * *

Patent Owner further argues that the particular search strategies described in Neal, e.g., proximity searching and string matching, are not compatible with Kovatch, in that "[n]one of these are designed to sequentially access a plurality of pre-selected web sites until the desired information is retrieved." *Id.* at 48; *see also id.* at 39. More generally, Patent Owner argues that "Neal is disclosing sequentially applying search strategies, or algorithms, to data sets in an electronic catalog, not accessing web sites." *Id.* at 49; *see also id.* at 37 ("Neal does not disclose sequentially accessing pre-selected web sites; rather, the Neal disclosure relied on and identified by Petitioners discloses accessing pre-curated electronic catalogs, not web sites."). Petitioner, however, does not cite Neal for teachings of particular search strategies. Rather, Petitioner cites Kovatch for a teaching of searching web sites and Neal for a technique of sequentially searching data sets. Pet. 12–15. Thus, Patent Owner's argument is not persuasive. *See In re Keller*, 642 F.2d 413, 426 (CCPA 1981) ("[O]ne cannot show non-obviousness by attacking references individually where, as here, the rejections are based on combinations of references.").

'431 DI at 42-43 (see also '084 DI at 46)

The Kovatch/Neal Combination Uses Kovatch's Website Search Methodology on Each Website

'431 Reply at 17-20;
'084 Reply at 21-24

Parus's Sur-Reply

For example, Petitioners now argue that Kovatch is relied upon "for a teaching of searching web sites" and refer to "Kovatch's website search methodology," but there is no disclosure of website searching in Kovatch. (*See* Ex. 1005; Paper 22, 17). Petitioners are now relying on Kovatch's web parser to "search each individual website." *Id.* But a web parser, parses the HTML tags on a web page to expose or render the data to the user; it does not search any data, and Kovatch's web parser is no different.

'431 Sur-Reply at 16 ('084 Sur-Reply at 18)

Petition

j. [1.i] "said computer further configured to access at least one of said plurality of web sites identified by said instruction set to obtain said information to be retrieved"

Hey Anita's Web Parser (part of the Anita Server and Application Server computers) "***[n]avigate[s] to [a] destination***" web site identified by the instruction set executed by the Natural Language and Query Engines (*see* §§ VII.A.4.f-i above) "and ***retrieve[s] requested information***." *Kovatch*, 13:33-14:1, 15:1-34, 17:28-18:5; *Lipoff* ¶ 157.

'431 Petition at 32 ('084 Petition at 59)

Kovatch

e. Anita State Machine and Web Parser (8)

Anita State Machine and Web Parser executes state machines written using a proprietary function library. This retrieves information web sites and other applications that are enabled for this operation. In addition, its web-parsing function also allows Anita Query Engine to retrieve web pages from any conventional web site on the Internet and convert unstructured HTML data into meaningful structured data. It is not mandatory to make changes to existing web sites to make them work with Anita State Machine and Web Parser. An example of this would be the operations performed to pass in a zip code to the Yahoo web site, execute the form to retrieve the results, select and format the results, play relevant information in the form of concatenated speech fragments. In this scenario the Yahoo! web site was not modified to support the operations nor was it aware that a voice-enabled application was using its HTML based services.

Kovatch (Ex. 1005) at 15-16

Parus's New Argument That Kovatch Cannot Find Information to Be Retrieved from Websites Is Unsupported and Wrong

'431 Reply at 17-20;
'084 Reply at 21-24

Parus's Sur-Reply

For example, Petitioners now argue that Kovatch is relied upon "for a teaching of searching web sites" and refer to "Kovatch's website search methodology," but there is no disclosure of website searching in Kovatch. (*See* Ex. 1005; Paper 22, 17). Petitioners are now relying on Kovatch's web parser to "search each individual website." *Id.* But a web parser, parses the HTML tags on a web page to expose or render the data to the user; it does not search any data, and Kovatch's web parser is no different.

NO EVIDENTIARY SUPPORT

'431 Sur-Reply at 16 ('084 Sur-Reply at 18)

Petitioners' Expert

13. I understand that Parus's and Mr. Occhiogrosso's fourth and "[f]inal[]" argument is that "neither Mr. Lipoff nor the Petition explain how one would apply Neal's search techniques to web sites." Occhiogrosso-Decl., ¶¶ 128-129; POR, page 40. Again, I disagree because the Kovatch/Neal combination does information from an individual website. As I discussed in ¶¶ 5-11 above, the Kovatch/Neal combination uses ***Kovatch's*** search methodologies (*e.g.*, Kovatch's web parsing) to retrieve information from each of ***Kovatch's*** websites. My original declaration explained how a POSA would have applied Neal's sequential-search teaching to Kovatch's existing system that searches websites. For example, as I stated in ¶ 104 of my original declaration:

Ex. 1057 in IPR2020-00846, ¶ 13, cited at '431 Reply at 20;
[Ex. 1057 in IPR2020-00847, ¶ 21, cited at '084 Reply at 24-25]

'431 Limitation [1.i]

"access at least one of said plurality of web sites…to obtain said information to be retrieved"

Kovatch

e. ***Anita State Machine and Web Parser (8)***

Anita State Machine and Web Parser executes state machines written using a proprietary function library. This retrieves information web sites and other applications that are enabled for this operation. In addition, its web-parsing function also allows Anita Query Engine to retrieve web pages from any conventional web site on the Internet and convert unstructured HTML data into meaningful structured data. It is not mandatory to make changes to existing web sites to make them work with Anita State Machine and Web Parser. An example of this would be the operations performed to pass in a zip code to the Yahoo web site, execute the form to retrieve the results, select and format the results, play relevant information in the form of concatenated speech fragments. In this scenario the Yahoo! web site was not modified to support the operations nor was it aware that a voice-enabled application was using its HTML based services.

* * * *

Weather

- 5-day forecasts for weather in over 6,000 U.S. and International cities
- User can search for weather at a particular location by specifying city and state (U.S. only), zip code (U.S. only), or city and country (International)

Kovatch (Ex. 1005) at 15-16; 33

Kovatch's Websites Are Separately Searched Datasets

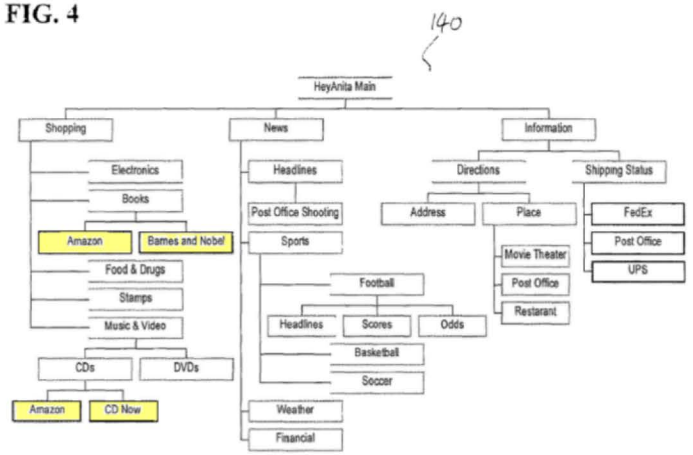
'431 Reply at 20;
'084 Reply at 24-25

Petitioners' Expert

14. Mr. Occhiogrosso more specifically asserts that "neither Mr. Lipoff, nor the Petition, explain how the data from web sites would be pre-segmented to employ the search strategies disclosed by Neal." Occhiogrosso-Decl., ¶ 129. Again, the Kovatch/Neal combination does not rely on using any particular search methodology from Neal for retrieving information from an individual website. Furthermore, the Internet data that Kovatch accesses is already "pre-segmented" into different websites, which are different datasets that are each searched separately and sequentially in the Kovatch/Neal combination per Neal's teachings.

Ex. 1057 in IPR2020-00846, ¶ 14, cited '431 Reply at 20;
[Ex. 1057 in IPR2020-00847, ¶ 22, cited '084 Reply at 24-25]

Kovatch



Kovatch (Ex. 1005) at Fig. 4, annotated in '431 Petition at 17;
'084 Petition at 45

Parus's Sur-Reply

Petitioners have failed to demonstrate how a POSA would apply Neal's hierarchical ordering to the websites in Kovatch. Petitioners do not even attempt to argue that the Internet is segmented into multiple tiers, as Neal discloses. Instead, Petitioners now claim that the Internet, which apparently is akin to a database in Neal, is already pre-segmented into websites, which apparently are akin to datasets in Neal. Petitioners fail to indicate how this pre-segmentation of the Internet into web pages "enable the identification of items from the most economical sources," like the datasets in Neal. (Paper 14, 25; Ex. 1007, 3:13-17).

'431 Sur-Reply at 19 ('084 Sur-Reply at 21)

Petition

For instance, Kovatch describes an example where the user says, "I want to buy CDs," thereby requesting information (*e.g.*, price information) needed to buy CDs. *Kovatch*, 21:19-25, 20:29-21:3; *Lipoff* ¶ 105. Kovatch teaches that a plurality of web sites ("Amazon" and "CD Now") may contain the requested information, and the system learns that the user prefers Amazon. *Kovatch*, 21:22-24, 23:25-29, FIG. 4; *Lipoff* ¶ 105. In the Kovatch/Neal combination, the most preferred supplier (Amazon's web site) is accessed first (*Kovatch*, 21:19-25, 23:25-

'431 Petition at 14-15 ('084 Petition at 42-43)

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Parus's New Argument That Kovatch Lacks a Plurality of Pre-Selected Destinations Is Waived and Wrong

Parus's Sur-Reply

Petitioners argue that it would be obvious to add the functionality of claim limitation 1(j) to Kovatch, which would add a plurality of pre-selected destinations to Kovatch, while completely ignoring and not explaining why a POSITA would modify Kovatch in a manner that is completely opposite of Kovatch's stated goal.

'431 Sur-Reply at 15 ('084 Sur-Reply at 16-17)

Board's Institution Decision:

Patent Owner argues "Kovatch discloses neither a plurality of web sites for each application nor addresses for the web sites." Prelim. Resp. 48. Patent Owner also states that an inquiry to Kovatch's "system results in the identification of a single application for accessing a single web site" and that "Kovatch never identifies a plurality of possible web sites for answering the inquiry." *Id.* at 49. We are unpersuaded by this argument because, as stated by Petitioner (Pet. 52), Kovatch appears to disclose a plurality of web sites containing requested information such as the price of a compact disc (a "CD") available for purchase. Ex. 1005, 21:19–25. For example, Kovatch's Anita system asks a user "[w]ould you like to buy CDs from Amazon, CD Now, or find the cheapest price [?]." *Id.* at 21:22–23; Fig. 4. At this stage of the proceeding, it appears that the Anita system is capable of accessing *both* the Amazon and CD Now web sites in order to "find the cheapest price." *Id.* at 21:22–23; *see also id.* at 20:29–21:3 (where, in response to an

'084 DI at 45 (see also '431 DI at 39)

Board's Scheduling Order:

Patent Owner may file—

a. A response to the petition (37 C.F.R. § 42.120). If Patent Owner elects not to file a response, Patent Owner must arrange a conference call with the parties and the Board. Patent Owner is cautioned that any arguments not raised in the response may be deemed waived.

Board's Scheduling Order (Paper No. 10) at 8

Parus's POR Admits:

Without being prompted, the HeyAnita system checks all of the available websites where the CD can be purchased to ensure it finds the cheapest price for the user. *Id.* A POSITA would understand that *Kovatch's* HeyAnita system would check multiple sites without being told to do so, which demonstrates that it is fault tolerant and maximizes the likelihood of finding the requested information. Ex. 2059 at ¶¶136-137.

'431 POR at 43 ('084 POR at 50)

Kovatch/Neal Combination:
Motivation to Combine

Parus Presented No Showing Against the Motivation the Petition Asserted

'431 Reply at 21;
'084 Reply at 25-26

Petition

Neal teaches techniques for "optimiz[ing] [a] search process by identifying the desired item from the most advantageous supplier, while efficiently utilizing computing resources." *Neal*, Abstract. When, like in Kovatch, a user inputs a "search" for a "desired item" that may be "available from more than one supplier, Neal searches the suppliers' "data sets" "in a hierarchy" (*i.e.*, an ordered ranking) in which "more favored suppliers [are] searched first." *Neal*, 3:35-36, 2:54-57, 5:55-60; *Lipoff* ¶ 99. "If the preferred supplier" does not "ha[ve] the exact item," the search "proceeds… to the second" supplier, "and thereafter along [the hierarchy] until a match is found," as shown in FIG. 2 (reproduced below). *Neal*, 6:40-7:14; *Lipoff* ¶ 100. "Once the item has been found, the search… terminates…, thereby saving the computing resources from needless searches through the remaining data sets." *Neal*, 3:42-45. "[When] the search fails to identify the desired item from any [supplier],… a negative search result is reported to the user." *Neal*, 7:30-33; *Lipoff* ¶ 101.

* * * *

A POSA would have been motivated to apply Neal's above-described hierarchical ordering and search techniques when retrieving information from web sites in Kovatch's HeyAnita system, to achieve the benefits Neal describes of "maximiz[ing] the likelihood of finding the desired [information]" while "efficiently us[ing] computing resources" by "increasing the efficiency of the search process by first searching in the most desirable data sets." *Neal*, 4:65-5:2,

'431 Petition at 12-14
('084 Petition at 40-42)

Parus's Expert

Q. And if a search engine searched fewer sites, would that involve lower expenditure of processing resources?

A. **It would involve lower expenditure of processing resources** by the search engine, if it presented fewer sites.

Deposition of Benedict Occhiogrosso (Ex. 1051) at 43:5-10
(cited '431 Reply at 22; '084 Reply at 26)

Parus's Assertion That Kovatch Requires "Dead Space" for Playing Advertisements Is Wrong

'431 Reply at 22-23;
'084 Reply at 26-27

Parus's POR

at 16:14-15. *Kovatch* understood that this dead space was an uncaptured advertising market, and this was an opportunity to generate revenue "for HeyAnita to connect eyeballs to eardrums, thereby enabling these companies to target and reach a significantly expanded audience. *See* Ex. 1005 at 3:13-14, 6:9-11. Reading the teachings of *Kovatch*, a POSITA would understand that speeding up *Kovatch's* HeyAnita system would create less dead space, which would lead to fewer opportunities to play advertisements, and inhibit the system's ability to generate revenue from playing advertisements for the user as it awaited the information to be retrieved from a website mapped to the HeyAnita application at the destination node of the destination tree. Ex. 2059 at ¶¶133-134.

