## Demonstratives of Patent Owner Angel Technologies Group LLC

Oral Hearing: February 13, 2024

The Challenged '432,' 291, '275, and '480 Patents
'432 Patent
(-00057)

'291 Patent
(CON of '432) (-00058)

-00058: Ex. 1001 at Cover
'275 Patent
(CON of '291) (-00059)

-00059: Ex. 1001 at Cover
'480 Patent
(CON of '275) (-00060)

-00060: Ex. 1001 at Cover

## '480 Patent (IPR2023-00060): Single Instituted Ground



## Ground 1

Claims 1-30 are obvious over Robertson in view of Lloyd-Jones


- Robertson is not analogous art
- Robertson/Lloyd-Jones does not disclose or suggest the claimed "associating input" (limitations 3[b]/30[b])
- Robertson/Lloyd-Jones does not disclose or suggest the claimed "prompt" to the "viewing user" (limitations $1[\mathrm{~g}] / 2[\mathrm{c}] / 3[\mathrm{c}], 1[\mathrm{~h}] / 2[\mathrm{~d}] / 3[\mathrm{~d}] / 30[\mathrm{~d}])$
- Petitioner fails to establish motivation to combine
- Petitioner fails to establish reasonable expectation of success
- Petitioner's analysis of the dependent claims fails


# '480: Robertson Must be Analogous Art for Petitioner's Single Ground to Succeed 



## analogous art to the claimed

invention.
In re Bigio, 381 F.3d 1320, 1325 (Fed. Cir. 2004)

## Analogous Art: Scope of the Art

- Is the reference from the same field of endeavor as the claimed invention?
- Is the reference reasonably similar to the problem the inventor faced?


## POSITA: Skill Level/Technical Sophistication

- The educational level of the inventor
- Types of problems encountered in the art
- Prior art solutions to those problems
- Rapidity with which inventions are made
- Sophistication of the technology
- Educational level for active workers in the field
"Thus, we attempt to more closely approximate the reality of the circumstances surrounding the making of an invention by only presuming knowledge by the inventor of prior art in the field of his endeavor and in analogous arts."

In re Wood, 599 F.2d 1032, 1036 (C.C.P.A. 1979)

## '480: Robertson Is Not Analogous Art



In re Bigio, 381 F.3d 1320, 1325 (Fed. Cir. 2004)


Field of the Invention
The present invention relates to computer software. More particularly, the invention relates to a method and apparatus for storing and sharing images such as photographs via a communications network and for permitting the identification of objects and the location of the objects within the images. The invention enables users to supply and/or receive information about the existence of objects within images.



## '480: Petitioner's Initial Positions Confirm the Inventor's Field of Endeavor

The '480 Patent relates to photo tagging over a communications network-
enabling "users to supply and/or receive information about the existence of objects
Petition within images." EX1001, 1:16-17. The specification claims that prior art systems

But such networked photo tagging systems were available at the time.

Dr. Bederson
45. The ' 480 patent describes a well-known system, computer program and method "for storing and sharing images such as photographs via a communications network." Ex. 1001 at Abstract. The system enables all users to identify persons within the photos, rather than requiring the person that originally uploaded the photo to do so. Id. Users can automatically share and search for photos and/or persons within the photos. Id.

## '480: Petitioner's Shifting Positions Fail to Account for the Invention

via a communications network." Id., Abstract. The '480 Patent describes its
embodiment as a website utilizing Internet, HTML, and databases. Id., 4:10-37,
Reply
Fig. 1. It further discloses using a web page called an "identifying page" to create
associations-i.e., contact relationships among users. Id., 11:13-23, Fig. 5;
Bederson 『47. The '480 Patent claims are also directed to methods implemented on

Dr. Bederson Reply
23. The ' 480 patent also describes its primary embodiment as a website that
utilizes the Internet, HTML, and databases. Id. at 4:10-37, Fig. 1. It further discloses
using a web page called an "identifying page" to create associations-i.e., contact relationships among users. Id. at 11:13-20, Fig. 5; Bederson Decl. T 47. The '480

## '480: Petitioner's Shifting Positions Fail to Account for the Invention

Figure 1


101


The Board must:

- consider "the full disclosure"
- reference the "function and structure of the invention"


## '480: The Field of Endeavor Is Not "Networked and Web-based Media Applications"



Polygroup Ltd. MCO v. Willis Elec. Co., Ltd., 759 F. App’x 934, 942 (Fed. Cir. 2019)

## Ex Parte Offenhartz: Field of endeavor is "configuration of software applications"


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- Specification, titled "Dynamic Generated Web UI for Configuration"
- Spec. $\mathbb{1} 17$ ("Users can be able to configure their application with a utility which is designed to be easy to use and informative.")
- Such configuration includes information that is used to set up applications (Spec. ๆ I 13)


## In re Mettke: Field of endeavor is "pay-for-use public communication terminals"



## [57] ABSTRACT

A "pay-as-you-use" communication terminal capable of interfacing with all major commercial on-line communications services (I.E. American On-Line, Prodigy, CompuServe, Genie, Delphi, Eworld). Users can receive a hard

## BACKGROUND-FIELD OF INVENTION

This invention relates to an electronic pay-as-you-use message terminal/apparatus capable of interfacing with all major commercial on-line services.

1. A public on-line, pay-as-you-use communications terminal comprising a housing, wherein said housing contain:

## Snap v. Vaporstream: Field of endeavor is "handling electronic messages"



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    Saly the Weuluw citives noumally wailute
        SNPNNC, Autume
    vavosstram, ise, Vmen Omm
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(54) ELECTRONIC MESSAGE HANDLING
SYSTEM AND METHOD BETWEEN
SENDING AND RECIPIENT DEVICES WITH
SEPARATION OF DISPLAY OF MEDIA
COMPONENT AND HEADER INFORMATION

"When determining whether a prior art reference meets the 'same field of endeavor' test for the analogous art, the primary focus is on what the reference discloses."

Airbus S.A.S. v. Firepass Corp., 941 F.3d 1374, 1380 (Fed. Cir. 2019)

## '480: Robertson's Field of Endeavor is Contact Management Systems



1. Field of the Invention

The present invention relates generally to multi-user computer systems, such as contact management systems, that provide services for users to locate and share personal information with other users.