'431 POR at 42 ('084 POR at 49)

Petitioners' Expert

disagree, and in my opinion a POSA would have disagreed. ***First***, Kovatch does ***not*** teach that advertisements are played while waiting for information to be retrieved from a website. Kovatch teaches that information is retrieved, and ***then*** "an audio stream based on commercials ***and web information returned*** by" the search can be played, with the commercials and information "[i]ntermix[ed]…in a seamless manner." Kovatch, 18:1-15, 14:1-8. A POSA would have understood that "intermixed" advertisements and information retrieved from a website are presented together at the same time. ***Second***, advertisements are only ***optional*** in Kovatch, as ***none*** of Kovatch's example "usage scenarios" include advertisements. *See* Kovatch, 20:5-22:21. Similarly, Kovatch's independent claim does ***not*** recite an ad generator; an ad generator is only in a dependent claim in Kovatch. *See* Kovatch, 35:3-25.

Ex. 1057 in IPR2020-00846, ¶ 18, cited at '431 Reply at 22-23;
[Ex. 1057 in IPR2020-00847, ¶ 26, cited at '084 Reply at 27]

Kovatch

9. Intermix commercials and information in a seamless manner to generate unique entertaining experience for the user

* * * *

10. Anita Prompt Generator 6 creates an audio stream based on commercials and web information returned by Anita State Machine and Web Parser 8 and sends it to Anita Telephone Interface 12.

Kovatch (Ex. 1005) at 14, 18 (cited '431 Reply at 23; '084 Reply at 27)

Parus's Sur-Reply

NO RESPONSE

Parus's Fault Tolerance Arguments Are Refuted by Both Experts

'431 Reply at 23-24;
'084 Reply at 27-29

Parus's POR

Therefore, there is no motivation to combine *Kovatch* with *Neal* because a POSITA would understand that *Kovatch's* HeyAnita system used its inventive advertisements to entertain the user as it awaited a response to its request, and HeyAnita was already fault tolerant and maximized the likelihood of finding the requested information. Ex. 2059 at ¶ 140.

'431 POR at 44 ('084 POR at 51)

Parus's Expert

40. While systems like *Perrone* and *Kovatch* returned relatively rapid answers if the speech command was a priori mapped to a web resource, they still suffered from additional drawbacks. For example, because these systems mapped a single web resource to a single speech command, these systems were not fault tolerant[1]. If the URL of the web resource was inaccessible, there would be no way to get the requested information. For example, using the weather example from earlier, if the "weather" command corresponded to the "www.weather.com" web resource, and weather.com was not currently accessible, there would be no way for the system to recover and return the requested weather information.

* * * *

[1] *Kovatch* does not appear to concern itself with fault tolerance due to the system's ability to ask follow up questions to determine the most appropriate single answer.

Occhiogrosso Declaration (Ex. 2059) at ¶ 40
(cited '431 Reply at 24; '084 Reply at 28)

Parus's POR

A POSITA would understand that this behavior indicates that HeyAnita is very interactive, and if a particular destination does not have the information requested, such as a CD, then the HeyAnita system would indicate that to the user and the user would have to decide if it wanted HeyAnita to retrieve the information from another web site. For example, if a user told HeyAnita that it wanted to buy the Guns N Roses CD from Amazon, and HeyAnita was not able to retrieve the information from Amazon, a logical follow-up would be if I wanted to try to buy it from CD Now. Ex. 2059 at ¶ 139.

'431 POR at 44 ('084 POR at 51)

Petitioners' Expert

up would be if I [*sic*] wanted to try to buy it from CD Now."). (Mr. Occhiogrosso does not cite any disclosure from Kovatch teaching this, because it is not disclosed in Kovatch.) A POSA would have understood that searching a second website automatically would have been just as "logical" (if not more so) as doing so after a follow-up question. Automatically providing fallback results from another site, as the Kovatch/Neal combination does once the first site fails to provide the requested information, would have avoided unnecessarily wasting time first reporting failure and going through another question-and-answer round to ask for instructions. A POSA would have understood this to be beneficial given users' known preference for shorter dialogs with voice response systems.

Ex. 1057 in IPR2020-00846, ¶ 22, cited '431 Reply at 24;
[Ex. 1057 in IPR2020-00847, ¶ 30, cited '084 Reply at 29]

Obviousness Does Not Require Bodily Incorporation

Petitioners' Reply

The Kovatch/Neal combination applies Neal's teaching to search supplier data sets sequentially in order, as Neal's FIG. 2 illustrates. Petition, 12-13.

In the Kovatch/Neal combination, each data set is a supplier's website searched using Kovatch's website search methodology, consistent with Neal's teachings that each "data set" can be a different "supplier" (Neal, 6:39-65) and "[t]here are many possible sequences of search algorithms" (Neal, 7:56). Petition, 13-15, 32-34.

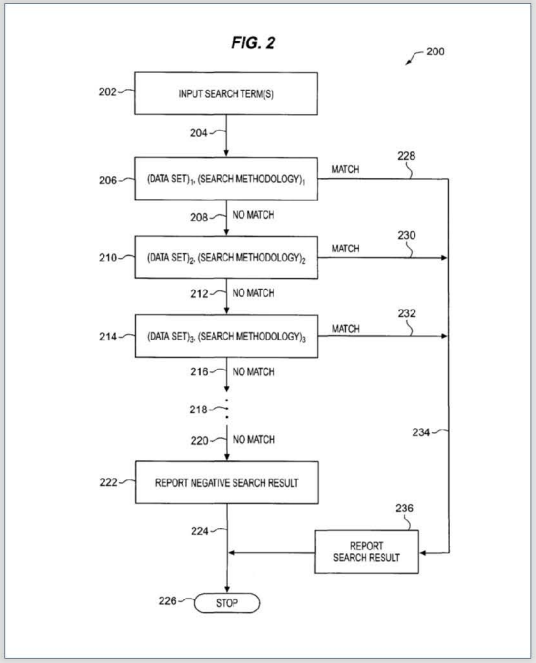
'431 Reply at 17-18 ('084 Reply at 21-22)

Parus's Sur-Reply

3:13-17). Neal explains that its search strategies, which Petitioners alleged they were relying on, "may include one or more of the following: exact search, stem search, soundex search, and fuzzy logic search." Petitioners do not rely on any of these search strategies to achieve the benefits of Neal. Further, as already noted,

'431 Sur-Reply at 21 ('084 Sur-Reply at 23)

Neal



Neal (Ex. 1007) at Fig. 2 (cited '431 Reply at 17-18; '084 Reply at 21-22)

"The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference;… Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art."

In re Keller, 642 F.2d 413, 425 (C.C.P.A. 1981) (cited '431 Reply at 17; '084 Reply at 20)

Parus Failed to Antedate Kovatch

Parus Failed to Meet Its Burden to Antedate Kovatch, for Multiple Independent Reasons

'431 Reply at 1-16;
'084 Reply at 5-20

GAS (Federal Circuit):

enforcement of its rules. The "patentee bears the burden of establishing that its claimed invention is entitled to an earlier priority date than an asserted prior art reference." *In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1375–76 (Fed. Cir. 2016). Thus, GAS had to present a case to establish prior conception of every claim limitation. GAS's briefing failed to meet this burden.

Gen. Access Sols. v. Sprint Spectrum, 811 F. App'x 654, 657-59 (Fed. Cir. 2020) ("*GAS*") (cited '431 Reply at 1-4; '084 Reply at 5-8)

Petitioners' Reply

'431 Reply at i ('084 Reply at i)

Parus's Brief Failed to Present a Case Antedating Kovatch, and Cannot Incorporate Its Case by Reference

'431 Reply at 2-5;
'084 Reply at 6-9

Parus's POR

1. The Webley Assistant source code enhancements pre-dates *Kovatch's* U.S. priority filing date.

The inventors conceived of the claimed subject matter before *Kovatch's* January 4, 2000 U.S. priority filing date. Conception is the mental formulation and the disclosure of a complete idea for the claimed subject matter. *Townsend v. Smith*, 36 F.2d 292, 295 (C.C.P.A. 1929). Conception is complete when the idea encompasses all limitations of the claimed subject matter. *Singh v. Brake*, 317 F.3d 1334, 1340 (Fed. Cir. 2003). In cases where there are physical exhibits, no corroboration is required. *Mahurkar*, 79 F.3d at 1577-78.

Here, the source code, documents, and testimony show that at least by July 12, 1999, Alexander Kurganov, and Valery Zhukov conceived of and invented the claimed subject matter while working on the web-based upgrades to the Webley Assistant. Kurganov Decl. at ¶ 13. The upgrades to the Webley Assistant approached retrieving information from websites in a different manner than prior art systems because the system sequentially accessed pre-selected websites until the information to be retrieved was found or all of the pre-selected websites had been accessed. The upgraded Webley Assistant was the first system to employ its information retrieval in this novel manner.

As shown through Alexander Kurganov's testimony, which is corroborated by the time-stamped source code, emails, documents, and the testimony of Paul Mulka and Benedict Occhiogrosso, the inventors conceived of the subject matter no later than July 12, 1999. Following conception, the inventors were reasonably and continuously diligent as the Webley Assistant enhancements was the only project they were working on at Webley and they were employed full-time. The evidence produced in Mr. Kurganov's declaration, along with the accompanying exhibits, demonstrate that the enhancements to the Webley Assistant reduced the '431 and '084 inventions to practice in a prototype no later than December 31, 1999, five days before *Kovatch's* earliest filing date of January 4, 2000.

To the extent that it is argued that the '431 and '084 inventions were not reduced to a prototype until January 7, 2000, the date the last source code file was added to the source code revision system, the inventors worked diligently to reduce the invention to practice from the critical date of January 4, 2000, until the grammar file was entered into the source code revision system on January 7, 2000. *See* Ex. 2059, Occhiogrosso Dec. at ¶¶ 44-91; Ex. 2060, Mulka Dec. at ¶¶ 1-6; Ex. 2020, Kurganov Dec. at ¶¶ 103-119.

If the inventors are the first to conceive but the second to reduce to practice, the patent owner must demonstrate reasonable diligence toward a reduction to practice. *Mahurkar*, 79 F.3d at 1578. The evidence must show diligence throughout the entire critical period. *Monsanto Co. v. Mycogen Plant Science, Inc.*, 261 F.3d 1356, 1369 (Fed. Cir. 2001). The evidence must also show that the activity during

'431 POR at 31-32 ('084 POR at 37-38)

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Parus Cannot Meet Its Burden with Conclusory Assertions and Non-Specific Reference to Other Documents

'431 Reply at 3-4;
'084 Reply at 7-8

GAS (Federal Circuit):

enforcement of its rules. The "patentee bears the burden of establishing that its claimed invention is entitled to an earlier priority date than an asserted prior art reference." *In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1375–76 (Fed. Cir. 2016). Thus, GAS had to present a case to establish prior conception of every claim limitation. GAS's briefing failed to meet this burden.

GAS urges that the following paragraph from its patent owner response "sets forth GAS's argument that Mr. Struhsaker conceived of the subject matter of the patents in suit prior to July 21, 2000":

> With respect to the specific claims in the '801 [*sic*] patent, Mr. Struhsaker had completely conceived of the claimed subject matter by at least May 24, 2000. (Ex. 2472, ¶ 15). As demonstrated in his Declaration, and the claim chart attached as Attachment A, Mr. Struhsaker had memorialized his conception in a document called the Last Mile Business Overview as of that date. (Ex. 2457). In Appendix A, Mr. Struhsaker maps to the specific claim elements of the '810 patent to the material Exhibit 2457.

Appellant's Br. at 14 (citing J.A. 1281); *see also* J.A. 4110 (providing an equivalent paragraph for the '916 patent). But this paragraph fails to explain with any specificity how inventor Struhsaker had conceived of the limitations recited in the various patent claims. Instead, GAS's patent owner response makes only the general allegation that the claimed limitations can be found "in a document called the Last Mile Business Overview." *See id.*

To identify GAS's substantive arguments, the Board was forced to turn to a declaration by Struhsaker, and further to delve into a twenty-nine-page claim chart attached as an exhibit. This exercise of "playing archaeologist with the record" is precisely what the rule against incorporation by reference was intended to prevent, 77 Fed. Reg. 48,617,

* * * *

We agree with the Board that the conclusory assertions in GAS's patent owner response are insufficient to meet GAS's burden of establishing prior conception.[3]

Gen. Access Sols. v. Sprint Spectrum, 811 F. App'x 654, 657-59 (Fed. Cir. 2020) (*"GAS"*) (cited '431 Reply at 1-4; '084 Reply at 5-8)

37 C.F.R. § 42.6(a)(3):

> *(3) Incorporation by reference; combined documents.* Arguments must not be incorporated by reference from one document into another document. Combined motions, oppositions, replies, or other combined documents are not permitted.

Reduction-to-Practice Prong 1: No Evidence Shows an Embodiment Was Constructed That Met All Claim Limitations

To demonstrate an actual reduction to practice, the applicant must have: (1) constructed an embodiment or performed a process that met all the limitations of the claim and (2) determined that the invention would work for its intended purpose.

In re Steed, 802 F.3d 1311, 1318 (Fed. Cir. 2015) (cited '431 Reply at 8; '084 Reply at 12)

Petitioners' Reply

'431 Reply at i ('084 Reply at i)

Any System Constructed Using the Source Code Would Not Have Met the Website Information Retrieval Limitations

'431 Reply at 10-11;
'084 Reply at 14-15

'431 Patent Claim 1

[1pre] A system for retrieving information from pre-selected web sites…,

* * * *

[1.h] said computer configured to retrieve said instruction set corresponding to said recognition grammar…;

[1.i] said computer further configured to access…web sites identified by said instruction set to obtain said information to be retrieved,

[1.j] …said computer configured to sequentially access said plurality of web sites until said information to be retrieved is found…;

[1.k] said speech synthesis device configured to produce an audio message containing any retrieved information from said pre-selected web sites….

Parus's Expert

Q. And calling getWeather meets limitation [1.i] because getWeather calls webget.pl which weather.ini; is that right?

A. Yes, I believe that's accurate. The functionality of all three modules and, in particular, webget.pl satisfies claim element [1.i].

* * * *

Q. And for meeting limitation [1.j], you also rely on calling the getWeather function which calls webget.pl and weather.ini; is that right?

A. That's correct.

Deposition of Benedict Occhiogrosso (Ex. 1051) at 78:4-11; 79:3-7
(cited '431 Reply at 10; '084 Reply at 14)

Parus's Inventor

47. At line 2766, the weather command code passed from the Nuance ASR Engine is matched to case "MD_WEATHER," and the getWeather() function or instruction set is called.

```
2766                case MD_WEATHER :
2767                    retries = SMENU_CHOICE_RETRIES;
2768                /*
2769                getWeather(m, vr_token[0].vr_tags);
2770                */
2771                    break;
2772                case MD_STOCKS :
2773                    retries = SMENU_CHOICE_RETRIES;
2774                getStocks();
2775                    break;
```

Ex. 2025 mc_vm.c at lines 2766-2775.

```
/*
    getWeather(m, vr_token[0].vr_tags);
*/
```

Ex. 2020, ¶ 47 (cited '431 Reply at 9; '084 Reply at 13)

Parus's Expert Admitted:

Q. And what does that /* do?

A. The /* in conjunction with the */ makes that call a comment. It's within a comment field.

* * * *

Q. So in the executable program that results after the source code is complied, the call to the getWeather function will not appear; is that correct?

A. The machine language that would result in a call to getWeather function would not be produced.

Q. Okay. So in the machine language code, no call to the getWeather function will be present; is that correct?

A. That's accurate.

Deposition of Benedict Occhiogrosso (Ex. 1051) at 95:24-96:3; 99:20-100:5
(cited '431 Reply at 10; '084 Reply at 14)

Any System Constructed Using the Source Code Would Not Have Met the Website Information Retrieval Limitations

'431 Reply at 10-11;
'084 Reply at 14-15

Petitioners' Expert

```
2766                    case MD_WEATHER :
2767                        retries = SMENU_CHOICE_RETRIES;
2768    /*
2769                getWeather(m, vr_token[0].vr_tags);
2770    */
2771                        break;
2772                    case MD_STOCKS :
2773                        retries = SMENU_CHOICE_RETRIES;
2774                getStocks();
2775                        break;
```

Kurganov-Decl., ¶ 63

23. Because the call to the getWeather() function is commented out, any compiler would have treated it the same as any other non-functional notes the inventors wrote within "comments" in the source code. Any C compiler that converted the mc_vm.c source code into an executable program would have ignored (*i.e.*, skipped over) all text that appears inside comments, including the call to the getWeather() function. *See, e.g., C for Dummies*, page 85 ("Comments in a

* * * *

characters between /* and */ are ignored by the compiler"). Thus, the getWeather function call would not have been executed by any executable program produced from mc_mv.c; indeed, the getWeather function call would not have been present at all in any such executable program run by a computer.

24. Thus, the evidence cited in Mr. Kurganov's declaration shows that if any embodiment had run an executable program generated from the cited source code, it would ***not*** have met limitations [1pre] and [1.h]-[1.k]. Even if a binary

Ex. 1053 in IPR2020-00846, ¶ ¶ 23-24, cited '431 Reply at 10-11
[Ex. 1053 in IPR2020-00847, ¶ ¶ 23-24, cited '084 Reply at 14-15]

C for Dummies, 1996

Comments in a C program have a starting point and an ending point. Everything between those two points is ignored by the compiler, meaning that you can stick any text in there — anything — and it doesn't affect how the program runs.

```
/* This is how a comment looks in the C language */
```

This is a fine example of a comment. What follows is another example of a comment, but the type that gives this book its reputation:

```
/*
Hello compiler!  Hey, error on this: pirntf!
Ha! Ha! You can't see me!  Pbbtbtbt!
Nya! Nya! Nya!
*/
```

* * * *

In the source code itself, comments can be used as notes to yourself, such as:

```
/* Find out why this doesn't work */
```

Or this:

```
save=itemv;  /* Save item value here */
```

Or even reminders to yourself in the future:

```
/*
Someday you will write the code here that makes
the computer remember what it did last time this
program ran.
*/
```

* * * *

You can use comments to disable certain parts of your program. If something isn't working correctly, for example, you can "comment it out." You might also want to include a note to yourself, explaining why that section is commented out.

* * * *

1. Comments in a C program are:
   A. Silly little things you write to yourself.
   B. Ignored by the compiler.
   C. Musings of a befuddled programmer.
   D. Probably all of the above.

Ex. 1055 at 85, 88, 90, 93 (cited '431 Reply at 10; '084 Reply at 14)

No Evidence Shows an Embodiment of the Claimed "Computer" Was Constructed

'431 Reply at 9-10;
'084 Reply at 12-14

'431 Patent Claim 1

[1pre] A system…comprising:

[1.a] a computer…connected to the internet;

[1.b] a voice enabled device…connected to said computer…;

[1.c] at least one speaker-independent speech recognition device…connected to said computer…;

[1.d] at least one speech synthesis device… connected to said computer…;

[1.e] at least one instruction set…associated with said computer…;

[1.f] at least one recognition grammar associated with said computer…

* * * *

[1.h] said computer configured to retrieve said instruction set corresponding to said recognition grammar selected by said speaker-independent speech recognition device;

[1.i] said computer further configured to access… web sites identified by said instruction set…,

[1.j] said computer configured to first access said first web site…and, if said information to be retrieved is not found…, said computer configured to sequentially access said plurality of web sites until said information to be retrieved is found…

Allegedly met by server not in Webley's office

Allegedly met by source code files on computer inside Webley's office

'084 Patent Claim 1

[1pre] A system…comprising:

[1.a] at least one computing device…coupled to one or more networks;

[1.b] at least one speaker-independent speech-recognition device…connected to the computing device…;

[1.c] at least one speech-synthesis device…connected to the computing device;

[1.d] memory operatively associated with the computing device with at least one instruction set…;

[1.e] at least one recognition grammar associated with the computing device…,

* * * *

[1.g] the computing device configured to retrieve the instruction set corresponding to the recognition grammar provided by the speaker-independent speech-recognition device;

[1.h] the computing device further configured to access…web sites identified by the instruction set…,

[1.i] wherein the computing device is further configured to periodically search via the one or more networks to identify new web sites…,

[1.j] the computing device configured to access a first web site…and, if the information to be retrieved is not found…, the computer configured to access the plurality of web sites…until the information to be retrieved is found…

No Evidence Shows an Embodiment of the Claimed "Computer" Was Constructed

'431 Reply at 9-10;
'084 Reply at 12-14

'431 Patent Claim 1

[1pre] A system…comprising:

[1.a] a computer…connected to the internet;

[1.b] a voice enabled device… said computer…;

[1.c] at least one speaker-in… recognition device…co… said computer…;

[1.d] at least one speech sy… connected to said com…

[1.e] at least one instruction… said computer…;

[1.f] at least one recognition… with said computer…

* *

[1.h] said computer configur… instruction set corresp… grammar selected by s… speech recognition dev…

[1.i] said computer further c… web sites identified by …

[1.j] said computer configure… first web site…and, if s… retrieved is not found… configured to sequentia… of web sites until said information to be retrieved is found…

'084 Patent Claim 1

[1pre] A system…comprising:

[1.a] at least one computing device…coupled to one or…

…ndependent speech-recognition …the computing device…;

…nthesis device…connected to …

…ssociated with the computing …e instruction set…;

…n grammar associated with …,

* *

…configured to retrieve the …onding to the recognition …the speaker-independent …vice;

…further configured to …ntified by the instruction set…,

… device is further configured to …the one or more networks to …,

…configured to access a first web …ation to be retrieved is not … configured to access the plurality of web sites…until the information to be retrieved is found…

Parus's *ATI* Case:

the invention). Moreover, ATI's argument conflates actual reduction to practice with *conception*, which is established when the inventive process ends. *See Hybritech Inc. v. Monoclonal Antibodies Inc.*, 802 F.2d 1367, 1376 (Fed. Cir. 1986) (Conception is the "formation in the mind of the inventor of a definite and permanent idea of the complete and operative invention as it is thereafter to be applied in practice."); *Townsend v. Smith*, 36 F.2d 292, 295 (CCPA 1930) (defining conception as "the complete performance of the mental part of the inventive act"). As discussed above, actual reduction to practice is established only when the invention "is put into *physical form* and shown to be operative in environment of its practical contemplated use." *Technical Dev.*, 597 F.2d at 746–47 (emphasis added).

LG Electronics, Inc. v. ATI Tech's ULC, IPR2015-00325, Paper 62 at 24-25 (Apr. 14, 2016) (cited '431 Sur-Reply at 5-6; '084 Sur-Reply at 6-8)

No Evidence Shows That Code Alleged to Meet the Claimed Functionality Was Deployed to the Claimed "Computer"

'431 Reply at 9-10;
'084 Reply at 12-14

Parus's Inventor

Q. So you said from the source code you build an actual program which is a binary program; is that right?

A, Correct.

Q. And what do you mean by "actual" when you say "actual program"?

A. Well, the program that corresponds to the -- to the source code. The one that we are discussing as Webley Assistant I.

* * * *

Q. And is the program binary copied to the production server from some other location?

A. Yes, typically, because the – the build -- the building process runs on the -- on a separate system and the production is not designed to -- to build things. It's a runtime environment.

So building environment somewhere else, and, then, in that runtime environment, you see the binary, and you focus on running the binary – and running software versus building software.

Deposition of Alexander Kurganov (Ex. 1050) at 26-27 (cited '431 Reply at 9; '084 Reply at 13)

Parus's *ATI* Case:

It is well settled that "[t]here cannot be a reduction to practice of the invention . . . without a *physical embodiment* which includes all limitations of the claim." *UMC Elecs. Co. v. United States*, 816 F.2d 647, 652 (Fed. Cir. 1987) (emphasis added). "It is equally well established that every limitation of the [claim] *must exist* in the embodiment and be shown to have performed as intended." *Newkirk v. Lulejian*, 825 F.2d 1581, 1582 (Fed. Cir. 1987) (emphasis added).

* * * *

We are not persuaded by ATI's argument that the RTL code, alone, is sufficient to meet the first requirement of actual reduction to practice—constructing a *physical* embodiment. PO Resp. 7–9, 16–20; Sur-reply 3–4.

LG Electronics, Inc. v. ATI Tech's ULC, IPR2015-00325, Paper 62 at 18, 25 (Apr. 14, 2016) (cited '431 Sur-Reply at 5-6; '084 Sur-Reply at 6-8)

Petitioners' Reply

Kurganov-Depo., 26-28. Mr. Kurganov testified that the prior-version WA-I software (which he admits did ***not*** meet the challenged claims) was deployed on the production server (Kurganov-Decl., ¶ 14; Kurganov-Depo., 24-29), but no evidence demonstrates that the ***WA-II*** software alleged to meet the claims was deployed on that production server or any other computer at any time, let alone early enough to antedate Kovatch.

'431 Reply at 9-10 ('084 Reply at 13)

Petitioners' Expert

16. As I explain in Section V below, the source code cited in Mr. Kurganov's declaration cannot be compiled to generate a program that would practice all of limitations [1.d]-[1.j]. However, even if it could, I find no evidence cited in Mr. Kurganov's declaration that purports to show that the WA-II source code alleged to meet [1.d]-[1.j] was ever compiled to generate an executable binary program that was run on the server that is alleged to meet the claimed "computing device." *See* ¶ 13 above, discussing the server that Mr. Kurganov's declaration cites as meeting the claimed "computing device" in connection with limitation [1.a]. Thus, the evidence cited in Mr. Kurganov's declaration does not show that an embodiment meeting all limitations [1.a]-[1.j] was constructed.

Ex. 1053 in IPR2020-00847, ¶ 16, cited '084 Reply at 13
[Ex. 1053 in IPR2020-00846, ¶ 16 cited '431 Reply at 9]

No Evidence Shows That Code Alleged to Meet the Claimed Functionality Was Deployed to the Claimed "Computer"

'431 Reply at 9-10;
'084 Reply at 12-14

Parus's Sur-Reply

b. The evidence demonstrates an embodiment having a computer meeting all claimed limitations

The evidence demonstrates an embodiment having a computer meeting all claimed limitations, contrary to Petitioners' assertions. (Paper 22, 9-10). For example, Mr. Kurganov's testimony and the evidence presented demonstrate that the claimed computer was embodied by a UNIX cluster of servers that was used to provide Parus's Webley Assistant product. (Ex. 2020, ¶ 14; Ex. 2025). Petitioners' attempts to confuse the claimed computer with the computers that housed the source code versioning system have no merit. (Paper 22, 9). The source code that was identified by Mr. Kurganov was tested and provides evidence of a working reduction to practice on that UNIX cluster of servers.