## '480: Robertson's Embodiments are Contact Management Systems



## '480: Robertson's Embodiments are Contact Management Systems



In a commercial embodiment of the present invention, the personal contact manager $\mathbf{3 4 3}$ is the heart of a Web-based personal contact management service called PlanetAll. The database 340 contains contact information entered by registered users. The personal contact manager 343 in some situations will notify a set of users of updates made to the database $\mathbf{3 4 0}$ by another user to whom the notified set is related.

## '480: Robertson's Embodiments are Text-Based GUIs



## PSEUDO GROUP LIST FORM

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580-2
```

Following are the other members who went to your college at about the same time.
580-4
Click on the boxes next to the names of the people you'd like to add to your Address Book.

$\square$ Robert Johnson (Graduated 1986)
$\square$ Jane Smith (Graduated 1986)


FIG. $g$

Wang Labs., Inc. v. Toshiba Corp., 993 F.2d 858, 864 (Fed. Cir. 1993)

## '480: Robertson Is Not in the Same Field of Endeavor

Fifth, even if the field of endeavor were limited to the "storing and sharing of images and the identification of objects and location of objects within those images," Robertson relates to that field. A POSA would have understood that the web-based technology disclosed in Robertson includes images. Id. $\mathbb{T \uparrow [ 2 9 - 3 2 \text { ; EX2021 (Bederson }}$ Tr.), 15:9-17:20, 18:17-19:11. As Dr. Bederson explained, websites such as those
31. As I explained in my original declaration, at the time of the purported invention, a skilled artisan would have been aware of the convergence of groupware software like Robertson with multimedia applications that incorporated images.

## Dr. Bederson Reply

Bederson Decl. ©T 88-110; see also Ex. 1012 at 1:53-2:22 (describing groupware prior art). Accordingly, even if the field of endeavor were limited to the "storing and sharing of images and the identification of objects and location of objects within those images" as Patent Owner and Dr. Saber contend, in my opinion Robertson would still relate to that field of endeavor because Robertson relates to images

## '480: Robertson Is Not in the Same Field of Endeavor


field of endeavor, regardless of the problem addressed, or (2) if it is not from the same field of the inventor's endeavor, it is reasonably pertinent to the particular problem with which the inventor is involved."

In re Bigio, 381 F.3d 1320, 1325 (Fed. Cir. 2004) (emphasis added)

## '480: No Credible Argument that Robertson Discloses or Suggests Images

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Robertson was not cited or discussed during the ' 480 Patent prosecution.
Robertson discloses adding a contact based on an affiliation (i.e., an association),
but does not explicitly disclose affiliations with images.
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69. 

The '994 Application does not describe any operations with digital
media-indeed, the term "digital media" does not appear at all in the '994
Dr. Bederson

> Application. Instead, the '994 Application is focused entirely on images (also described as "digital images" or "digital photographs"). It states that "[ $t]$ he present

[^0]

The ' 375 patent describes a method for manufacturing a light emitting diode ("LED").
$* * * * *$

1. A method for manufacturing a light emitting device comprising:

According to Patent Owner, Pinnow and the ' 375 patent are directed to two distinct fields of endeavor, "Pinnow is a gas ion laser projection display system and the ['375 patent] invention is, in contrast, directed to LED light sources." Prelim. Resp. 49. As noted in its specification, Pinnow describes its field of invention as "concerned with projection display systems and is primarily concerned with those producing black and white images." Ex. 1006, 1:5-7. Further, Pinnow's claims all are directed to a "[v]isual display apparatus comprising a laser." Id. at 5:8-9 (preamble of Pinnow's sole independent claim). Based on our review of Pinnow's disclosures, we find no reference to an LED in the text of Pinnow. In addition, Patent Owner contends that "[a]ll of Pinnow's embodiments concern gas ion laser display systems that use a phosphor screen to create black and white images." Prelim. Rep. 50
*6 We are persuaded by Patent Owner's argument that Pinnow is not in the same field of endeavor as the '375 Patent because "Pinnow was focused on a projection display system, not an LED light source.... Stated another way, Pinnow does not teach a white laser, but only a white image. In contrast, the light source-the white LED-is the primary focus of the [' 375 patent's] invention." Prelim. Resp. 55. Pinnow's disclosures are focused on laser projection displays and Petitioner has not provided argument or evidence to persuade us that one of ordinary skill in the art would find the Pinnow and the ' 375 patent to be in the same field of endeavor. Thus, Petitioner has failed to demonstrate that Pinnow and the ' 375 patent are analogous art based a shared field of endeavor.

Vizio, Inc. v. Nichia Corp., IPR2017-00558, 2017 WL 2901318, at *6 (PTAB July 7, 2017)

## '480: Reasonable Pertinence Requires that the Problems Must be Compared



Donner Tech., LLC v. Pro Stage Gear, LLC, 979 F.3d 1353, 1359 (Fed. Cir. 2020) (emphasis added)

## '480: Reasonable Pertinence Requires that the Problems Must be Compared



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    One particular problem PO asserts that the '480 Patent addresses is
establishing associations (i.e., contact relationships) among the users of an
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application. EX1046 $\uparrow 47$; Bederson Reply $\uparrow$ 35. The ' 480 Patent states that users

## Petition

searching." See POR 15. As noted above, PO has stated that the ' 480 Patent "claims
the addition of new contacts to a user's contact list after the user views a tagged
photo." EX1046 947. PO has also stated that the '480 Patent "allows users to
36. The claims of the Angel Technologies Patents are directed at specific problems existing in the realm of Internet-based digital photo and media sharing. For example, "existing websites [did] not offer users the ability to identify objects within photos" such that unless the viewer had prior knowledge of the individuals in the photo, the viewer was unable to determine their identities. $I d$. at 1:62-2:1. Although photo album sites "offer[ed] the ability to describe uploaded photos through the use of captions or other descriptive fields," this was insufficient. Id. at 2:1-3. For example, if

## Ex. 1046

 (Complaint)
## 47. The claims of each of the Angel Technologies Patents recite a specific

 way to accomplish the features of the inventions. For example, the ' 432 Patent claims specific unique IDs and associations that allow users to tag and search photos. See, e.g., id. at claims 1 and 6. Similarly, the '291 Patent claims determining associations between users of a network and enabling the use of a contact list to tag photos. See, e.g., Ex. B ('291 Patent) at claim 1. The '275 Patent claims the use of a facial recognition algorithm to identify the same tagged user in other photos stored on the system. See, e.g., Ex. C ('275 Patent) at claim 1. Finally, the ' 480 Patent claims the addition of new contacts to a user's contact list after the user views a tagged photo. See, e.g., Ex. D ('480 Patent) at claim 1.```
person's album." EX1001, 9:38-41. It further explains that the use of contacts
"enables the system to filter the number of records in the users database and provide
only the most relevant people to the user when identifying people or searching for
photos." Id., 9:44-48.