The working reduction to practice is a functional embodiment of the invention. As testified to by Mr. Kurganov and corroborated by contemporaneous evidence, the claimed computer, the Unix cluster of servers, executed the binary program which was the compiled and linked source code. Mr. Kurganov makes this clear in his declaration as well in his deposition testimony and email communications that the system was operational. (Ex. 2020, ¶¶ 20-102; Ex. 2021-2057; Ex. 1050, 21:17-22:8, 32:17-23). There is no limitation requiring the claimed computer to house the source code versioning system, and Petitioners provide no evidence to support their suggestion.

'431 Sur-Reply at 7; '084 Sur-Reply at 8-9

Parus's Inventor

14. The WA I was launched in 1997. This first version of the Webley Assistant was an application running on the Vail Systems' platform which was based on my design and implementation of a UNIX cluster of voice and web servers which shared several high-availability, redundant database servers. Ex. 2024. I began working on WA I in 1996. The source code of the main module that holds WA I application logic, mc_vm.c, was created by me on October 4, 1996. Ex. 2025.

Ex. 2020, ¶ 14 (cited '431 Sur-Reply at 7; '084 Sur-Reply at 9)

Parus's Inventor

Q. Okay. Just finishing up with the sentence we've been looking at in paragraph 3 of your declaration that ends by saying "...the first version of the Webley Assistant was launched in 1997."

What does "launched" mean?

A. It means it was publicly announced as a product, and, you know, it could be -- it – it would be offered, you know, just like any other service.

Deposition of Alexander Kurganov (Ex. 1050) at 21:12-21
(cited '431 Sur-Reply at 7; '084 Sur-Reply at 9

No Evidence Shows That Code Alleged to Meet the Claimed Functionality Was Deployed to the Claimed "Computer"

'431 Reply at 9-10;
'084 Reply at 12-14

Parus's Sur-Reply

b. The evidence demonstrates an embodiment having a computer meeting all claimed limitations

The evidence demonstrates an embodiment having a computer meeting all claimed limitations, contrary to Petitioners' assertions. (Paper 22, 9-10). For example, Mr. Kurganov's testimony and the evidence presented demonstrate that the claimed computer was embodied by a UNIX cluster of servers that was used to provide Parus's Webley Assistant product. (Ex. 2020, ¶ 14; Ex. 2025). Petitioners' attempts to confuse the claimed computer with the computers that housed the source code versioning system have no merit. (Paper 22, 9). The source code that was identified by Mr. Kurganov was tested and provides evidence of a working reduction to practice on that UNIX cluster of servers.

The working reduction to practice is a functional embodiment of the invention. As testified to by Mr. Kurganov and corroborated by contemporaneous evidence, the claimed computer, the Unix cluster of servers, executed the binary program which was the compiled and linked source code. Mr. Kurganov makes this clear in his declaration as well in his deposition testimony and email communications that the system was operational. (Ex. 2020, ¶¶ 20-102; Ex. 2021-2057; Ex. 1050, 21:17-22:8; 32:17-23). There is no limitation requiring the claimed computer to house the source code versioning system, and Petitioners provide no evidence to support their suggestion.

'431 Sur-Reply at 7; '084 Sur-Reply at 8-9

Parus's Inventor

Q. Using that same meaning of the word "launched," was the WA II ever launched?

A. **Yes, there was a press release, I think. So there was -- from that standpoint, I don't know if you can call it launched, but probably if it's public information, then absolutely you can – you can consider that as launched.**

Deposition of Alexander Kurganov (Ex. 1050) at 32:17-23
(cited '431 Sur-Reply at 7; '084 Sur-Reply at 9)

FOR IMMEDIATE RELEASE

Webley Systems' New Internet by Phone Service Accesses WWW content Via Voice Command From Any Phone

Services Targeted at Very Mobile Users of The Webley Brand
Unified Communications Service and Value Added Providers of Wireless Data Services

DEERFIELD, IL.—(BUSINESS WIRE)—February , 2000—Webley Systems, a leader in speech recognition enabled communications services, announced today that it has successfully developed and will introduce a breakthrough communications service that will allow users to easily access internet content from any telephone. This new service feature will be useful for mobile users to access pertinent,

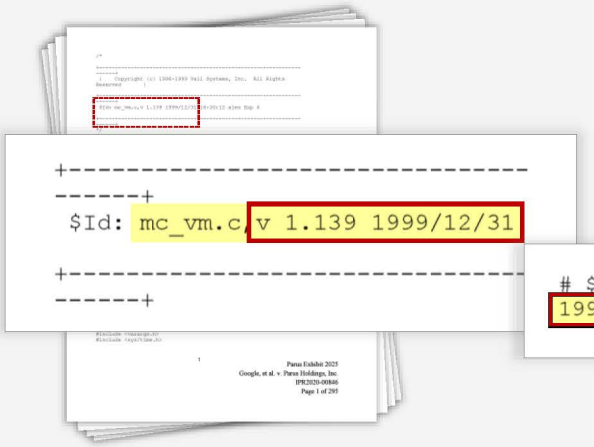
TOO LATE

Ex. 2056 at 1

No Evidence Shows That the Different Source Code Files Relied Upon Were Deployed Together by the Requisite Date

'431 Reply at 10, 15;
'084 Reply at 14, 19

mc_vm.c

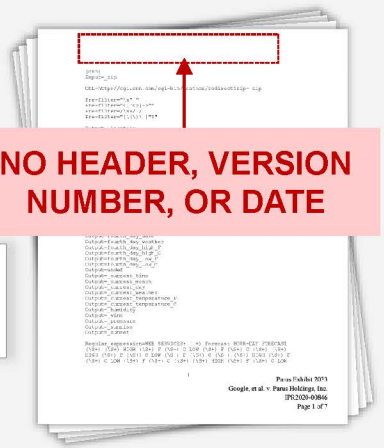


Ex. 2025 at 1

webget.pl

Ex. 2032 at 1

weather.ini



Ex. 2033 at 1

Petitioners' Expert

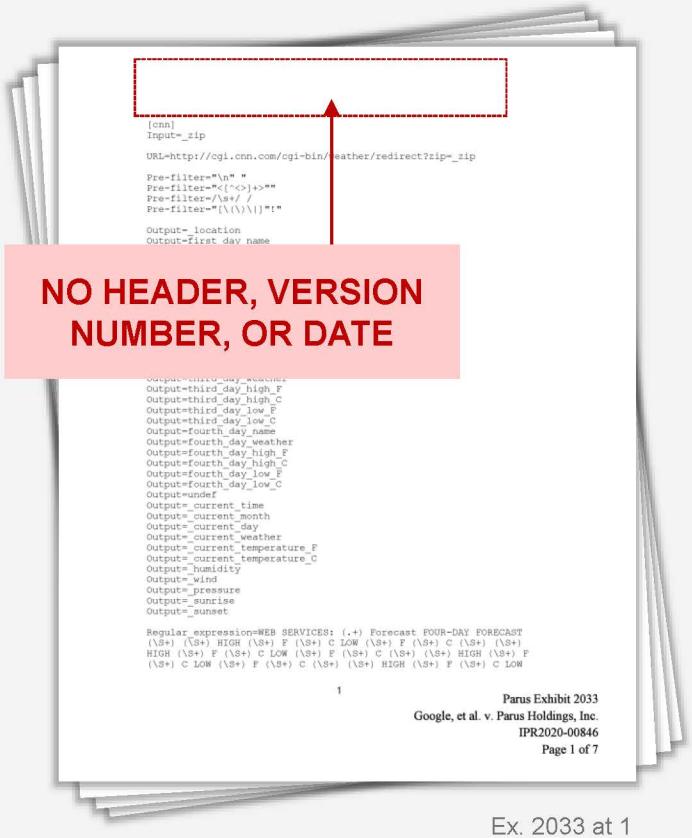
indicates that this resulted in version 1.9 of webget.pl. But I find no evidence cited in Mr. Kurganov's declaration to show that the version 1.9 of webget.pl that existed on December 13, 1999 was ever deployed together on the same computer with an executable program generated from the version 1.139 of mc_vm.c that existed on December 31, 1999; much less any evidence that both of those were deployed together on the same computer at the same time with whatever version of weather.ini is purportedly in Ex. 2033 (which lists no version number or date, as I

Ex. 1053 in IPR2020-00846, ¶ 20 (cited '431 Reply at 10)
[Ex. 1053 in IPR2020-00847, ¶ 20 (cited '084 Reply at 14)]

No Evidence Shows That the Different Source Code Files Relied Upon Were Deployed Together by the Requisite Date

'431 Reply at 10, 15;
'084 Reply at 14, 19

weather.ini



NO HEADER, VERSION NUMBER, OR DATE

Ex. 2033 at 1

Petitioners' Expert

weather.ini (versions 1.1-1.9). Ex. 2058 thus indicates that at least ten different versions of weather.ini existed at different times. I find no evidence cited in Mr. Kurganov's declaration to establish what version of weather.ini is provided in Ex. 2033 (*e.g.*, whether Ex. 2033 is purported to be any one of the above-discussed ten different versions, or a later version (*e.g.*, version 1.11) created sometime later than version 1.10). I also find no evidence cited in Mr. Kurganov's declaration to establish what date the version of weather.ini provided in Ex. 2033 was in use, if it ever was.

Ex. 1053 in IPR2020-00846, ¶ 45 (cited '431 Reply at 15)
[Ex. 1053 in IPR2020-00847, ¶ 45 (cited '084 Reply at 19)]

No Evidence Demonstrates Conception or Reduction to Practice of '084 Limitation [1.i] ('431 Claim 9)

'431 Reply at 11-12;
'084 Reply at 15-16

'084 and '431 Patents

'084 Limitation [1.i]: "the computing device is further configured to periodically search via the one or more networks to identify new web sites and to add the new web sites to the plurality of web sites"

'431 Claim 9: "said computer is further configured to periodically search said internet to identify new web sites and to add said new web sites to said plurality of web sites.

Petitioners' Expert

from the URL that is input to the program). There is nothing in URL.pl that "periodically" does anything, much less "periodically search[es] [the] internet to identify new web sites." The commands in url.pl are executed sequentially, just once, and are not repeated within the program at all, much less at any "period." Furthermore, there is no "plurality of websites" referred to in url.pl, nor is there anything that "add[s]" a new website to any set of websites.

* * * *

source." As I explained in the previous paragraph, url.pl does nothing but get and print the content from a URL; it does not process that content or make any determinations about it. Mr. Kurganov's declaration cites no other evidence to corroborate his statement.

* * * *

However, nothing in url.pl shows a list of URLs taken from a search engine, and there is no loop in url.pl nor anything in url.pl that is pushed to anything in a loop. Mr. Kurganov's declaration cites no other evidence to corroborate his statement.

Ex. 1053 in IPR2020-00846, ¶¶ 28-30 (cited '431 Reply at 12)
[Ex. 1053 in IPR2020-00847, ¶¶ 28-30 (cited '084 Reply at 15)]

Parus's Inventor

79. The Webley Assistant further discloses this claim limitation. *See* Ex. 2027 Claim Chart at 46. For example, the file url.pl would be used on the computer to grab any URL and return its content for further processing and determination if that url contains useful information and should be added as a source. The list of URLs for processing can be taken from any available search engine and then pushed to this file in a loop.

Ex. 2020, ¶ 79 (cited '431 Reply at 11; '084 Reply at 15)

url.pl

```
#!/usr/local/bin/sybperl5
# $Header: /usr/local/cvsroot/webley/agents/www/url.pl,v 1.1
1999/08/04 21:17:18 zhukoff Exp $
# returns url content
# param: url

use URI::URL;
use LWP::UserAgent;
use HTTP::Request::Common;

my $ua = LWP::UserAgent->new;
$ua->agent( 'Mozilla/4.0 [en] (X11; I; FreeBSD 2.2.8-STABLE
i386)' );
$ua->proxy( ['http', 'https'], 'http://proxy.vail:3128/' );
$ua->no_proxy( 'webley', 'vail' );
my $res = $ua->request( GET $ARGV[ 0 ] );
print $res->content;
```

Ex. 2042 at 1

Parus's Expert Admitted

Q. Do you see any loop in the code in Exhibit 2042?

A. **I do not.**

* * * *

Q. Do you see anything in the code in Exhibit 2042 that processes content to determine if it contains useful information and should be added to the system as a source?

A. **Offhand, I don't see anything ...**

Deposition of Benedict Occhiogrosso (Ex. 1051) at 110:15-17;111:13-17 (cited '431 Reply at 12; '084 Reply at 16)

Reduction-to-Practice Prong 2: No Evidence Shows a Constructed Embodiment Worked to Retrieve Information from Websites

'431 Reply at 13-15;
'084 Reply at 16-18

"[A]ctual reduction to practice…depends on the evidence that the invention, as conceived, was shown to work for its intended purpose, before the date of the adverse reference. … *See, e.g., Holmwood v. Sugavanam,* 948 F.2d 1236, 1238 (Fed.Cir.1991) ("[A]n applicant must show that 'the embodiment relied upon as evidence of priority actually worked for its intended purpose.'")