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-00060: Reply at 10

wish to receive or view photographs taken by the user. The use of contacts, while not necessary, enables the system to 45 filter the number of records in the users database and provide only the most relevant people to the user when identifying people or searching for photos.
a list of objects to identify in the image. Then system may optionally filter this list providing only the most relevant objects to select from (e.g. only providing a list of contacts).

## '480: Petitioner Improperly Conflates the '480 Problem with the Solution



Galloway is titled, "Reciprocating Apparatus and Cam Follower for Winding a Package." J.A. 878. "This invention relates to the production of glass fibers, and in particular, to winding a glass fiber strand to form packages." Id. at 1:21-23. Galloway discloses a reciprocating apparatus with a helical groove. Id. at 2:19-21. The Board found that Galloway

In this case, the Board erred by too narrowly construing the problem addressed by the ' 459 patent. The inventors of the ' 459 patent focused on solving the difficulty in cutting large amounts of semi-rigid tissue. Galloway, in contrast, is directed to winding glass fiber. Even though both ended up with similar mechanical solutions, it is beyond a stretch to say that Galloway "logically would have commended itself to an inventor's attention in considering his problem." Id. at 659. Because Galloway is not analogous prior art, the Board erred by affirming Rejections 5 and 8.

# '480: Robertson Is Not Reasonably Pertinent to the '480 Patent's Problem 

| '480 Patent's Problem | Robertson's Problem |
| :--- | :--- |
| $\checkmark$ Identifying objects in images and |  |
| storing associations for sharing | $\times$Providing a contact management <br> system that links individual users based <br> on group affiliations and providing <br> notifications when information for a <br> particular user has changed |

## '480: Robertson Is Directed to an Entirely Different Problem



Donner Tech., LLC v. Pro Stage Gear, LLC, 979 F.3d 1353, 1359 (Fed. Cir. 2020)

- Robertson is not analogous art
- Robertson/Lloyd-Jones does not disclose or suggest the claimed "associating input" (limitations 3[b]/30[b])
- Robertson/Lloyd-Jones does not disclose or suggest the claimed "prompt" to the "viewing user" (limitations $1[\mathrm{~g}] / 2[\mathrm{c}] / 3[\mathrm{c}], 1[\mathrm{~h}] / 2[\mathrm{~d}] / 3[\mathrm{~d}] / 30[\mathrm{~d}])$
- Petitioner fails to establish motivation to combine
- Petitioner fails to establish reasonable expectation of success
- Petitioner's analysis of the dependent claims fails


## '480: Robertson/Lloyd-Jones Does Not Disclose or Suggest Limitations 3[b]/30[b]

## Claim 3



- "associating input"

1. "indicating an association between the first user and an item of digital media"
2. "received separately from the naming input"

## '480: Robertson Does Not Disclose Limitations 3[b]/30[b]



## '480: Robertson Does Not Disclose Limitations 3[b]/30[b]

Second, Robertson discloses the affiliation is received from the client computer (the associating input received) separately from the user's personal name input (the naming input). Bederson 『156. Specifically, Robertson teaches that the user's personal name is received through data fields different from the groups the user wishes to affiliate with. EX1012, 6:39-41 (describing different data fields in Figure 7), Fig. 7. Because the input is received through different data fields, the input is received separately.

## 480: Robertson Does Not Disclose or Suggest Limitations 3[b]/30[b]

## Claim 3

by the one or more computing devices, storing in memory accessible to the one or more computing devices information determined from an associating input received from a computing device of a user of the communications network, the associating input indicating an association between the first user and an item of digital media, the associating input received separately from the naming input;

- "associating input"

1. "indicating an association between the first usef and an item of digital media"
z. "received separately from the naming input"

## '480: Robertson/Lloyd-Jones Does Not Disclose or Suggest Limitations 3[b]/30[b]

> Fourth, Robertson does not explicitly disclose that the associating input indicat[es] an association between the first user and an item of digital media, but this would have been obvious in view of Lloyd-Jones. Bederson $\mathbb{1} 159$. Like the Affinity Table of Robertson, Lloyd-Jones teaches "an association list, in a storage device." EX1013, [0031]. Lloyd-Jones further teaches that the "association list preferably includes a tag indicating an association with the rendered image." Id.
> Notably, "if the image depicts a person called 'Liza Hayward', then the icon associated with the name 'Liza Haywood' can be selected" and "the metadata (e.g., the name 'Liza Hayward') associated with the selected icons is stored as an association list ... linked to the rendered image." Id., [0030]-[0031]; see also

Figs. 1,3. Accordingly, the association list includes an association between the first
user (e.g., Liza Hayward) and an item of digital media (e.g., image ID 1).

-00060: Pet. at 35

## '480: Lloyd-Jones Discloses Associating Metadata with Image, Not a "First User"

100

Fig. 1


[0029] The method of annotating an image using metadata, can now be described with reference to the flowehart 100 of FIG. 1, where the method is performed using the computer system 200. The process begins at step 101, where a list of metadata labels is provided. The list of metadata labels is preferably provided automatically. For example, a list of people's names can be provided automatically by extracting the names from an existing database of names, such as an e-mail address book. In this instance, names,
-00060: Ex. 1013 at 9 [0029]


## '480: Lloyd-Jones Discloses Associating Metadata with Image, Not a "First User"

## 100

Fig. 1


[0031] At the next step 113, the metadata (e.g. the name "Liza Hayward") associated with the selected icons is stored as an association list, in a storage device such as the hard disk drive 210, and linked to the rendered image. The position ( $\mathrm{x}, \mathrm{y}$ ) and size (width, height) of the bounding box (e.g. 503), associated with the subject, are also stored in the association list, as at step 113, such that the metadata and bounding box information are linked together. Alternatively,
-00060: Ex. 1013 at 9 [0031]

language used for associating metadata with images. An example of the format of an XML file $\mathbf{3 0 1}$ is shown in FIG. 3. As seen in FIG. 3, the XML file includes the file name $\mathbf{3 0 0}$ of an image file, the metadata 303 , and bounding box information 305 associated with the image file. In a further implementation, the metadata and bounding box positional information associated with the selected subject can be stored as part of the image file. For example, the .TIF image


The Petition, however, does not specify with particularity how Lange teaches a memory hierarchy, and moving data between members of a memory hierarchy, as required under our interpretation of the term "data prefetch unit." Our rules require that a petition specify with particularity where each element of a claim is found in the prior art, and include a detailed explanation of the relevance of the prior art to the claim.
37 C.F.R. $\S 42.104$ (b)(4) (" $[t]$ he petition must specify where each element of the claim is found in the prior art patents or printed publications relied upon"); id. § 42.22(a)(2) ("[e]ach petition . . . must include . . . a detailed $* * * * *$