In re Steed, 802 F.3d 1311, 1316 (Fed. Cir. 2015) (cited '431 Reply at 8; '084 Reply at 12)

Petitioners' Expert

Based on my experience with CVS and with software development, I am aware that it was common practice (including in the 1999-2000 period referenced in Mr. Kurganov's declaration) for software developers to store in a CVS repository source code files that were still under development and may not yet (and might never) work for their intended purpose. Therefore, evidence that code was stored in CVS is not evidence that code worked for its intended purpose. I find no evidence cited in Mr. Kurganov's declaration to show that a computer running the WA-II software worked for the intended purpose of retrieving information from websites—*i.e.*, that it ever actually retrieved information from websites.

Ex. 1053 in IPR2020-00846, ¶ 33 (cited '431 Reply at 13)
[Ex. 1053 in IPR2020-00847, ¶ 33 (cited '084 Reply at 17)]

Board's Scheduling Order:

Patent Owner may file—

a. A response to the petition (37 C.F.R. § 42.120). If Patent Owner elects not to file a response, Patent Owner must arrange a conference call with the parties and the Board. Patent Owner is cautioned that any arguments not raised in the response may be deemed waived.

Board's Scheduling Order (Paper No. 10) at 8

Parus's Sur-Reply

2044). By December 17, 1999, another email between the two inventors demonstrate that the web agents were completed. (Ex. 2020, ¶ 114; Ex. 2050). Specifically in that email, Mr. Zhukoff stated that, amongst his accomplishments for the year, he had "[d]esigned/developed/implemented stock quote, weather, flight delays agents." (Ex. 2020, ¶ 114; Ex. 2050 at 1). Those functions, which track the

'431 Sur-Reply at 12 ('084 Sur-Reply at 14)

Parus's Inventor

airlines. *Id.* By December 17, 1999 Valery sent me an email regarding what he had accomplished over the course of the year. Ex. 2050. In that email, Valery indicated that he had designed, developed, and implemented stock quote, weather, and flight delay agents. *Id.*

Ex. 2020 at ¶ 114

Agents:
Designed/developed/implemented stock quote, weather, flight delays agents.

Ex. 2050 at 1

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

No Evidence Shows That the Relied-Upon Code Worked to Retrieve Information from Websites

'431 Reply at 13-15;
'084 Reply at 16-18

Petitioners' Expert

43. Additionally, the evidence cited in Mr. Kurganov's declaration demonstrates that the WA II was ***not*** operational for its intended purpose of retrieving information from websites, because the getWeather() function call—which Mr. Kurganov's declaration asserts would lead to the above-discussed use of the regular expressions to perform information retrieval (Kurganov-Decl., ¶ 65)—was commented out of the source code. *See* Section V above. All the webget.pl and weather.ini code discussed above is called only if getWeather() is called. Therefore, the evidence shows that the WA II did not work to retrieve information from websites, because any executable program generated by compiling the source code would never direct the computer to execute the functionality of retrieving information from websites.

Ex. 1053 in IPR2020-00847, ¶ 43 (cited '084 Reply at 18)
[Ex. 1053 in IPR2020-00846, ¶ 43 (cited '431 Reply at 14)]

Parus's Sur-Reply

NO RESPONSE

```
Regular_expression=Get a personalized forecast (?:.+). td (.+)td
(.+) td td Current Conditions: temperature: (\S+)&deg; F or
C&deg; sky: (.+) wind: (.+) relative humidity: (\S+) barometer:
(.+) td td td 5-Day forecast: td (\S+)td (\S+)td (\S+)td (\S+)td
(\S+)td td td td td td (.+) td (.+) td (.+) td (.+) td (.+) td hi
(\S+)&deg;lo (\S+)&degtd hi (\S+)&deg;lo (\S+)&degtd hi
(\S+)&deg;lo (\S+)&degtd hi (\S+)&deg;lo (\S+)&degtd hi
(\S+)&deg;lo (\S+)&degtd td td  td Enter a city for
forecasts
```

* * * *

code matches the regular expression on page 3 of Ex. 2033. There are myriad ways this regular expression could fail to find a match in the website's HTML code, due to potential mismatches (even seemingly very minor ones) between the hard-coded regular expression and the website's current textual content or layout.

* * * *

it worked for its intended purpose. Mr. Kurganov's declaration does not provide even a single test result demonstrating that any of the regular expressions in the versions in the exhibits cited in the declaration were successful in actually retrieving information from any webpage of any website. Mr. Kurganov's declaration also provides no evidence that the textual content and layout of any of the particular weather website webpages that weather.ini is written to access actually matched the regular expressions in weather.ini corresponding to those webpages at a particular time when the WA II was allegedly used. The HTML code representing the content and layout of a webpage can change often, as website owners and administrators change what content they wish to include and in what order and visual layout. I find no evidence cited in Mr. Kurganov's declaration to demonstrate that the WA II ever actually worked.

Ex. 1053 in IPR2020-00847, ¶ 38-42 (cited '084 Reply at 17)
[Ex. 1053 in IPR2020-00846, ¶ 38-42 (cited '431 Reply at 13)]

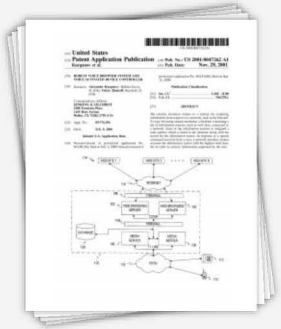
Kurganov-262 Grounds

Kurganov-262 Is § 102(b) Prior Art Because Claims Lack Written Description for Entitlement to Priority Claim

'084 Petition at 6-25
'084 Reply at 1-4
'431 Petition at 50-63
'431 Reply at 25-28

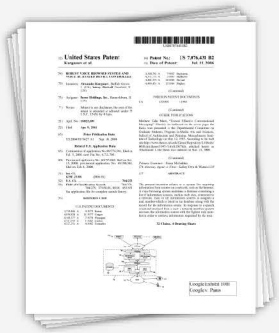
Feb. 5, 2001
Appl. 09/776,996 Filed

Nov. 29, 2001
Kurganov-262 Published
(Appl. 09/776,996)

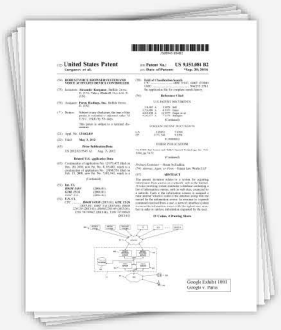


102(b) Prior Art

Apr. 9, 2004
'431 Patent Appl. Filed



May 3, 2012
'084 Patent Appl. Filed



2001 | 2002 | 2003 | 2004 | 2005 /// 2011 | 2012

Priority Claim

Priority Claim

The Specification Lacks Written Description Support for Periodically Searching to Identify and Add New Web Sites

'084 Petition at 6-11
'084 Reply at 1-4
'431 Petition at 50-54
'431 Reply at 25-28

'084 Patent Claim 1

1. A system for acquiring information from one or more sources maintaining a listing of web sites by receiving speech commands uttered by users into a voice-enabled device and for providing information retrieved from the web sites to the users in an audio form via the voice-enabled device, the system comprising:

at least one computing device, the computing device operatively coupled to one or more networks;

at least one speaker-independent speech-recognition device, the speaker-independent speech-recognition device operatively connected to the computing device and configured to receive the speech commands;

at least one speech-synthesis device, the speech-synthesis device operatively connected to the computing device;

memory operatively associated with the computing device with at least one instruction set for identifying

wherein the computing device is further configured to periodically search via the one or more networks to identify new web sites and to add the new web sites to the plurality of web sites, the computing device con-

[1.i]

information request provided by the user, the speaker-independent speech-recognition device configured to receive the speech command from the users via the voice-enabled device and to select the corresponding recognition grammar upon receiving the speech command;

the computing device configured to retrieve the instruction set corresponding to the recognition grammar provided by the speaker-independent speech-recognition device;

the computing device further configured to access at least one of the plurality of web sites identified by the instruction set to obtain the information to be retrieved,

wherein the computing device is further configured to periodically search via the one or more networks to identify new web sites and to add the new web sites to the plurality of web sites, the computing device configured to access a first web site of the plurality of web sites and, if the information to be retrieved is not found at the first web site, the computer configured to access the plurality of web sites remaining in an order defined for accessing the listing of web sites until the information to be retrieved is found in at least one of the plurality of web sites or until the plurality of web sites have been accessed;

the speech synthesis device configured to produce an audio message containing any retrieved information from the plurality of web sites, and

the speech synthesis device further configured to transmit the audio message to the users via the voice-enabled device.

'431 Patent Claim 9

9. The system of claim 1 wherein said computer is further configured to periodically search said internet to identify new web sites and to add said new web sites to said plurality of web sites.

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

None of the POR's Citations to the Specification Disclose "periodically search[ing]…to identify new web sites"

'084 Petition at 6-11
'084 Reply at 1-4
'431 Petition at 50-54
'431 Reply at 25-28

First (Web Site) Embodiment

An additional object of an embodiment of the present invention is to provide a system and method that allows the searching and retrieving of publicly available information by controlling a web browsing server using naturally spoken voice commands.

'084 Patent at 3:13-16; '431 Patent at 2:66-3:3

The robustness and reliability of the voice browsing system of the present invention is further improved by the addition of a polling mechanism. This polling mechanism continually polls or "pings" each of the sites listed in the database **100**. During this polling function, a web browsing server **102** sends brief data requests or "polling digital data" to each web site listed in database **100**. The web browsing server **102** monitors the response received from each web site and determines whether it is a complete response and whether the response is in the expected format specified by the content descriptor file **406** used by the extraction agent **400**. The polled web sites that provide complete responses in the format expected by the extraction agent **400** have their ranking established based on their "response lime". That is, web sites with faster response times will be will be assigned higher rankings than those with slower response times. If the web browsing server **102** receives no response from the polled web site or if the response received is not in the expected format, then the rank of that web site is lowered. Additionally, the web browsing server contains a warning mechanism that generates a warning message or alarm for the system administrator indicating that the specified web site has been modified or is not responsive and requires further review.

'084 Patent at 21:5-28; '431 Patent at 16:56-17:12

ciently. Finally, it allows the voice browser system of the present invention to dynamically adapt to changes in the rapidly evolving web sites that exist on the Internet.

'084 Patent at 21:42-44; '431 Patent at 17:26-28

Second (Device) Embodiment

the device **500** to communicate with network **502**. In the preferred embodiment, the devices **500** appear as "web sites" connected to the network **502**. This allows a network interface system, such as a device browsing server **506**, a database **508**, and a user interface system, such as a media server **510**, to operate similar to the web browsing server **102**, database **100** and media server **106** described in the first preferred embodiment above. A network **502** interfaces with

'084 Patent at 21:66-22:6; '431 Patent at 17:50-57

The device browsing system **514** of this embodiment of the present invention also provides the same robustness and reliability features described in the first embodiment. The device browsing system **514** has the ability to detect whether new devices have been added to the system or whether current devices are out-of-service. This robustness is achieved by periodically polling or "pinging" all devices **500** listed in database **508**. The device browsing server **506**

'084 Patent at 23:26-33; '431 Patent at 19:10-17

Abstract

The present invention relates to a system for acquiring information from sources on a network, such as the Internet.

'084 Patent Abstract; '431 Patent Abstract

General

The descriptions of the preferred embodiments described above are set forth for illustrative purposes and are not intended to limit the present invention in any manner. Equivalent approaches are intended to be included within the scope of the present invention. While the present inven-

'084 Patent at 23:55-60; '431 Patent at 19:40-44

All Cited
'084 POR at 31-34
'431 POR at 46-50

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

The Specification Only Describes "Polling" Known Web Sites, *Not* Searching for New Web Sites

'084 Petition at 7
'084 Reply at 1-4
'431 Petition at 50-51
'431 Reply at 25-28

Limitation 1.j

wherein the computing device is further configured to periodically search via the one or more networks to identify new web sites and to add the new web sites to the plurality of web sites, the computing device con-

'084 Patent at Claim 1 ('431 Patent at Claim 9)

Patent Specification

the user. This task is also known as "content extraction." The web browsing servers **102** also perform the task of periodically polling or "pinging" various web sites and modifying the ranking numbers of these web sites depending upon their response and speed. This polling feature is further discussed below. The web browsing server **102** is comprised of a

'084 Patent at 7:18-23; '431 Patent at 7:4-9

addition of a polling mechanism. This polling mechanism continually polls or "pings" each of the sites listed in the database **100**. During this polling function, a web browsing

'084 Patent at 21:7-9; '431 Patent at 16:58-60

Petition

a. The "First Embodiment" Does Not Provide Written Description for Claim 1

The only thing "periodic" in the first embodiment is a "polling mechanism" that measures response times of ***known*** web sites. *'084-patent*, 4:4-21, 7:17-22, 21:5-44; *Lipoff* ¶¶ 80-81. It only polls "each of the sites ***listed in the database***" (*i.e.*, the "plurality of web sites" in claim 1), and does not identify or ***add new*** web sites to that plurality of web sites, as [1.i] recites. *'084-patent*, 21:7-9, 5:44-46, 20:48-52; *Lipoff* ¶¶ 81-83.