that Lange teaches moving data between members of a hierarchy. With regard to claim 1, Petitioner asserts that Lange discloses a first memory (i.e., either the FIFO memory in the MARC core or BlockSelectRAM in the FPGA) and a second memory (i.e., SRAM and/or DRAM accessed by the MARC core back-end ports), as recited in the claim, but Petitioner does not specify that these memories comprise a memory hierarchy or explain why that would be the case. Pet. 15-17 (asserting a first memory); id. at 21-22 (asserting second memory); see generally id. at 15-22 (failing to specify a memory hierarchy). With regard to claim 9 , Petitioner identifies a memory,

## '480: The Combination Does Not Disclose or Suggest Limitations 3[b]/30[b]


-00060: Ex. 1001 at Claim 3

- "associating input"

1. "indicating an association between the first user and an item of digital media"
z. "received separately from the naming input"

- Robertson is not analogous art
- Robertson/Lloyd-Jones does not disclose or suggest the claimed "associating input" (limitations 3[b]/30[b])
- Robertson/Lloyd-Jones does not disclose or suggest the claimed "prompt" to the "viewing user" (limitations $1[\mathrm{~g}] / 2[\mathrm{c}] / 3[\mathrm{c}], 1[\mathrm{~h}] / 2[\mathrm{~d}] / 3[\mathrm{~d}] / 30[\mathrm{~d}])$
- Petitioner fails to establish motivation to combine
- Petitioner fails to establish reasonable expectation of success
- Petitioner's analysis of the dependent claims fails

3. A method implemented on one or more computing devices connected via a communications network, the method comprising:
by one or more computing devices, storing in memory accessible to the one or more computing devices descriptive naming information about a first user of the communications network, the descriptive naming information determined from a naming input received from a computing device of the first user;
by the one or more computing devices, storing in memory accessible to the one or more computing devices information determined from an associating input received from a computing device of a user of the communications network, the associating input indicating an association between the first user and an item of digital media, the associating input received separately from the naming input;
by the one or more computing devices, transmitting display data for presentation in a graphical user interface on a computing device of a viewing user, the display data indicating the association between the first user and the item of digital media such that a graphical display of the display data in the graphical user interface includes:
i) information determined from the associating input,
ii) descriptive naming information determined from the naming input, the descriptive naming information in the display data being information other than information received from the associating input, and
iii) an element configured to provide a prompt to the viewirg user to add an association between the first user and the viewing user;
by the one or more computing devices, receiving an input initiated by the viewing user indicating a request to add the association between the first user and the viewing user; and
responsive to receiving the input initiated by the viewing user, storing the association between the first user and the viewing user in memory accessible to the one or more computing devices.

## "First User" (Pictured User)

- Provides the naming input
- Associated with an item of digital media, e.g., tagged in a photo
"Viewing User"
- Viewing the display data with the tagged photo
- Prompted to add an association with the first user, e.g., add pictured user as a contact

3. A method implemented on one or more computing devices connected via a communications network, the method comprising:
by one or more computing devices, storing in memory accessible to the one or more computing devices descriptive naming information about a first user of the communications network, the descriptive naming information determined from a naming input received from a computing device of the first user;
by the one or more computing devices, storing in memory accessible to the one or more computing devices information determined from an associating input received from a computing device of a user of the communications network, the associating input indicating an association between the first user and an item of digital media, the associating input received separately from the naming input;
by the one or more computing devices, transmitting display data for presentation in a graphical user interface on a computing device of a viewing user, the display data indicating the association between the first user and the item of digital media such that a graphical display of the display data in the graphical user interface includes:
i) information determined from the associating input,
ii) descriptive naming information determined from the naming input, the descriptive naming information in
the display data being information other than infornaming input, the descriptive naming information in
the display data being information other than information received from the associating input, and mation received from the associating input, and viewing user to add an association between the first user and the viewing user;
by the one or more computing devices, receiving an input initiated by the viewing user indicating a request to add the association between the first user and the viewing user, and
responsive to receiving the input initiated by the viewing user, storing the association between the first user and the viewing user in memory accessible to the one or more computing devices.

Limitation 3[c] -

[^1]
## "Element Configured to Provide a Prompt"

- Graphical display of display data that includes the association between the first user and item of digital media with an element configured to prompt the viewing user to add an association

The '994 Application does not describe a viewing user adding an association between themselves and a pictured user. The '994 Application merely discloses that "a client, while viewing an image (or digital photograph) can
Petition identify a person who appears within the image by clicking on the image and selecting this person from a list of people." EX1014, 5. But a POSA would have understood that identifying a user in an image forms an association between the pictured user and the image, not an association between the pictured user and the viewing user.

## '480: The Combination Does Not Disclose the Claimed "Prompt" or "Viewing User"



Users database $\mathbf{2 3 0}$. Users may request to enter a number of other persons as contacts or be prompted if they would like to add specific users as contacts, for example when viewing 40 another person's album. The contacts may include, for example, friends and family members who regularly appear in photographs taken by the user and/or persons who may wish to receive or view photographs taken by the user. The use of contacts, while not necessary, enables the system to filter the number of records in the users database and provide only the most relevant people to the user when identifying people or searching for photos.

## '480: The Combination Does Not Disclose the Claimed "Prompt" or "Viewing User"

[A]lthough the prior art ... clearly allows users to annotate images with people who appear in them, and ... teaches contact lists, the specific use of prompting a viewing user (of another[] user's images) to add (and subsequently store) an association between that viewing user and the other user (which is interpreted as adding that other user to the viewing user's contact list ...) is not found in the prior art in conjunction with the rest of the limitations of the parent independent claim(s).

-00060: Resp. at 19-23; Sur-Reply at 14-18

## '480: Lloyd-Jones Does Not Disclose the Claimed "Prompt"

## '480: Robertson Does Not Disclose the Claimed "Prompt" or "Viewing User"



## PSEUDO GROUP LIST FORM

```
580-2
```

Following are the other members who went to your college at about the same time.

```
        -580-4
```

    Click on the boxes next to the names of the people
    you'd like to add to your Address Book.
    580-6
                                    -580-8
    State University, 1982-1986

$\square$ Robert Johnson (Graduated 1986)
$\square$ Jane Smith (Graduated 1986)
580-16


FTG. $B$

## '480: Robertson Does Not Disclose the Claimed "Prompt" or "Viewing User"




65
Referring now to FIG. 8, a pseudo GUI $\mathbf{5 8 0}$ is shown that allows a first user to select other users they wish to add to their personal address book. The list of contacts is created based on

In another portion of the member update pseudo GUI 650 shown in FIG. 11, if one or more members has affiliated with 15 a group with which the first user is also affiliated, a text description $650-14$ will alert the first user. The name of the second user, the name of the group in which the first and second users share an affiliation, and the ending date of the second user's affiliation with that group are displayed 650-16. 20
-00060: Ex. 1012 at 11:14-20


## No "first user"

No "prompt" to add an association with "first user" from image

No "viewing user"

Finally, PO alleges that Petitioner and Dr. Bederson "resort to fabricating new figures" to meet the claim limitation, and that the modified figures are "not the result of a combination." POR 21-22 (emphasis original). PO is plainly wrong. The Petition demonstrated how a POSA would have used ordinary creativity to combine the GUIs of Robertson and Lloyd-Jones to prompt the user to add contacts from
tagged images. Pet. 41-48; see also KSR Int'l Co, v. Teleflex Inc., 550 U.S. 398, 418

## '480: Petitioner Cannot Resort to "Creativity" or "Common Sense"

Arendi S.A.R.L. v. Apple Inc., 832 F.3d 1355, 1366-67 (Fed. Cir. 2016)
"The Board's invocation of 'ordinary creativity' is no different from the reference to 'common sense' that we considered in Arendi."

DSS Tech. Mgmt., Inc. v. Apple Inc., 885 F.3d 1367, 1374-75 (Fed. Cir. 2018)

## '480: Petitioner Cannot Resort to "Creativity" or "Common Sense"



## '480: Petitioner Cannot Resort to "Creativity" or "Common Sense"



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OSS TECHNOLOGY MANAGEMENT, INC.,APpellan
    APPLEINC.,Appellee
    2012332,,016:254
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- Robertson is not analogous art
- Robertson/Lloyd-Jones does not disclose or suggest the claimed "associating input" (limitations 3[b]/30[b])
- Robertson/Lloyd-Jones does not disclose or suggest the claimed "prompt" to the "viewing user" (limitations $1[\mathrm{~g}] / 2[\mathrm{c}] / 3[\mathrm{c}], 1[\mathrm{~h}] / 2[\mathrm{~d}] / 3[\mathrm{~d}] / 30[\mathrm{~d}])$
- Petitioner fails to establish motivation to combine
- Petitioner fails to establish reasonable expectation of success
- Petitioner's analysis of the dependent claims fails


# '480: Petitioner Fails to Establish Motivation to Combine 



Petition for Inter Parter Review U.S. Patent No. $10.628,480$

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

## In re Inter Partes Review o

.S. Patent No. 10.628.480
Issued: Apr, 21, 2020
Application No: 16/537.227
Filing Date: Aug 9, 2019
For: Linking Tags to User Profiles
ELLED VIA P-TACTS
PETITION FOR INTER PARTES REVIEW OF
US. PATENT NO. 10,628,480

Petitioner's analysis fails for many reasons, including:

1. Petitioner's analysis fails to focus on the claimed invention
2. Petitioner fails to establish why a POSA would start with Robertson
3. Petitioner fails to establish why a POSA would combine Lloyd-Jones with Robertson

## A. Motivation to Combine

A POSA would have been motivated to combine the teachings of Robertson and Lloyd-Jones. Bederson $\boldsymbol{\top} \uparrow 138-41$. Specifically, a POSA would have recognized that Lloyd-Jones's image annotation and association features would have improved Robertson's social networking system and facilitated its goal of establishing contact

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relationships. Id
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## '480: Petitioner Fails to Establish Motivation to Yield the Claimed Invention



Axonics, Inc. v. Medtronic, Inc., 73 F.4th 950, 957 (Fed. Cir. 2023) (emphasis added)


The Board's reasoning is also deficient in its finding that a relevant skilled artisan would have had a motivation to combine Woodhill and Stefik in the way claimed in the ' 310 patent claims at issue and would have had a reasonable expectation of success in doing so. The Board's most substantial discussion of this issue merely agrees with Apple's contention that "a person of ordinary skill in the art reading Woodhill and Stefik would have understood that the combination of Woodhill and Stefik would have allowed for the selective access features of Stefik to be used with Woodhill's content-dependent identifiers feature." Id. at *8 (emphasis added). But that reasoning seems to say no more than that a skilled artisan, once presented with the two references, would have understood that they could be combined. And that is not enough: it does not imply a motivation *994 to pick out those two references and combine them to arrive at the claimed invention. See

WBIP, LLC v. Kohler Co., 829 F.3d 1317, 1337 (Fed. Cir. 2016) (emphasis added)

2:66-67.

## A POSA would have understood that supplementing a user's group

affiliations with image associations would have advanced the user's ability to add
more contacts Bederson 9139 . Specifically, a POSA would have recognized the importance of images to establishing relationships and connections. Id.; see also,


When a user enters a Travel Event into Robertson's system, the user may be notified that he will be crossing paths with another user. EX1012, 12:22-26, Fig. 11 (item

> Using images in a social networking system was also a known design option
> Id. 1141. As discussed in the Technology Overview, at the relevant time in 2001, it was obvious to develop software that could use the features of photo management software, groupware, and social networking. See Section IV.A; Bederson 『141; see

## '480: Petitioner Fails to Establish Why a POSITA Would Combine These References



In re Van Os, 844 F.3d 1359, 1361 (Fed. Cir. 2017)

## '480: Conclusory Expert Testimony is Inadequate to Support Obviousness



*1328 The opinion by Verizon's expert regarding the motivation to combine references was likewise insufficient. Verizon's expert testified that:

> The motivation to combine would be because you wanted to build something better. You wanted a system that was more efficient, cheaper, or you wanted a system that had more features, makes it more attractive to your customers, because by combining these two things you could do something new that hadn't been able to do before.
J.A. 4709-10. This testimony is generic and bears no relation to any specific combination of prior art elements. It also fails to explain why a person of ordinary skill in the art would have combined elements from specific references in the way the claimed invention does. See KSR, 550 U.S. at 418, 127 S.Ct.

## '480: Petitioner Fails to Establish Why a POSITA Would Combine These References



KSR Int'I Co. v. Teleflex Inc., 550 U.S. 398, 421 (2007)

- Robertson is not analogous art
- Robertson/Lloyd-Jones does not disclose or suggest the claimed "associating input" (limitations 3[b]/30[b])
- Robertson/Lloyd-Jones does not disclose or suggest the claimed "prompt" to the "viewing user" (limitations $1[g] / 2[c] / 3[c], 1[h] / 2[d] / 3[d] / 30[d])$
- Petitioner fails to establish motivation to combine

Petitioner fails to establish reasonable expectation of success

- Petitioner's analysis of the dependent claims fails


## ActiveVideo v. Verizon: Must explain how references are combined and would operate



> We agree with the district court that the obviousness testimony by Verizon's expert was conclusory and factually unsupported. Although Verizon's expert testified that " $[t]$ hese are all components that are modular, and when I Iadd one, it doesn't change the way the other one works," J.A. 4709 , he never provided any factual basis for his assertions. The expert failed to explain how specific references could be combined, which combination(s) of elements in specific references would yield a predictable result, or how any specific combination would operate or read on the asserted claims.

- No explanation by Dr. Bederson of how Robertson and Lloyd-Jones could be combined or how any specific combination would operate or read on the asserted claims
- Dr. Bederson does not explain how to combine the tagging functionality of Lloyd-Jones with Robertson's system

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144. The database of the Robertson system "is a relational database built from a set of relational tables 350 ." Ex. 1012 at 4:17-18. Lloyd-Jones describes storing its association list in an Extensible Markup Language (XML) file. Ex. 1013 at [0031]. It would have been well within the skill of a POSA to add the image annotations and affiliations taught by Lloyd-Jones by including an Image Table and
an Image Affinity Table implemented as additional relational tables in Robertson's
database. As I described above in the Technology Overview section, a POSA would
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| Trials $\overline{\text { an }}$ uspto.gov Tel: 571-272-7822 <br> UNITED <br> BEFORE <br> DAIFUKI <br> Before KEN B, BA BRIAN P. MURPI MURPHY, Admin | $\begin{array}{r} \text { Paperf } 0 \\ \text { Entered May } \&: 2015 \end{array}$ |
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|  | raised in n both cases are The arguments in both cases. |

Although the quoted statement is consistent with $K S R$, neither Petitioner nor Dr. Sturges provides the important analysis of explaining why, based on the particular facts and evidence of the present case, one of ordinary skill would have made the suggested modification or why the logic, judgment, and common sense of such a person would have led to the asserted combination with a reasonable expectation of success. A review of the cited testimony from paragraphs 60 and 61 of Dr. Sturges's Declaration reveals similarly conclusory testimony, unsupported by a specific engineering and technical analysis of how the asserted combination would have worked and why it would have been an obvious combination to one of skill in the art. See In re

- Robertson is not analogous art
- Robertson/Lloyd-Jones does not disclose or suggest the claimed "associating input" (limitations 3[b]/30[b])
- Robertson/Lloyd-Jones does not disclose or suggest the claimed "prompt" to the "viewing user" (limitations 1[g]/2[c]/3[c], 1[h]/2[d]/3[d]/30[d])
- Petitioner fails to establish motivation to combine
- Petitioner fails to establish reasonable expectation of success
- Petitioner's analysis of the dependent claims fails


## '432 Patent (IPR2023-00057): Instituted Grounds



| Ground 1 | Claims 1, 3 and 6-8 are obvious over Sharpe in view of knowledge of <br> POSITA |
| :---: | :--- |
| Ground 2 | Claims 1-8 are obvious over Sharpe and Eintracht in view of <br> knowledge of POSITA |
| Ground 3 | Claim 3 is obvious over Sharpe and Carey in view of knowledge of <br> POSITA |
| Ground 4 | Claim 3 is obvious over Sharpe, Eintracht and Carey in view of <br> knowledge of POSITA |

## '291 Patent (IPR2023-00058): Instituted Grounds



## '275 Patent (IPR2023-00059): Instituted Grounds



## Ground 1

## Ground 2

Claims 1, 5 and 1-26 are obvious over Sharpe, Eintracht and Fotofile in view of knowledge of POSITA Claims 1-26 are obvious over Sharpe, Eintracht, Fotofile and Carey in view of knowledge of POSITA

- Sharpe does not disclose or suggest the claimed "pictured user unique identifier"/"unique user identifier" ('432/'291/'275)
- Sharpe does not disclose or suggest the "second tagging user" limitations ('432)
- Sharpe does not disclose or suggest the "said image data" limitation ('432)
- Sharpe does not disclose or suggest a "list of pictured users" ('432)
- Sharpe and Eintracht do not disclose or suggest the "coordinates" limitations ('432/'291/'275)


## Claim 6

obtaining identification data from a first tagging user of said computer network, wherein said identification data comprises said unique image identifier and a pictured user unique identifier of a user of said computer network pictured in said image data;

## Claim 26

in response to receiving from the identifying user the input indicating the selection of the named user from the list of other users, determining a unique user identifier of the named user; and

## Claim 1

in response to receiving from the identifying user the input indicating the selection of the named user from the list of other users, determining a unique user identifier of the named user;


Before the storage process begins, when the registration process ( $\mathbf{2}$ in FIG. $\mathbf{1}$ ) is carried out by a member or members of the groups, information is stored in a group table $6 a$. A group identifies a group and people in the group are identified. When a user wishes to use the system they will enter a user name and password thus identifying themselves as a member of a group.