'084 Petition at 7 ('431 Petition at 51)

Board's Institution Decision

As pointed out by Petitioner (Pet. 7), the first embodiment describes polling known web sites and modifying their ranking number based on the individual web site's response and speed, and does not appear to search for new web sites. Ex. 1001, 7:17–21. The second embodiment appears to have

'084 DI at 33 ('431 DI at 51)

Parus's Written Description Arguments All Fail

'084 Petition at 6-11; '431 Petition at 50-54
'084 Reply at 1-4; '431 Replay at 25-28

Parus's POR Argues:

1. **A web search system "would include" identifying new web sites.**
   '084 POR at 32; '431 POR at 47

2. **The specification's "dynamically adapt[ing] to changes in…web sites" requires identifying new websites.**
   '084 POR at 33-34; '431 POR at 49

3. **The term "polling" means asking a website for a listing of URLs.**
   '084 POR at 34; '431 POR at 49-50

4. **The inventors' alleged reduction to practice included identifying new websites.**
   '084 POR at 32; '431 POR at 47

5. **"Devices" in the second embodiment "may in fact be websites."**
   '084 POR at 32-33; '431 POR at 47-48

6. **The second embodiment could not detect a new device by polling devices "listed in database 508" as disclosed.**
   '084 POR at 34; '431 POR at 49

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Parus's Written Description Arguments All Fail

'084 Petition at 6-11; '431 Petition at 50-54
'084 Reply at 1-4; '431 Replay at 25-28

Parus's POR Argues:

1. **A web search system "would include" identifying new web sites.**
   '084 POR at 32; '431 POR at 47

2. **The specification's "dynamically adapt[ing] to changes in…web sites" requires identifying new websites.**
   '084 POR at 33-34; '431 POR at 49

3. **The term "polling" means asking a website for a listing of URLs.**
   '084 POR at 34; '431 POR at 49-50

4. **The inventors' alleged reduction to practice included identifying new websites.**
   '084 POR at 32; '431 POR at 47

5. **"Devices" in the second embodiment "may in fact be websites."**
   '084 POR at 32-33; '431 POR at 47-48

6. **The second embodiment could not detect a new device by polling devices "listed in database 508" as disclosed.**
   '084 POR at 34; '431 POR at 49

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

#1: Parus's Argument That a Web Search System "Would Include" Identifying New Web Sites Is Unsupported

'084 Petition at 6-7
'084 Reply at 2-4
'431 Petition at 50-51
'431 Reply at 26-28

Parus's POR

[0042]. A POSITA, after reading the specification of the '431 Patent, would understand that a web search system would include the ability to "identify new websites" or engage in web crawling. Ex. 2059 at ¶ 149.

ONLY ALLEGED SUPPORT

'084 POR at 32 ('431 POR at 47)

Parus's Expert

voice commands." '431 Patent, 2:66-3:3. A POSITA would understand that a web search system or engine would include the ability to "identify new websites" or engage in web crawling. Lipoff Dep. (Rough) 80:9-24.

ONLY ALLEGED SUPPORT (NOT AN EXHIBIT)

Occhiogrosso Declaration (Ex. 2059) ¶ 149

Petitioners' Expert

exhibit filed with the POR. Occhiogrosso-Decl., ¶ 149. To the extent Mr. Occhiogrosso intended to cite something in my deposition testimony in this proceeding, I never testified that the '084 patent's system would include web crawling or the ability to identify new web sites. *See* Ex. 1049, pages 84-87. As I explained in my original declaration, functionality meeting limitation [1.i] was "taught by Chakrabarti" (Lipoff-Orig.-Decl., ¶ 110), and "a POSA would have understood that it was well-known in the prior art to include this feature in an information-retrieval system" (Lipoff-Orig.-Decl., ¶ 104), but the specification shared by the '084 patent and its ancestor application ***does not describe*** doing so.

Ex. 1057 in IPR2020-00847, ¶ 3 (cited '084 Reply at 2)
Ex. 1057 in IPR2020-00846, ¶ 24 (cited '431 Reply at 26)

Petitioners' Expert

Q. Now, you say that Chakrabarti explains that Web crawling was known and conventional functionality at the time of the – of the priority date of the '431 patent, right?

A. Yeah.

Deposition of Stuart Lipoff (Ex. 1049) at 80:20-24
See also '084 Reply at 2; '431 Reply at 26

"A description which renders obvious the invention for which an earlier filing date is sought is not sufficient."

Lockwood v. Am. Airlines, Inc., 107 F.3d 1565, 1572 (Fed. Cir. 1997)
(cited '084 Petition at 9-10; '431 Petition at 54)

Parus's Written Description Arguments All Fail

'084 Petition at 6-11; '431 Petition at 50-54
'084 Reply at 1-4; '431 Replay at 25-28

Parus's POR Argues:

1. ~~A web search system "would include" identifying new web sites.~~
   ~~'084 POR at 32; '431 POR at 47~~

2. **The specification's "dynamically adapt[ing] to changes in…web sites" requires identifying new websites.**
   '084 POR at 33-34; '431 POR at 49

3. **The term "polling" means asking a website for a listing of URLs.**
   '084 POR at 34; '431 POR at 49-50

4. **The inventors' alleged reduction to practice included identifying new websites.**
   '084 POR at 32; '431 POR at 47

5. **"Devices" in the second embodiment "may in fact be websites."**
   '084 POR at 32-33; '431 POR at 47-48

6. **The second embodiment could not detect a new device by polling devices "listed in database 508" as disclosed.**
   '084 POR at 34; '431 POR at 49

#2: The Specification Only Describes Dynamically Adapting to Changes Within a Known Website

'084 Petition at 7
'084 Reply at 1-4
'431 Petition at 50-51
'431 Reply at 25-28

Parus's POR

Internet." '084 Patent at 21:42-44; Ex. 1004, ¶ [0051]; Ex. 2059 at ¶ 153. Without "identify[ing] new websites" it would be impossible for the system to "dynamically adapt to changes in the rapidly evolving web sites that exist on the Internet." *Id.*; and '084 Patent, claim 1.

'084 POR at 33-34 ('431 POR at 48-49)
Note: '084 Patent at 21:42-44 matches '431 Patent at 17:26-28

Patent

The web site ranking method and system of the present invention provides robustness to the voice browser system and enables it to adapt to changes that may occur as web sites evolve. For instance, the information required by a web site **114** to perform a search or the format of the reported response data may change. Without the ability to adequately monitor and detect these changes, a search requested by a user may provide an incomplete response, no response, or an error. Such useless responses may result from incomplete data being provided to the web site **114** or the web browsing server **102** being unable to recognize the response data messages received from the searched web site **114**.

'431 Patent at 16:44-55; '084 Patent at 20:60-21:4

not get any information at all. The constant polling and reranking of the web sites used within each category allows the voice browser of the present invention to operate efficiently. Finally, it allows the voice browser system of the present invention to dynamically adapt to changes in the rapidly evolving web sites that exist on the Internet.

'431 Patent at 17:23-28; '084 Patent at 21:39-44

Petitioners' Expert

would have disagreed. The "changes ***in*** the rapidly evolving web sites" that the specification describes "adapt[ing] to" are described not only at 21:39-44, but also at 2:44-55 and 20:60-21:4 of the '084 patent, all of which are describing changes ***within*** each ***known*** website already listed in the system's database. For example,

Ex. 1057 in IPR2020-00847, ¶ 6 (cited '084 Reply at 3)
Ex. 1057 in IPR2020-00846, ¶ 27 (cited '431 Reply at 27)

Parus's Expert

Q. Okay. So column 2 and column 16 discuss the ability to detect similar types of changes **in a Website**; is that right?

A. Column 16 describes the input information to the Website and the format of the response from the Website.

Q. All Right. And Column 16 discussing detecting these changes, at line 46 it says that, quote: "…enables it to adapt to changes that may occur as web sites evolve," end quote. Is that right?

A. Yes, that's what it says.

Deposition of Benedict Occhiogrosso (Ex. 1051) at 57:12-15
(cite '084 Reply at 3; '431 Reply at 27)

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Parus's Written Description Arguments All Fail

'084 Petition at 6-11; '431 Petition at 50-54
'084 Reply at 1-4; '431 Replay at 25-28

Parus's POR Argues:

1. ~~A web search system "would include" identifying new web sites.~~
   ~~'084 POR at 32; '431 POR at 47~~

2. ~~The specification's "dynamically adapt[ing] to changes in…web sites" requires identifying new websites.~~
   ~~'084 POR at 33-34; '431 POR at 49~~

3. **The term "polling" means asking a website for a listing of URLs.**
   '084 POR at 34; '431 POR at 49-50

4. **The inventors' alleged reduction to practice included identifying new websites.**
   '084 POR at 32; '431 POR at 47

5. **"Devices" in the second embodiment "may in fact be websites."**
   '084 POR at 32-33; '431 POR at 47-48

6. **The second embodiment could not detect a new device by polling devices "listed in database 508" as disclosed.**
   '084 POR at 34; '431 POR at 49

#3: Parus's Argument That the Specification's "Polling" Means Asking a Website for a Listing of URLs is Unsupported and Wrong

'084 Petition at 6-7
'084 Reply at 4
'431 Petition at 50-51
'431 Reply at 28

Parus's POR

The specification also describes "polling or 'pinging'" in the first embodiment. '084 Patent, 21:5-28. The process of "pinging" a website measures the speed by which a message travels to a specific website and that website provides a response. Ex. 2059 at ¶ 155. Polling is something more. A POSITA would understand that "polling" includes asking for information from a website, including a listing of URLs or asking a website of a search engine to provide new website information as done in the reduction to practice. Ex. 2059 at ¶ 155.

'084 POR at 34 ('431 POR at 49-50)

Parus's Expert

155. The specification also describes "polling or 'pinging'" in the first embodiment. '431 Patent, 16:56-17:12. The process of "pinging" a website measures the speed by which a message travels to a specific website and that website provides a response. Polling is generally understood as somewhat more involved. A POSITA would understand that "polling" includes asking for information from a website, including a listing of the current links or URLs provided by the website, which is a common web crawling technique.

NO EVIDENTIARY SUPPORT

Occhiogrosso Declaration (Ex. 2059) ¶ 155 at 80

Patent

The robustness and reliability of the voice browsing system of the present invention is further improved by the addition of a polling mechanism. This polling mechanism continually polls or "pings" each of the sites listed in the database **100**. During this polling function, a web browsing server **102** sends brief data requests or "polling digital data" to each web site listed in database **100**. The web browsing server **102** monitors the response received from each web site and determines whether it is a complete response and whether the response is in the expected format specified by the content descriptor file **406** used by the extraction agent **400**. The polled web sites that provide complete responses in the format expected by the extraction agent **400** have their ranking established based on their "response lime". That is, web sites with faster response times will be will be assigned higher rankings than those with slower response times. If the web browsing server **102** receives no response from the polled web site or if the response received is not in the expected format, then the rank of that web site is lowered. Additionally, the web browsing server contains a warning mechanism that generates a warning message or alarm for the system administrator indicating that the specified web site has been modified or is not responsive and requires further review.

'084 Patent at 21:5-28
'431 Patent at 16:56-17:12

Petitioners' Expert

includes "asking…a search engine to provide new website information"). I disagree, and in my opinion a POSA would have disagreed. I find no basis or evidence in Mr. Occhiogrosso's declaration to support his assertion that "polling" means asking a website for a listing of links or URLs, and no basis or evidence anywhere for the POR's assertion that "polling" means asking a search engine to provide new website information. The specification nowhere describes asking a website for a listing of links or URLs or asking a search engine to provide new website information. The specification explicitly describes what "polling" does: the "polling function…sends…'polling digital data' to each web site ***listed in database 100***[,]…monitors the response…and determines whether it is a complete response and whether the response is in the expected format," and adjusts the website's ranking on that basis. '084 patent, 21:5-28. The specification makes

Ex. 1057 in IPR2020-00847, ¶ 7 (cited Reply at 6)
Ex. 1057 in IPR2020-00846, ¶ 28 (cited Reply at 22)

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

#3: The Board Correctly Found That the Specification's "Polling" Only Describes Polling Known Websites Listed in the Database

'084 Petition at 6-7
'084 Reply at 4
'431 Petition at 50-51
'431 Reply at 28

Petition

a. The "First Embodiment" Does Not Provide Written Description for Claim 1

The only thing "periodic" in the first embodiment is a "polling mechanism" that measures response times of ***known*** web sites. *'084-patent*, 4:4-21, 7:17-22, 21:5-44; *Lipoff* ¶¶ 80-81. It only polls "each of the sites ***listed in the database***" (*i.e.*, the "plurality of web sites" in claim 1), and does not identify or ***add new*** web sites to that plurality of web sites, as [1.i] recites. *'084-patent*, 21:7-9, 5:44-46, 20:48-52; *Lipoff* ¶¶ 81-83.

'084 Petition at 7 ('431 Petition at 51)

Board's Institution Decision:

As pointed out by Petitioner (Pet. 7), the first embodiment describes polling known web sites and modifying their ranking number based on the individual web site's response and speed, and does not appear to search for new web sites. Ex. 1001, 7:17–21. The second embodiment appears to have

'084 DI at 33 ('431 DI at 51)

Patent

The robustness and reliability of the voice browsing system of the present invention is further improved by the addition of a polling mechanism. This polling mechanism continually polls or "pings" each of the sites listed in the database **100**. During this polling function, a web browsing server **102** sends brief data requests or "polling digital data" to each web site listed in database **100**. The web browsing server **102** monitors the response received from each web site and determines whether it is a complete response and whether the response is in the expected format specified by the content descriptor file **406** used by the extraction agent **400**. The polled web sites that provide complete responses in the format expected by the extraction agent **400** have their ranking established based on their "response lime". That is, web sites with faster response times will be will be assigned higher rankings than those with slower response times. If the web browsing server **102** receives no response from the polled web site or if the response received is not in the expected format, then the rank of that web site is lowered. Additionally, the web browsing server contains a warning mechanism that generates a warning message or alarm for the system administrator indicating that the specified web site has been modified or is not responsive and requires further review.

Since the web browsing servers **102** access web sites based upon their ranking number, only those web sites that produce useful and error-free responses will be used by the voice browser system to gather information requested by the user. Further, since the ranking numbers are also based upon the speed of a web site in providing responses, only the most time efficient sites are accessed. This system assures that users will get complete, timely, and relevant responses to their requests. Without this feature, users may be provided with information that is not relevant to their request or may not get any information at all. The constant polling and reranking of the web sites used within each category allows the voice browser of the present invention to operate efficiently. Finally, it allows the voice browser system of the present invention to dynamically adapt to changes in the rapidly evolving web sites that exist on the Internet.