## '432/'291/'275: Petitioner's "Would" Language


"Inherency ... may not be established by probabilities or possibilities."
"The mere fact that a certain thing may result from a given set of circumstances is not sufficient."

The patent challenger must "show that the natural result flowing from the operation as taught would result in the performance of the questioned function."

In re Oelrich, 666 F.2d 578, 581 (CCPA 1981)


# Inherency requires a "stringent standard." 

Amgen Inc. v. Sandoz Inc., 66 F.4th 952, 966 (Fed. Cir. 2023)
81. For instance, Petitioner and Dr. Bederson ignore that another possible way-besides the speculative approach described in the Petition-to implement Sharpe's system is to have a piece of data different than the user name for keeping track of each user. It was well known to assign an internal (e.g., not known to the user) unique identifier to a user. For example, it was an elementary name would have been used in the specific way required by limitation $6[\mathrm{e}]$. To the contrary, Dr. Bederson conceded, for example, that primary keys may be created by combining multiple columns. Ex. 2019, 52:4-5, 52:18-20. A POSITA would have known of multiple ways to implement databases relating to users, including functionality regarding a "primary key" as described by Petitioner. A

$$
\begin{aligned}
& \text { also EX1005, 7:39-41. Implementing Sharpe with the username as the unique } \\
& \text { identifier would have been a known design choice, and the most obvious design } \\
& \text { choice given that each user already required a username to logon to the system. } \\
& \text { Bederson } ₫ 307 . \\
& \text { Dr. } \\
& \text { Bederson } \begin{array}{l}
\text { password thus identifying themselves as a member of a group."). Using the } \\
\text { username as the primary key would have been a matter of design choice to a POSA. } \\
\text { Usernames are often used as primary keys in database schemas, and the most } \\
\text { obvious design choice for the Sharpe system given that each user already required a } \\
\text { username to log on to the system. }
\end{array}
\end{aligned}
$$

-00057: Ex. 1003 at ๆ 307

If Petitioner had wanted to say that it would have been obvious to modify Sharpe's system to use the username as a primary key, Petitioner should have presented this analysis in its Petition. PO explained why a POSITA would not have necessarily understood Sharpe's user name to be a primary key in the database based on Sharpe's singular reference to the term "user name," a reference not made in the context of a "primary key." Response, 18-23. PO further explained that any obviousness analysis on this issue was insufficient (Response, 18-23).

- Sharpe does not disclose or suggest the claimed "pictured user unique identifier"/"unique user identifier" ('432/'291/'275)
- Sharpe does not disclose or suggest the "second tagging user" limitations ('432)
- Sharpe does not disclose or suggest the "said image data" limitation ('432)
- Sharpe does not disclose or suggest a "list of pictured users" ('432)
- Sharpe and Eintracht do not disclose or suggest the "coordinates" limitations ('432/'291/'275)


## Claim 1


-00057: Ex. 1001 at Claim 1

Sharpe discloses a collaborative system specifically intended to enable users to interact with images. $I d . \llbracket 224$. Sharpe consistently explains that multiple users can employ the functionalities described. Id. $\mathbb{\|} 224$. For example, Sharpe discusses how "the members of the private group work together ... to identify, collect, translate or create digital media items in different media." EX1005, 5:4-18. Sharpe

## Petition

 discloses a server-based approach that enables multiple users to access the system simultaneously using various devices. See id., 4:21-37, 5:50-67, Fig. 2; Bederson -225. A POSA would have understood that a second user using Sharpe's systemfor example, another member of the same group -would be able to perform the same user identification tasks as a first user as in 1[d]. Bederson $\{226$; see Section VIII.C. 5 (Ground 1, 1[d]).
## '432: Petition's Argument for '432 Limitation 7[a], [b]


-00057: Ex. 1001 at Claim 7
"[I]t would have been obvious to implement the claimed tagging features for a second user."
-00057: Reply at 4

Patent Owner does not assert that a POSITA would simply need to implement the claimed features for a second user. Rather, the POR clearly explained that

Sur-Reply Sharpe does not disclose or suggest identification data comprising "said unique image identifier" and a "pictured user unique identifier of a user ... pictured in said image data," and as such, Sharpe also does not disclose or suggest obtaining this identification from a second tagging user, when Sharpe does not disclose or suggest obtaining the identification data at all.

- Sharpe does not disclose or suggest the claimed "pictured user unique identifier"/"unique user identifier" ('432/'291/'275)
- Sharpe does not disclose or suggest the "second tagging user" limitations ('432)
- Sharpe does not disclose or suggest the "said image data" limitation ('432)
- Sharpe does not disclose or suggest a "list of pictured users" ('432)
- Sharpe and Eintracht do not disclose or suggest the "coordinates" limitations ('432/'291/'275)


## Claim 8


-00057: Ex. 1001 at Claim 8

## Claim 1


-00057: Ex. 1001 at Claim 1

## Claim 1


-00057: Ex. 1001 at Claim 1

## Exemplary Claim 1 ‘432 Patent

1. In a multi-user computer network, a method for obtaining and displaying information relating to existence of at least one user of a computer network in an image comprising:
assigning unique user identifications to users of a computer network and storing said unique user identifications in a users database accessible to a plurality of computers of said computer network;
obtaining image data from at least one uploading user of said computer network;
assigning a unique image identification to said image data and storing said unique image identification in an images database accessible to a plurality of computers of said computer network;
receiving from a first tagging user a request to identify users of said computer network in said image data wherein said request contains said image identification and the user identification of said first tagging user;
responsive to said request presenting a client interface to said first tagging user configured to provide identifying information, wherein said identifying information comprises a user identification of a first pictured user of said computer network and said image identification;
obtaining said identifying information from said first tagging user:


Because the collection and indexing of the digital media items is based on the episodic memory of the group, i.e. they have chosen the material and indexed it according to its relevance to them, the retrieval and browsing through data digital items are attuned to the memories of the user. The aim of retrieval is not to retrieve a specific digital media item but instead to retrieve any digital media items relating to a memorable episode. Thus the indexing system does not uniquely identify digital media items, but replaces them within a highly personal framework. For example, even if a specific photograph were required, it would be remembered through the event and hence retrieved by searching on the event or the person. Thus the archive may contain many commonly indexed images taken at the same time period involving the same people at the same event.


Fig 4
-00057/-00058/-00059: Ex. 1005 at FIG. 4

-00057/-00058/-00059: Ex. 1005 at FIG. 7

Dr. Saber
92. The user of Sharpe's process/system, by entering parameters for the retrieval process, isn't selecting or requesting a specific digital media item ("said image data"). Indeed, the user may not even know of a specific digital media item because as I explained above, the aim of Sharpe is not to retrieve a specific digital media item (e.g., image) but rather to automatically find any digital media items that match the parameters inputted by the user. Upon selecting the retrieve button 61 shown above in Figure 7, multiple images may turn up, and thus Sharpe does not disclose "receiving a request for said image data." Rather, Sharpe discloses inputting parameters in order to retrieve any matching images (possibly multiple images). Sharpe does not disclose a request for "said image data" at all, because Sharpe's user is not selecting a particular image. Unlike Sharpe's disclosure, limitation 8 [a] requires a request for a particular image data, not the selection of a set of parameters in order to retrieve any and all responsive images.

## Petitioner's Reply

> "PO's interpretation would exclude the preferred embodiment disclosed in the ' $432 \ldots$ a user may search for several tagged users simultaneously, and the results may include multiple images."
-00057: Reply at 7
> '432 Patent
> "Preferred
> Embodiment"
"The identifying page includes a photo 34 requested by the user, a list of contacts 36 associated with the user, and a "Submit" button or link 38...The host computer 200 may display photos in an album alongside an "identify people" button or link that may be selected to request an identifying page. Embedded in the button or link is a request for an identifying page, the image I.D. for the photo..."

- Sharpe does not disclose or suggest the claimed "pictured user unique identifier"/"unique user identifier" ('432/'291/'275)
- Sharpe does not disclose or suggest the "second tagging user" limitations ('432)
- Sharpe does not disclose or suggest the "said image data" limitation ('432)
- Sharpe does not disclose or suggest a "list of pictured users" ('432)
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## Claim 1


-00057: Ex. 1001 at Claim 1

## Claim 8


-00057: Ex. 1001 at Claim 8


Fig 4
-00057/-00058/-00059: Ex. 1005 at Fig. 4

items. Beneath work space $\mathbf{5 1}$ are user controls for generating index information for archiving or for generating a query when retrieving. A drop down box 55 is provided for selecting any of a number of people within the group. A drop down box 56 is provided for identifying one of a number of event types.
94. Petitioner argues that "a POSA would have understood that Sharpe's UI would need to reflect the current retrieval parameters as the user repeatedly narrows and broadens the scope (or "focus") of their search. Thus, Sharpe's UI would update to display [the] list of pictured users of said network that are associated with the displayed images." Petition, 41. I disagree. Petitioner is pointing to Sharpe's retrieval process, which allows a user to set retrieval parameters, which may include people. Ex. 1005, Fig. 4. However, despite disclosing the ability to retrieve photos based on people associated with them, Sharpe does not disclose "displaying list of pictured users...identified by said Dr. Saber first tagging user and said second tagging user in said image data." The drop down list of people Petitioner points to may be selected as part of the retrieval of Sharpe. But that drop down list is not a list of people pictured in the image; rather, it is a list of people in the group, whom the user can select in order to receive images previously associated with the selected person. Further, in Sharpe, the group members shown in the drop down list would be the same regardless of what media item is being shown, because it is dependent on who is in the group, not who is in the image. If Petitioner is attempting to argue that the drop down list only shows people pictured in the media item, this would run contrary to Sharpe's teachings, making it impossible for a user to tag additional members pictured in the media item if the names subsequently disappeared as users were tagged and only those present in the image were shown.

- Sharpe does not disclose or suggest the claimed "pictured user unique identifier"/"unique user identifier" ('432/'291/'275)
- Sharpe does not disclose or suggest the "second tagging user" limitations ('432)
- Sharpe does not disclose or suggest the "said image data" limitation ('432)
- Sharpe does not disclose or suggest a "list of pictured users" ('432)
- Sharpe and Eintracht do not disclose or suggest the "coordinates" limitations ('432/'291/'275)


## Claim 2

2. The method of $\mathbf{1}$, further comprising receiving location information that identifies coordinates of where the pictured users associated with said pictured user identifications appear within said image data.

## Claim 6

6. The method of claim $\mathbf{5}$, further comprising receiving, via the communications network, one or more inputs initiated by the second user indicating a set of coordinates corresponding to a location of the first user within the image data.

## Claim 1

Limitation 1[e]
receiving, from the identifying user, one or more inputs indicating a set of coordinates corresponding to a location of the named user within the image; and


Note that the annotation can be displayed within its own window or can be layered on top of the displayed document. The first option is used in the case of text only annotations. The second option is used for mixed text and graphical annotations.


FIG.1B
-00057/-00058/-00509: Ex. 1006 at 7:65-8:4 and Fig. 1B


[^0]:    -00060: Ex. 1003 at ๆ 69

[^1]:    -00060: Ex. 1001 at Claim 3 (annotated)