'084 Patent at 21:5-44; '431 Patent at 16:56-17:28

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

#3: All the Specification's Mentions of "Polling" Websites Describe Determining Response Speed and Format of Known Websites

'084 Petition at 6-7
'084 Reply at 4
'431 Petition at 50-51
'431 Reply at 28

Patent

A preferred embodiment of the voice browser system and method uses a web site polling and ranking methodology that allows the system to detect changes in web sites and adapt to those changes in real-time. This enables the voice browser system of a preferred embodiment to deliver highly reliable information to users over any voice enabled device. This ranking system also enables the present invention to provide rapid responses to user requests. Long delays before

'084 Patent at 4:4-21; '431 Patent at 3:58-4:8

the user. This task is also known as "content extraction." The web browsing servers **102** also perform the task of periodically polling or "pinging" various web sites and modifying the ranking numbers of these web sites depending upon their response and speed. This polling feature is further discussed below. The web browsing server **102** is comprised of a

'084 Patent at 7:17-23; '431 Patent at 7:4-13

8. The system of claim **1**, wherein the computing device is further configured to periodically poll each of the web sites without being instructed by the user to determine at least one or more of 1) the availability of each web site, 2) the duration of time for each web site to respond to a request from the computing device, and changes to the location of the information to be retrieved from each web site, the computing device further configured to create the order of access to the plurality of web sites based on the periodic polling.

'084 Patent, Claim 8; '431 patent, Claim 8

The robustness and reliability of the voice browsing system of the present invention is further improved by the addition of a polling mechanism. This polling mechanism continually polls or "pings" each of the sites listed in the database **100**. During this polling function, a web browsing server **102** sends brief data requests or "polling digital data" to each web site listed in database **100**. The web browsing server **102** monitors the response received from each web site and determines whether it is a complete response and whether the response is in the expected format specified by the content descriptor file **406** used by the extraction agent **400**. The polled web sites that provide complete responses in the format expected by the extraction agent **400** have their ranking established based on their "response lime". That is, web sites with faster response times will be will be assigned higher rankings than those with slower response times. If the web browsing server **102** receives no response from the polled web site or if the response received is not in the expected format, then the rank of that web site is lowered. Additionally, the web browsing server contains a warning mechanism that generates a warning message or alarm for the system administrator indicating that the specified web site has been modified or is not responsive and requires further review.

Since the web browsing servers **102** access web sites based upon their ranking number, only those web sites that produce useful and error-free responses will be used by the voice browser system to gather information requested by the user. Further, since the ranking numbers are also based upon the speed of a web site in providing responses, only the most time efficient sites are accessed. This system assures that users will get complete, timely, and relevant responses to their requests. Without this feature, users may be provided with information that is not relevant to their request or may not get any information at all. The constant polling and reranking of the web sites used within each category allows the voice browser of the present invention to operate efficiently. Finally, it allows the voice browser system of the present invention to dynamically adapt to changes in the rapidly evolving web sites that exist on the Internet.

'084 Patent at 21:5-44; '431 Patent at 16:56-17:28

All cited '084 Petition at 7; '431 Petition at 51

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Parus's Written Description Arguments All Fail

'084 Petition at 6-11; '431 Petition at 50-54
'084 Reply at 1-4; '431 Replay at 25-28

Parus's POR Argues:

1. ~~A web search system "would include" identifying new web sites.~~
   ~~'084 POR at 32; '431 POR at 47~~

2. ~~The specification's "dynamically adapt[ing] to changes in…web sites" requires identifying new websites.~~
   ~~'084 POR at 33-34; '431 POR at 49~~

3. ~~The term "polling" means asking a website for a listing of URLs.~~
   ~~'084 POR at 34; '431 POR at 49-50~~

4. **The inventors' alleged reduction to practice included identifying new websites.**
   '084 POR at 32; '431 POR at 47

5. **"Devices" in the second embodiment "may in fact be websites."**
   '084 POR at 32-33; '431 POR at 47-48

6. **The second embodiment could not detect a new device by polling devices "listed in database 508" as disclosed.**
   '084 POR at 34; '431 POR at 49

#4: Parus's Allegation of Actual Reduction to Practice Is Irrelevant to Written Description

'084 Reply at 2-3
'431 Reply at 26-27

Parus's POR

websites" or engage in web crawling. Ex. 2059 at ¶ 149. A POSITA would understand that a search system as described by the '431 Patent would need to adapt to the changing internet by identifying new websites. Ex. 2059 at 149. This is confirmed by a review of the system that inventors reduced to practice prior to filing the provisional application that led to the issuance of the '431 Patent, which included this functionality. Ex. 2059 at ¶¶ 44-91.

'084 POR at 32 ('431 POR at 47)

Petitioners' Reply

Parus alleges the "need to…identify[] new websites…is confirmed by…the system that inventors reduced to practice." POR, 32. No evidence corroborates that WA-II practiced limitation [1.i]. *Infra* § IV.B.2.a.iii. Even if it had, that is irrelevant to written description in ***the parent specification***. *Enzo Biochem v. Gen-Probe*, 323 F.3d 956, 969 (Fed. Cir. 2002) ("[R]eduction to practice, absent an adequate description in the specification…, does not serve…for purposes of § 112.").

'084 Reply at 2-3 ('431 Reply at 26-27)

"[R]eduction to practice, absent an adequate description in the specification…, does not serve… for purposes of § 112."

Enzo Biochem v. Gen-Probe., 323 F.3d 956, 969 (Fed. Cir. 2002)
(cited '084 Reply at 2-3; '431 Reply at 26-27)

Parus's Sur-Reply

NO RESPONSE

Parus's Written Description Arguments All Fail

'084 Petition at 6-11; '431 Petition at 50-54
'084 Reply at 1-4; '431 Replay at 25-28

Parus's POR Argues:

1. ~~A web search system "would include" identifying new web sites.~~
   ~~'084 POR at 32; '431 POR at 47~~

2. ~~The specification's "dynamically adapt[ing] to changes in…web sites" requires identifying new websites.~~
   ~~'084 POR at 33-34; '431 POR at 49~~

3. ~~The term "polling" means asking a website for a listing of URLs.~~
   ~~'084 POR at 34; '431 POR at 49-50~~

4. ~~The inventors' alleged reduction to practice included identifying new websites.~~
   ~~'084 POR at 32; '431 POR at 47~~

5. **"Devices" in the second embodiment "may in fact be websites."**
   '084 POR at 32-33; '431 POR at 47-48

6. **The second embodiment could not detect a new device by polling devices "listed in database 508" as disclosed.**
   '084 POR at 34; '431 POR at 49

#5: The Board Correctly Rejected Parus's Argument That the Specification's Household Devices in Second Embodiment Are Websites

'084 Petition at 7-9; '084 Reply at 1-4
'431 Petition at 51-53; '431 Reply at 25-28

Parus's POR

A closer look at this disclosure shows that the devices in the second embodiment may in fact be web sites, and operate similarly to the first embodiment:

> In the preferred [second] embodiment, **the devices 500 appear as "web sites"** connected to the network 502. This allows a network interface system, such as device browsing server 506, a database 508, and a user interface system, such as media server 510 **similar to the web browsing sever 102, database 100 and the media server 106 described in the first preferred embodiment above**.
> '431 at 17:50-58; Ex. 1004 at ¶ [0054] (emphasis added).

'084 POR at 33; '431 POR at 48

Patent

A second embodiment of the present invention is depicted in FIG. **5**. This embodiment provides a system and method for controlling a variety of devices **500** connected to a network **502** by using conversational speech commands spoken into a voice enabled device **504** (i.e., wireline or wireless telephones, Internet Protocol (EP) phones, or other special wireless units). The networked devices may include various household devices. For instance, voice commands may be used to control household security systems, VCRs, TVs, outdoor or indoor lighting, sprinklers, or heating and air conditioning systems.

'084 Patent at 21:52-62; '431 Patent at 17:36-46

Board's Institution Decision:

The '084 patent's disclosure that the devices of the second embodiment "appear as 'web sites'" does not convince us otherwise at this stage of the proceeding because, "[f]or each device 500, the database 508 contains a record," which record contains "at least a device identifier, which may be in the form of a URL." *Id.* at 21:66–22:1, 22:15–17. Dr. Lipoff testifies that a person of ordinary skill in the art would have understood this device identifier URL "to be the device's network address on the local network 502, *similar to* how a web site has a URL as its network address on the web." Ex. 1002 ¶ 90 (emphasis added). Dr. Lipoff explains that a person of ordinary skill in the art would have understood this disclosure "to teach that the devices are, of course, *not actually* web sites, but only 'appear' to the device browsing server as URLs, because the device browsing server can access a URL to communicate with the device." *Id.* (emphasis added). At this stage of the proceeding, we credit Dr. Lipoff's testimony. It follows that we are unpersuaded by Patent Owner's argument that the '084 patent "disclosure describes that the devices in the second embodiment may in fact be websites." Prelim. Resp. 35.

'084 DI at 34; '431 DI at 52

#5: The Second Embodiment Also Cannot Provide Written Description Because It Fails to Meet Other Limitations of the Claim

'084 Petition at 9
'431 Petition at 53

'084 Patent Claim 1

1. A system for acquiring information from one or more sources maintaining a listing of web sites by receiving speech commands uttered by users into a voice-enabled device and for providing information retrieved from the web sites to the users in an audio form via the voice-enabled device, the system comprising:

at least one computing device, the computing device operatively coupled to one or more networks;

at least one speaker-independent speech-recognition device, the speaker-independent speech-recognition device operatively connected to the computing device and configured to receive the speech commands;

at least one speech-synthesis device, the speech-synthesis device operatively connected to the computing device;

memory operatively associated with the computing device with at least one instruction set for identifying the information to be retrieved, the instruction set being associated with the computing device, the instruction set comprising:

a plurality of web site addresses for the listing of web sites, each web site address identifying a web site containing the information to be retrieved;

at least one recognition grammar associated with the

sites and, if the information to be retrieved is not found at the first web site, the computer configured to access the plurality of web sites remaining in an order defined for accessing the listing of web sites until the information to be retrieved is found in at least one of the plurality of web sites or until the plurality of web sites have been accessed;

identify new web sites and to add the new web sites to the plurality of web sites, the computing device configured to access a first web site of the plurality of web sites and, if the information to be retrieved is not found at the first web site, the computer configured to access the plurality of web sites remaining in an order defined for accessing the listing of web sites until the information to be retrieved is found in at least one of the plurality of web sites or until the plurality of web sites have been accessed;

the speech synthesis device configured to produce an audio message containing any retrieved information from the plurality of web sites, and

the speech synthesis device further configured to transmit the audio message to the users via the voice-enabled device.

Petition

Furthermore, the second embodiment ***also*** fails to meet other limitations beyond [1.i]. For example, there is no description of the second embodiment meeting **[1.j]** ("if the information… is not found at the first web site,… access the plurality of web sites remaining in an order… until the information to be retrieved is found"), and that limitation would not have made sense in the second embodiment for controlling particular devices. *Lipoff* ¶ 92.

The second embodiment does not provide the required written description of claim 1 "with ***all*** its claimed limitations." *Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997).

'084 Petition at 9; '431 Petition at 53

Parus's POR & Sur-Reply

NO RESPONSE

Parus's Written Description Arguments All Fail

'084 Petition at 6-11; '431 Petition at 50-54
'084 Reply at 1-4; '431 Replay at 25-28

Parus's POR Argues:

1. ~~A web search system "would include" identifying new web sites.~~
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2. ~~The specification's "dynamically adapt[ing] to changes in…web sites" requires identifying new websites.~~
   ~~'084 POR at 33-34; '431 POR at 49~~

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   ~~'084 POR at 34; '431 POR at 49-50~~

4. ~~The inventors' alleged reduction to practice included identifying new websites.~~
   ~~'084 POR at 32; '431 POR at 47~~

5. ~~"Devices" in the second embodiment "may in fact be websites."~~
   ~~'084 POR at 32-33; '431 POR at 47-48~~

6. **The second embodiment could not detect a new device by polling devices "listed in database 508" as disclosed.**
   '084 POR at 34; '431 POR at 49

#6: The Specification Is Explicit That the Second Embodiment Polls the Devices Listed in the Database

'084 Petition at 7-8
'084 Reply at 3-4
'431 Petition at 50-53
'431 Reply at 27-28

Parus's POR

The specification describes a system where new devices / web sites are discovered. The specification describes polling or pinging "each device 500." '084 Patent, 23:31-33; Ex. 2059 at ¶ 155. That includes polling or pinging new devices as well as the devices listed in database 508. *Id.* The second embodiment simply polls or pings all devices on the network 502. If only devices in the database 508 were polled or pinged, the system could never detect a new device. Ex. 2059 at ¶ 154. That runs counter to the description in the '084 Patent. Instead, only known devices would be polled or pinged. A POSITA would understand that the described "polling or 'pinging'" describes a process where by existing and new devices and/or websites are discovered. Ex. 2059 at ¶ 154.

'084 POR at 32, 34 ('431 POR at 47-49)
See also '084 Sur-Reply at 3 ('431 Sur-Reply at 25)

Patent

reliability features described in the first embodiment. The device browsing system **514** has the ability to detect whether new devices have been added to the system or whether current devices are out-of-service. This robustness is achieved by periodically polling or "pinging" all devices **500** listed in database **508**. The device browsing server **506** periodically polls each device **500** and monitors the response. If the device browsing server **506** receives a recognized and expected response from the polled device, then the device is categorized as being recognized and in-service. However, if the device browsing server **506** does not receive a response from the polled device **500** or receives an unexpected response, then the device **500** is marked as being either new or out-of-service. A warning message or a report may then be generated for the user indicating that a new device has been detected or that an existing device is experiencing trouble.

Board's Institution Decision:

new web sites. Ex. 1001, 7:17–21. The second embodiment appears to have the ability to "detect whether *new devices* have been added to the system or whether current devices are out-of-service." *Id.* at 23:29–31 (emphasis added). Such detection of a new device appears to be carried out by polling or "pinging" periodically all known devices listed in a database, and "[i]f the device browsing server 506 receives a recognized and expected response from the polled device," it is categorized as being known and "in-service." *Id.* at 23:35–38. If, however, the server receives an unexpected response, then the device is identified as being "new." *Id.* at 23:38–41. Thus, the disclosed method of detecting whether a new device has been added to browsing system 514 appears to involve little more than receiving an unexpected response after a periodic polling of all known devices, and simply deducing that a new device was added. *Id.* at 23:26–41. Patent

'084 DI at 33-34; '431 DI at 51

Petitioners' Expert

discovered." Occhiogrosso-Decl., ¶ 154. Receiving an unexpected response after polling the known devices on a home or office network is not searching the Internet to identify new websites, and I find no explanation or evidence in Mr. Occhiogrosso's declaration to the contrary. Also, the disclosure at 23:26-44 of the '084 patent only discusses generating "[a] warning message or a report…for the user indicating that a new device has been detected," and nowhere describes adding a new network location or any other device identifier to the database.

Ex. 1057 in IPR2020-00847, ¶ 5 (cited '084 Reply at 4)
Ex. 1057 in IPR2020-00846, ¶ 26 (cited '431 Reply at 19-20)

#6: The Board Correctly Rejected Parus's Attempt to Mix-and-Match Embodiments

'084 Petition at 6-11; '431 Petition at 50-54
'084 Reply at 1-4; '431 Replay at 25-28

Parus's POPR

Ex, 1004, Original Application, at ¶ [0021], ¶ [0025], ¶ [0026], ¶ [0053]. The first embodiment describes using the voice browser system to browse web sites, while the second embodiment describes using it to browse devices. However, the disclosure makes it clear that these embodiments are not exclusive, and that the description of the second embodiment concerning a system for browsing devices is equally applicable to web sites and to the first embodiment system for browsing web sites. (*E.g.*, Ex. 1001, 21:65-22:6, 23:26-31, 23:56-67; Ex. 1004, ¶ [0054], ¶ [0061], ¶ [0063]).

Parus's POR

The first embodiment disclosed describes using the voice browser system to browse web sites, and the second embodiment describes using the voice browser system to browse devices. However, the disclosure makes it clear that these embodiments are not exclusive, and a POSITA would understand that the description of the second embodiment concerning a system for browsing devices is equally applicable to web sites and to the first embodiment system for browsing web sites. '084 Patent at 21:66-22:6, 23:26-33, 23:55-60; Ex. 1004, ¶ [0054], ¶ [0061], ¶ [0063].

'084 POPR at 35; '431 POPR at 53; '084 POR at 32; '431 POR at 47-48

Parus's Sur-Reply

NO RESPONSE

Board's Institution Decision

then the device is identified as being "new." *Id.* at 23:38–41. Thus, the disclosed method of detecting whether a new device has been added to browsing system 514 appears to involve little more than receiving an unexpected response after a periodic polling of all known devices, and simply deducing that a new device was added. *Id.* at 23:26–41. Patent Owner has not explained, nor do we discern, how such a method can be applied to identify new web sites—presumably to find additional sources of "desired data," which is an objective of the first embodiment. *Id.* at 4:57–59.

* * * *

At this stage of the proceeding, we credit Dr. Lipoff's testimony. It follows that we are unpersuaded by Patent Owner's argument that the '084 patent "disclosure describes that the devices in the second embodiment may in fact be websites." Prelim. Resp. 35.

'084 DI at 33-34; '431 DI at 51-52

Petitioners' Reply

Parus's POR largely copies-and-pastes its failed POPR arguments that the Board correctly rejected. *Compare* POR, 32-33 *with* POPR, 35-36; Paper 9 ("DI"), 31-34 (rejecting POPR's argument that "two exemplary embodiments" "are not exclusive," and being "unpersuaded" that "devices in the second embodiment may in fact be websites"). Parus gives no reason for the Board to reconsider, and its expert's declaration merely parrots the POR verbatim. Ex. 2059 ("Occhiogrosso-Decl."), ¶¶ 150-153. *Tyco Fire Prods. v. Victaulic*, IPR2016-00279, Paper 40 at 22 (June 12, 2017) (expert declaration that "repeat[s] verbatim Patent Owner's argument without additional facts or data…is entitled to little or no probative weight. 37 C.F.R. § 42.65.").

'084 Reply at 1-2 ('431 Reply at 25-26)

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Parus's Written Description Arguments All Fail

'084 Petition at 6-11; '431 Petition at 50-54
'084 Reply at 1-4; '431 Replay at 25-28

Parus's POR Argues:

1. ~~A web search system "would include" identifying new web sites.~~
   ~~'084 POR at 32; '431 POR at 47~~

2. ~~The specification's "dynamically adapt[ing] to changes in…web sites" requires identifying new websites.~~
   ~~'084 POR at 33-34; '431 POR at 49~~

3. ~~The term "polling" means asking a website for a listing of URLs.~~
   ~~'084 POR at 34; '431 POR at 49-50~~

4. ~~The inventors' alleged reduction to practice included identifying new websites.~~
   ~~'084 POR at 32; '431 POR at 47~~

5. ~~"Devices" in the second embodiment "may in fact be websites."~~
   ~~'084 POR at 32-33; '431 POR at 47-48~~

6. ~~The second embodiment could not detect a new device by polling devices "listed in database 508" as disclosed.~~
   ~~'084 POR at 34; '431 POR at 49~~

Parus's Patents Fail to Meet the Requirements for Written Description to Claim Priority

'084 Petition at 6-11; '431 Petition at 50-54
'084 Reply at 1-4; '431 Replay at 25-28

"[T]he hallmark of written description is disclosure. Thus, 'possession as shown in the disclosure' is a more complete formulation… **[T]he test requires an objective inquiry into the four corners of the specification** from the perspective of a person of ordinary skill in the art."

Ariad Pharms., Inc. v. Eli Lilly & Co., 598 F.3d 1336, 1351 (Fed. Cir. 2010) (cited '084 DI at 32; '431 DI at 50)

"A description which **renders obvious the invention** for which an earlier filing date is sought **is not sufficient**."

Lockwood v. Am. Airlines, Inc., 107 F.3d 1565, 1572 (Fed. Cir. 1997) (cited '084 Petition at 9-10; '431 Petition at 54)

"[W]hile each element may be *individually* described in the specification, the deficiency was the **lack of adequate description of their combination**… 'While each element may individually be discussed neither the specification nor drawings clearly support the claimed embodiment as a whole.'"

Hyatt v. Dudas, 492 F.3d 1365, 1371 (Fed. Cir. 2007) (italics original) (cited '084 Petition at 9-10; '431 Petition at 53-54)

"To the extent that Purdue contends that a person of skill in the art would **isolate and combine aspects from various embodiments** in the specifications (including patents incorporated by reference involving a different drug) to obtain the claimed invention, Purdue **relies upon the wrong test**. A description that merely renders the invention **obvious does not satisfy the written description requirement**."

Purdue Pharma L.P. v. Recro Tech., 694 F. 794, 797–98 (Fed. Cir. 2017) (cleaned up) (cited '084 Petition at 10; '431 Petition at 54)

Law Requires Demonstrating Possession of the Claimed Invention Within the Four Corners of the Patent

'084 Petition at 6-11; '084 Reply at 1-4
'431 Petition at 50-54; '431 Replay at 25-28

Board's Institution Decision:

A description adequate to satisfy 35 U.S.C. § 112, first paragraph, "must 'clearly allow persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed.' In other words, the test for sufficiency is whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date." *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc) (citation omitted, alteration in original). "[T]he hallmark of written description is disclosure," and "the test requires an objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art. Based on that inquiry, the specification must describe an invention understandable to that skilled artisan to show that the inventor actually invented the invention claimed." *Id.; see also Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563–64 (Fed. Cir. 1991) (stating that "the applicant must also convey with reasonably clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention," which, "for purposes of the 'written description' inquiry, [is] whatever is now claimed").

'084 DI at 32 ('431 DI at 50)

Petition

c. Written Description Cannot Be Found by Plucking Elements from the Different Embodiments

* * * *

written description of the claim. *Lipoff* ¶ 93; *Hyatt v. Dudas*, 492 F.3d 1365, 1371 (Fed. Cir. 2007) (affirming written description rejection, because even though "each element may be *individually* described in the specification, the deficiency was the lack of adequate description of [the claimed] *combination*") (emphasis original); *Trans Video Elecs., Ltd. v. Sony Elecs., Inc.*, 822 F. Supp. 2d 1020, 1026–27 (N.D. Cal. 2011) (rejecting argument that written description can be demonstrated by combining elements from different embodiments) (citing *Hyatt*); *Purdue Pharma L.P. v. Recro Tech., LLC*, 694 F. App'x 794, 797 (Fed. Cir. 2017) ("isolat[ing] and combin[ing] aspects from various embodiments in the specification" is "the wrong test" for written description); *Lockwood*, 107 F.3d at 1572 ("A description which renders obvious the invention… is not sufficient.").

'084 Petition at 9-10 ('431 Petition at 53-54)

Parus's Sur-Reply

that the application has sufficient disclosure to support claim 14. As to claim [1.i], that support comes from the knowledge of one of ordinary skill in the art and the Kurganov application's disclosure of its second embodiment. One of ordinary skill in the art should understand that "polling" allows a system to discover new websites. This is made clear by the description of the second embodiment. The polling of devices as disclosed in the second embodiment is not limited to known devices. It expressly discloses adding new devices to the system. If it were restricted to known devices, new devices could never be added.

'084 Sur-Reply at 1-2 ('431 Sur-Reply at 23-24)

Challenged Independent Claims

’431 Patent Claim 1

1. A system for retrieving information from pre-selected web sites by uttering speech commands into a voice enabled device and for providing to users retrieved information in an audio form via said voice enabled device, said system comprising:

a computer, said computer operatively connected to the internet;

a voice enabled device operatively connected to said computer, said voice enabled device configured to receive speech commands from users;

at least one speaker-independent speech recognition device, said speaker-independent speech recognition device operatively connected to said computer and to said voice enabled device;

at least one speech synthesis device, said speech synthesis device operatively connected to said computer and to said voice enabled device;

at least one instruction set for identifying said information to be retrieved, said instruction set being associated with said computer, said instruction set comprising:

a plurality of pre-selected web site addresses, each said web site address identifying a web site containing said information to be retrieved;

at least one recognition grammar associated with said computer, each said recognition grammar corresponding to each said instruction set and corresponding to a speech command;

said speech command comprising an information request selectable by the user;

said speaker-independent speech recognition device configured to receive from users via said voice enabled device said speech command and to select the corresponding recognition grammar upon receiving said speech command;

said computer configured to retrieve said instruction set corresponding to said recognition grammar selected by said speaker-independent speech recognition device;

said computer further configured to access at least one of said plurality of web sites identified by said instruction set to obtain said information to be retrieved, said computer configured to first access said first web site of said plurality of web sites and, if said information to be retrieved is not found at said first web site, said computer configured to sequentially access said plurality of web sites until said information to be retrieved is found or until said plurality of web sites has been accessed;

said speech synthesis device configured to produce an audio message containing any retrieved information from said pre-selected web sites, and said speech synthesis device further configured to transmit said audio message to said users via said voice enabled device.

’084 Patent Claim 1

1. A system for acquiring information from one or more sources maintaining a listing of web sites by receiving speech commands uttered by users into a voice-enabled device and for providing information retrieved from the web sites to the users in an audio form via the voice-enabled device, the system comprising:

at least one computing device, the computing device operatively coupled to one or more networks;

at least one speaker-independent speech-recognition device, the speaker-independent speech-recognition device operatively connected to the computing device and configured to receive the speech commands;

at least one speech-synthesis device, the speech-synthesis device operatively connected to the computing device;

memory operatively associated with the computing device with at least one instruction set for identifying the information to be retrieved, the instruction set being associated with the computing device, the instruction set comprising:

a plurality of web site addresses for the listing of web sites, each web site address identifying a web site containing the information to be retrieved;

at least one recognition grammar associated with the computing device, each recognition grammar corresponding to each instruction set and corresponding to a speech command, the speech command comprising an information request provided by the user, the speaker-independent speech-recognition device configured to receive the speech command from the users via the voice-enabled device and to select the corresponding recognition grammar upon receiving the speech command;

the computing device configured to retrieve the instruction set corresponding to the recognition grammar provided by the speaker-independent speech-recognition device;

the computing device further configured to access at least one of the plurality of web sites identified by the instruction set to obtain the information to be retrieved, wherein the computing device is further configured to periodically search via the one or more networks to identify new web sites and to add the new web sites to the plurality of web sites, the computing device configured to access a first web site of the plurality of web sites and, if the information to be retrieved is not found at the first web site, the computer configured to access the plurality of web sites remaining in an order defined for accessing the listing of web sites until the information to be retrieved is found in at least one of the plurality of web sites or until the plurality of web sites have been accessed;

the speech synthesis device configured to produce an audio message containing any retrieved information from the plurality of web sites, and

the speech synthesis device further configured to transmit the audio message to the users via the voice-enabled device.

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE