

Demonstratives of Patent Owner Angel Technologies Group LLC

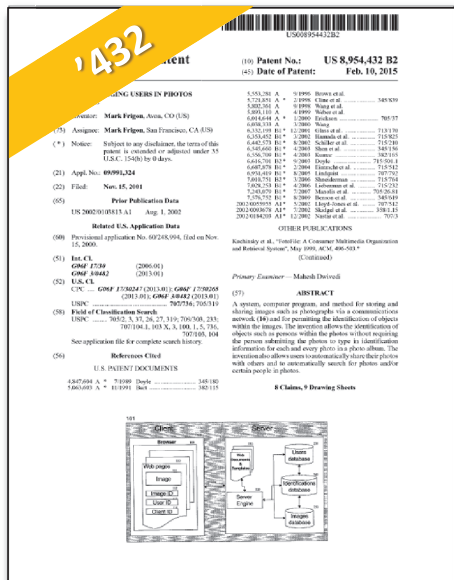
Case Nos.: IPR2023-00057, -00058, -00059, -00060

USPTO Patent Trial and Appeal Board

Oral Hearing: February 13, 2024

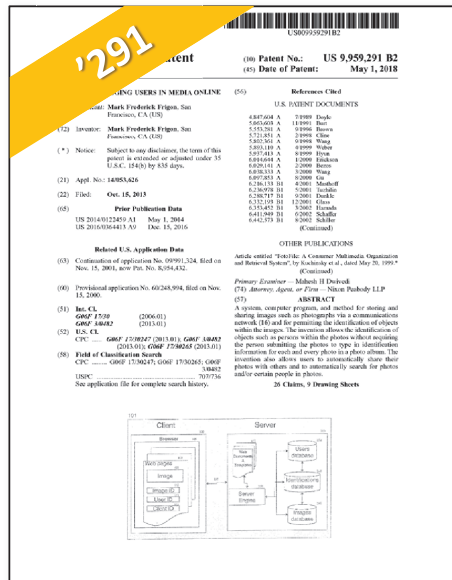
The Challenged '432, '291, '275, and '480 Patents

'432 Patent (-00057)



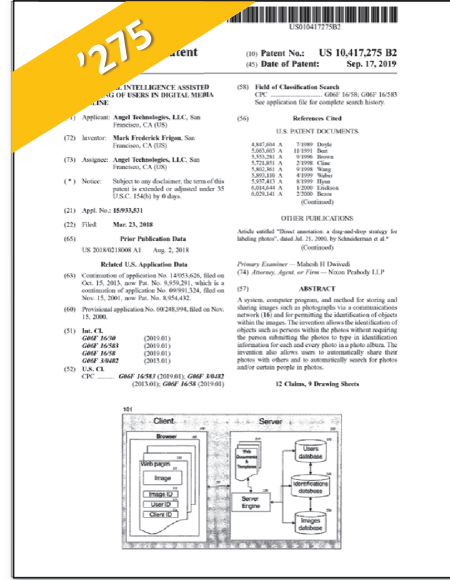
-00057: Ex. 1001 at Cover

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



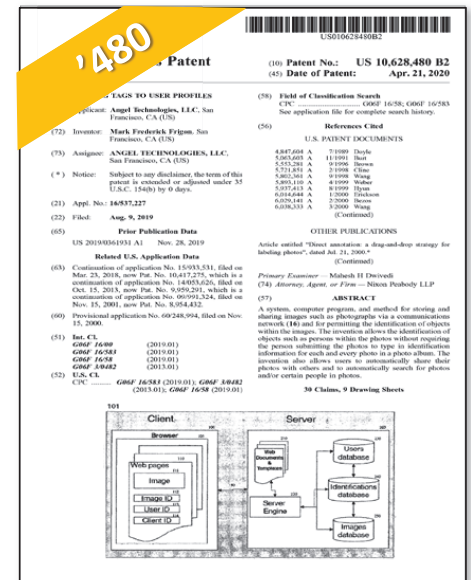
-00058: Ex. 1001 at Cover

'275 Patent (CON of '291) (-00059)



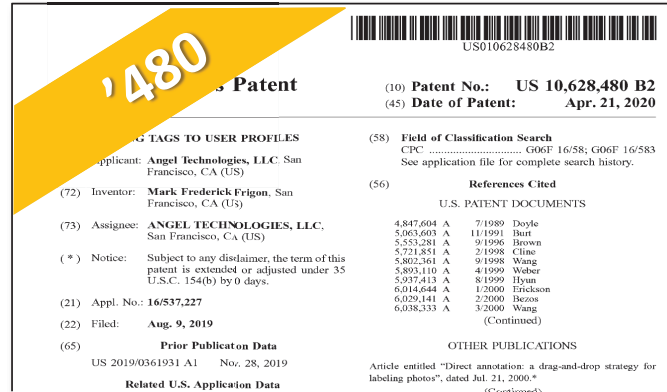
-00059: Ex. 1001 at Cover

'480 Patent (CON of '275) (-00060)



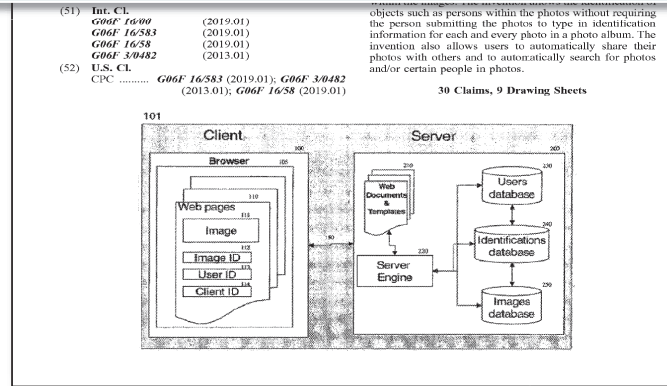
-00060: Ex. 1001 at Cover

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



Ground 1

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



'480 Patent (IPR2023-00060): Disputed Issues

- **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

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



In order for a reference to be proper for use in an obviousness rejection under **35 U.S.C. 103**, the reference must be analogous art to the claimed invention.

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

'480: Analogous Art vs. Person Having Ordinary Skill in the Art

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)

“In a given case, every factor may not be present, and one or more factors may predominate.”

In re GPAC Inc., 57 F.3d 1573, 1579 (Fed. Cir. 1995)

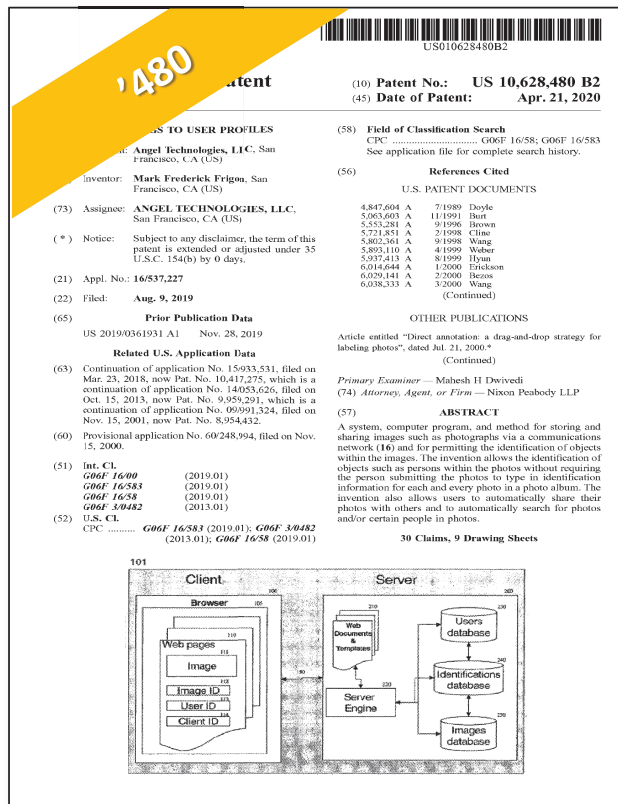
'480: Robertson Is Not Analogous Art



The field of endeavor is determined “by reference to **explanations of the invention’s subject matter in the patent application**, including embodiments, function, and structure **of the claimed invention.**”

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

'480: The '480 Patent "Field of the Invention"



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.

-00060: Ex. 1001 at 1:19-26

'480: All Embodiments of the '480 Patent are Systems with Images

'480 Patent

(10) Patent No.: **US 10,628,480 B2**
 (45) Date of Patent: **Apr. 21, 2020**

CLASSIFICATION
 (58) Field of Classification Search
 CPC G06F 16/58; G06F 16/583
 See application file for complete search history.

REFERENCES CITED
 (56) U.S. PATENT DOCUMENTS
 4,847,404 A 7/1989 Doyle
 5,063,603 A 11/1991 Butt
 5,555,281 A 9/1996 Brown
 5,721,851 A 2/1998 Cline
 5,802,161 A 9/1998 Wang
 5,993,110 A 4/1999 Weber
 5,937,413 A 8/1999 Hyun
 6,014,644 A 7/2000 Tricketson
 6,029,141 A 2/2000 Ibezos
 6,038,333 A 3/2000 Wang
 (Continued)

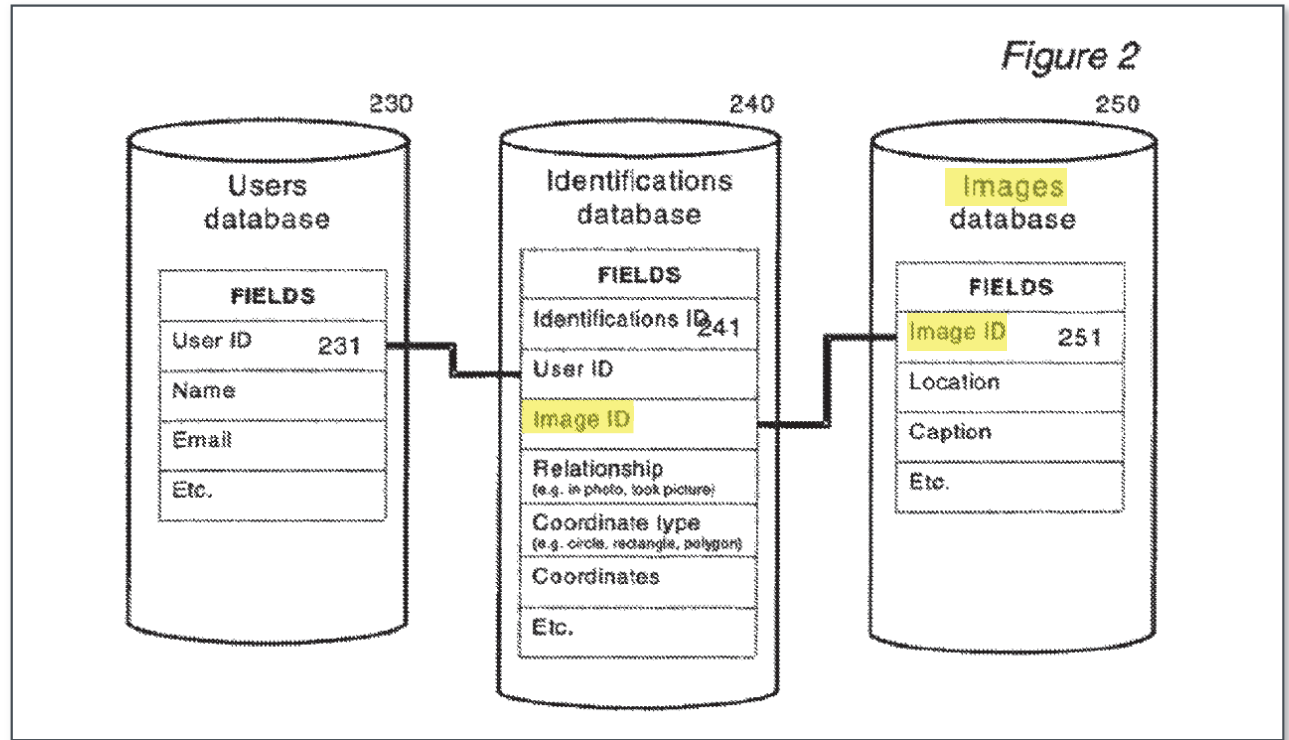
OTHER PUBLICATIONS
 Article entitled "Direct annotation: a drag-and-drop strategy for labeling photos", dated Jul. 21, 2008.*
 (Continued)

Primary Examiner — Mahesh H Dwivedi
 (74) Attorney, Agent, or Firm — Nixon Peabody LLP

ABSTRACT
 (57) A system, computer program, and method for storing and sharing images such as photographs via a communications network (16) and for permitting the identification of objects within the images. The invention allows the identification of objects such as persons within the photos without requiring the person submitting the photos to type in identification information for each and every photo in a photo album. The invention also allows users to automatically share their photos with others and to automatically search for photos and/or certain people in photos.

30 Claims, 9 Drawing Sheets

FIG. 101



-00060: Ex. 1001 at Fig. 2

'480: All Embodiments of the '480 Patent are Systems with Images

'480 Patent

US 10,628,480 B2
 (10) Patent No.: US 10,628,480 B2
 (45) Date of Patent: Apr. 21, 2020

CLASSIFICATION

(58) Field of Classification Search
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REFERENCES CITED

(56) U.S. PATENT DOCUMENTS

4,847,404	A	7/1989	Doyle
5,263,603	A	11/1991	Burt
5,555,281	A	9/1996	Brown
5,721,851	A	2/1998	Cline
5,802,161	A	9/1998	Wang
5,893,110	A	4/1999	Weber
5,937,413	A	8/1999	Hyan
6,014,644	A	7/2000	Trickson
6,029,141	A	2/2000	Ikeos
6,038,333	A	3/2000	Wang

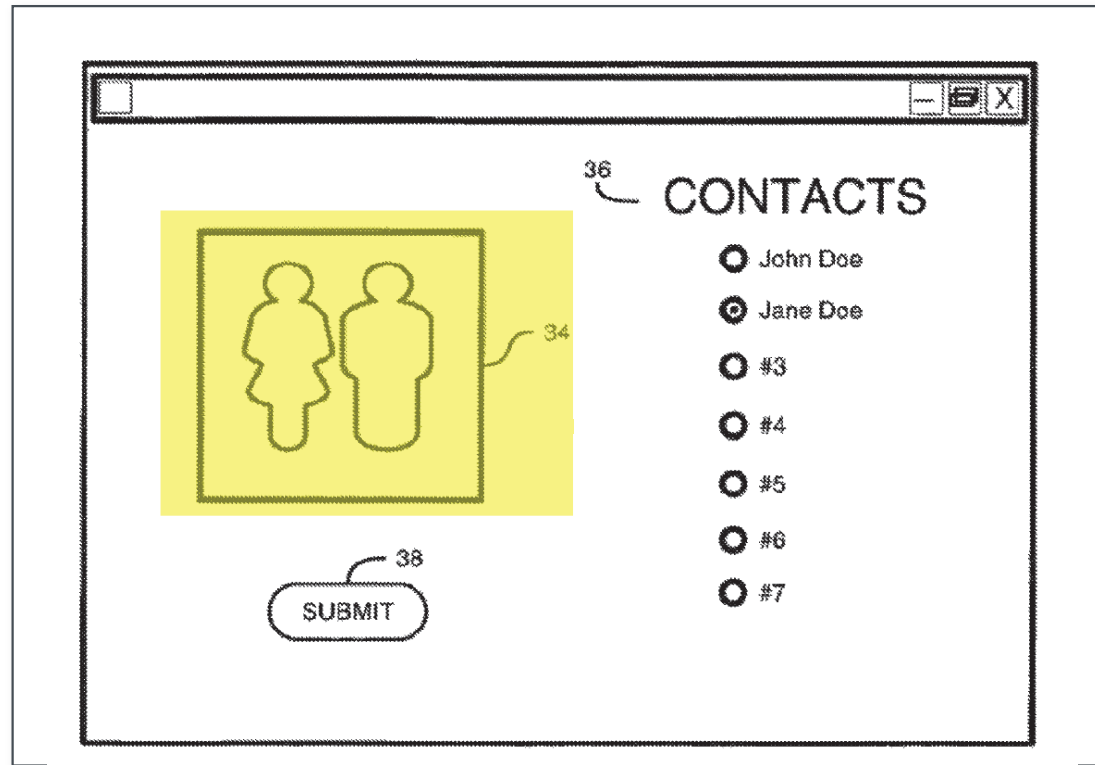
OTHER PUBLICATIONS

Article entitled "Direct annotation: a drag-and-drop strategy for labeling photos", dated Jul. 21, 2000.*
 (Continued)

ABSTRACT

(57) A system, computer program, and method for storing and sharing images such as photographs via a communications network (16) and for permitting the identification of objects within the images. The invention allows the identification of objects such as persons within the photos without requiring the person submitting the photos to type in identification information for each and every photo in a photo album. The invention also allows users to automatically share their photos with others and to automatically search for photos and/or certain people in photos.

30 Claims, 9 Drawing Sheets



-00060: Ex. 1001 at Fig. 4

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

Petition

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

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

-00060: Pet. at 1

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.*

-00060: Ex. 1003 at ¶ 45

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

Reply

via a *communications network*.” *Id.*, Abstract. The '480 Patent describes its embodiment as a website utilizing Internet, HTML, and databases. *Id.*, 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.*, 11:13-23, Fig. 5; Bederson ¶47. The '480 Patent claims are also directed to methods implemented on

-00060: Reply at 4

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. ¶ 47. The '480

-00060: Ex. 1039 at ¶ 23

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

'480 Patent

(10) Patent No.: **US 10,628,480 B2**
 (45) Date of Patent: **Apr. 21, 2020**

REFERENCES TO USER PROFILES

Inventor: **Angel Technologies, LLC**, San Francisco, CA (US)

Assignee: **ANGEL TECHNOLOGIES, LLC**, San Francisco, CA (US)

(73) Assignee: **ANGEL TECHNOLOGIES, LLC**, San Francisco, CA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **16/837,227**

(22) Filed: **Aug. 5, 2019**

(65) **Prior Publication Data**
 US 2019/0361931 A1 Nov. 28, 2019

Related U.S. Application Data

(63) Continuation of application No. 15/933,531, filed on Mar. 23, 2018, now Pat. No. 10,417,275, which is a continuation of application No. 14,053,626, filed on Oct. 15, 2013, now Pat. No. 9,959,291, which is a continuation of application No. 09/991,324, filed on Nov. 15, 2001, now Pat. No. 8,954,432.

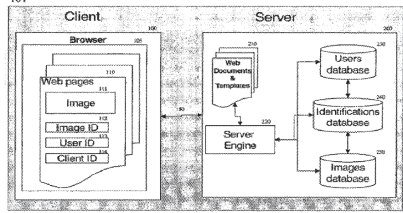
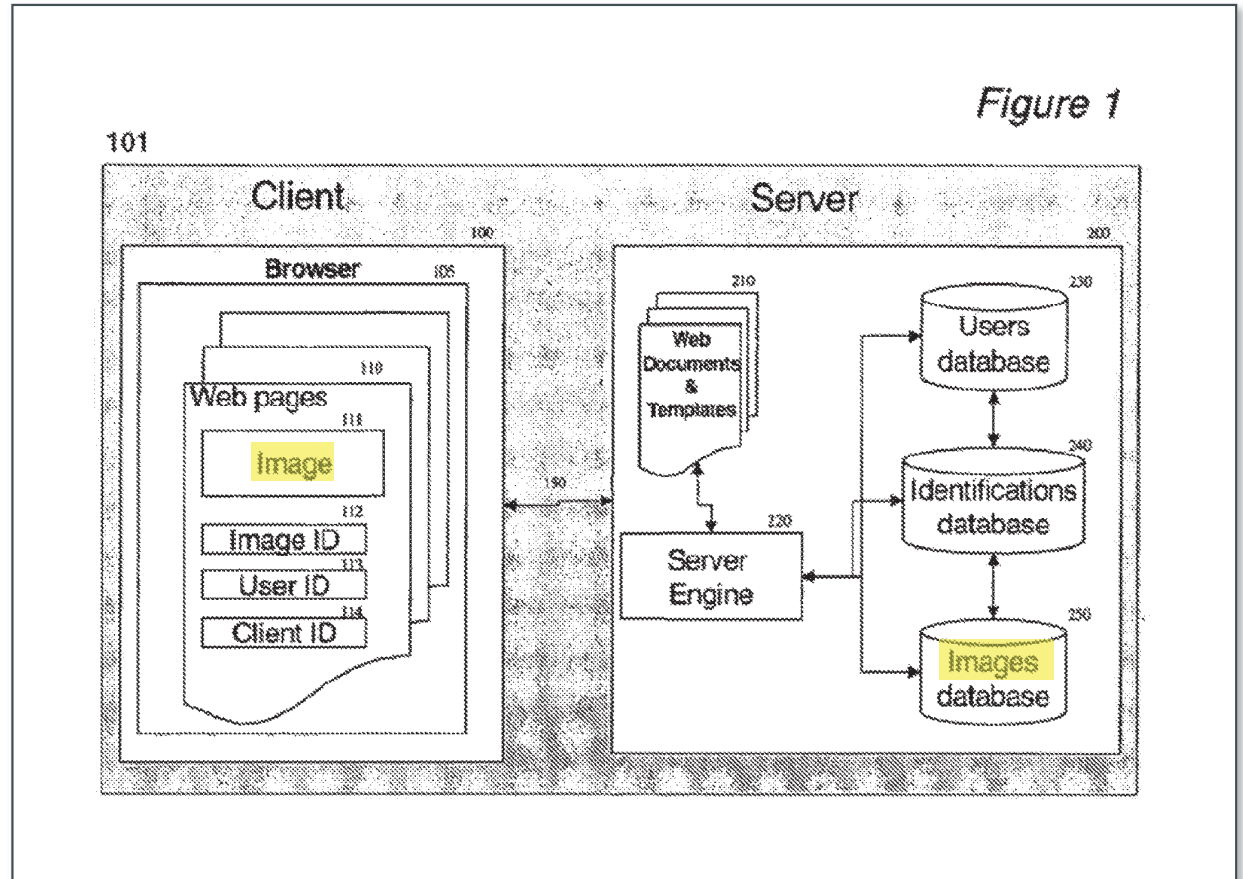
(60) Provisional application No. 60/248,994, filed on Nov. 15, 2000.

(51) Int. Cl. (2019.01)
G06F 16/00 (2019.01)
G06F 16/583 (2019.01)
G06F 16/58 (2019.01)
G06F 3/0482 (2013.01)

(52) U.S. Cl. (2019.01); **G06F 16/583** (2019.01); **G06F 3/0482** (2013.01); **G06F 16/58** (2019.01)

30 Claims, 9 Drawing Sheets

ABSTRACT
 A system, computer program, and method for storing and sharing images such as photographs via a communications network (16) and for permitting the identification of objects within the images. The invention allows the identification of objects such as persons within the photos without requiring the person submitting the photos to type in identification information for each and every photo in a photo album. The invention also allows users to automatically share their photos with others and to automatically search for photos and/or certain people in photos.

-00060: Ex. 1001 at Fig. 1

'480: Petitioner's Proposed Field of Endeavor Is Overly Broad



The Board must:

- consider “**the full disclosure**”
- reference the “**function and structure of the invention**”

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

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

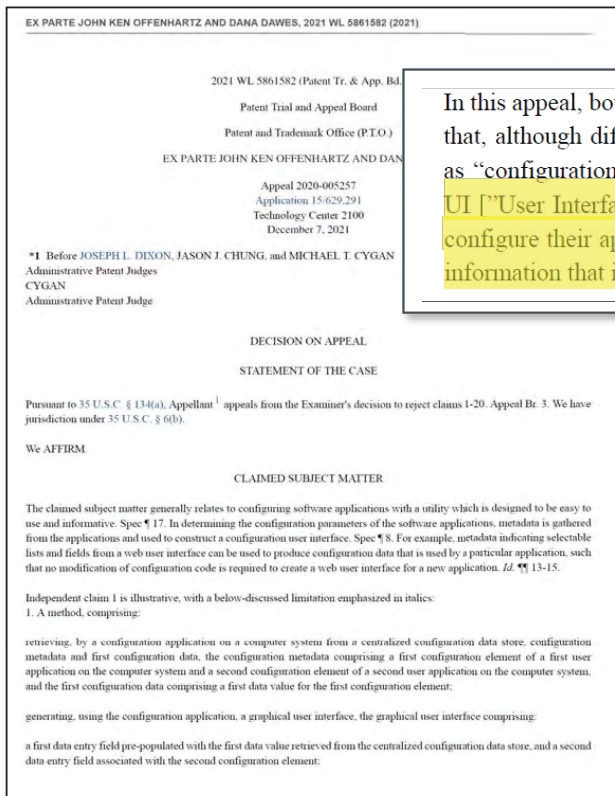


“Although the challenged patents cover electrical connections between tubular portions of a device, those connections are all within the **context of an artificial tree**. The Board thus did not err in defining the field of endeavor as ‘artificial trees with decorative lighting.’”

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

'480: No Decision Disregards the Field of Endeavor Identified by the Inventor

Ex Parte Offenartz: Field of endeavor is “configuration of software applications”



In this appeal, both the Appellant and the Examiner provide characterizations of the field of endeavor of the claimed invention that, although different, are supported by the record. Appellant characterizes the field of endeavor of the claimed invention as “configuration of software applications.” Appeal Br. 9. We note that the Specification, titled “Dynamic Generated Web UI [“User Interface”] for Configuration,” supports Appellant's characterization. *See, e.g.*, Spec. ¶ 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. ¶ 13.

- Specification, titled “Dynamic Generated Web UI for Configuration”
- Spec. ¶ 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. ¶ 13)

'480: No Decision Disregards the Field of Endeavor Identified by the Inventor

In re Mettke: Field of endeavor is “pay-for-use public communication terminals”

In re Mettke, 570 F.3d 1356 (2009)

570 F.3d 1356
United States Court of Appeals,
Federal Circuit.
In re Richard P. METTKE.
No. 2009-1125.
June 25, 2009.
Rehearing Denied Aug. 17, 2009.

Synopsis
Background: Applicant for reissue of patent directed to on-line communication terminal apparatus filed suit challenging decision of United States Patent and Trademark Office, Board of Patent Appeals and Interferences, 2008 WL 4448201, affirming examiner's rejection of sole remaining patent claim.

Holdings: The Court of Appeals, Newman, Circuit Judge, held that:

[1] evidence supported Board's finding that field of endeavor was not limited to Internet terminals, and

[2] patent claim was obvious under any of several different combinations of references.

Affirmed.

West Headnotes (8)

[1] **Patents** — Questions of law or fact
Obviousness of a patent claim is a legal conclusion based on underlying findings of fact.
1 Case that cites this headnote

[2] **Patents** — In general, multiple factors
Patents — In general, multiple factors
Patents — Commercial Success
The factual inquiries relevant to obviousness of a patent claim include: (1) the scope and content of

the prior art, (2) the differences between the prior art and the claims, (3) the level of ordinary skill in the relevant art, and (4) any objective indicia of non-obviousness such as commercial success, long felt need, and failure of others.

4 Cases that cite this headnote

[3] **Patents** — Scope of Review
Court of Appeals reviews factual findings of the Board of Patent Appeals and Interferences for support by substantial evidence, and the Board's ultimate conclusion of obviousness without deference.

[4] **Patents** — Administrative review
Board of Patent Appeals and Interferences' finding, in rejecting sole remaining patent claim for reissue application regarding patent directed to on-line communication terminal apparatus, that field of endeavor was pay-for-use public communication terminals rather than limited field of Internet terminals, was supported by substantial evidence including that specification described various communication media, including facsimile machines and e-mail, as related to invention, and that asserted prior art references were within field of invention or were analogous art. 35 U.S.C.A. § 251.
3 Cases that cite this headnote

[5] **Patents** — Particular products or processes
Board of Patent Appeals and Interferences' findings, in rejecting as obvious sole remaining patent claim for reissue application regarding patent directed to on-line communication terminal apparatus, that patent claim would have been obvious in light of any of several different combinations of references, was supported by substantial evidence including that every element of claim was shown in prior art, performing same function as in claim, along with reference showing reason to combine elements so that person of ordinary skill would have been motivated to modify existing information terminals to provide access to Internet, and

[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:

'480: No Decision Disregards the Field of Endeavor Identified by the Inventor

Snap v. Vaporstream: Field of endeavor is “handling electronic messages”



(54) **ELECTRONIC MESSAGE HANDLING SYSTEM AND METHOD BETWEEN SENDING AND RECIPIENT DEVICES WITH SEPARATION OF DISPLAY OF MEDIA COMPONENT AND HEADER INFORMATION**

FIELD OF THE INVENTION

The present invention generally relates to the field of electronic messaging. In particular, the present invention is directed to an electronic message handling system and method between sending and recipient devices with separation of display of media component and header information.

'480: No Decision Disregards the Field of Endeavor Identified by the Inventor

<i>Snap</i> Field of Endeavor	'480 Patent Disclosure
<p style="text-align: center;">FIELD OF THE INVENTION</p> <p>The present invention generally relates to the field of electronic messaging. In particular, the present invention is directed to an electronic message handling system and method between sending and recipient devices with separation of display of media component and header information.</p>	<p>Field of the Invention</p> <p>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.</p>

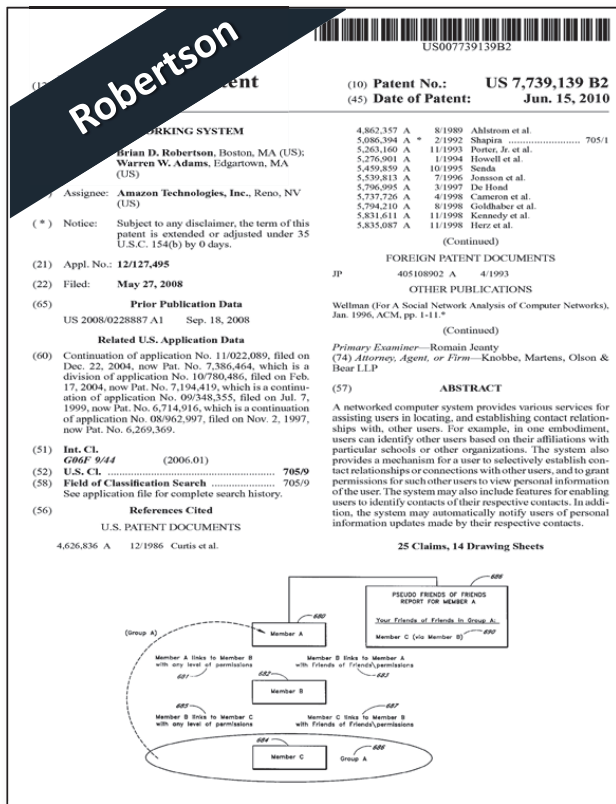
'480: Robertson Is Not In the Same Field of Endeavor



“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.

-00060: Ex. 1012 at 1:16-20

'480: Robertson's Embodiments are Contact Management Systems

Robertson

US007739139B2

(10) Patent No.: **US 7,739,139 B2**
 (45) Date of Patent: **Jun. 15, 2010**

ABSTRACT

A networked computer system provides various services for assisting users in locating, and establishing contact relationships with, other users. For example, in one embodiment, users can identify other users based on their affiliations with particular schools or other organizations. The system also provides a mechanism for a user to selectively establish contact relationships or connections with other users, and to grant permissions for such other users to view personal information of the user. The system may also include features for enabling users to identify contacts of their respective contacts. In addition, the system may automatically notify users of personal information updates made by their respective contacts.

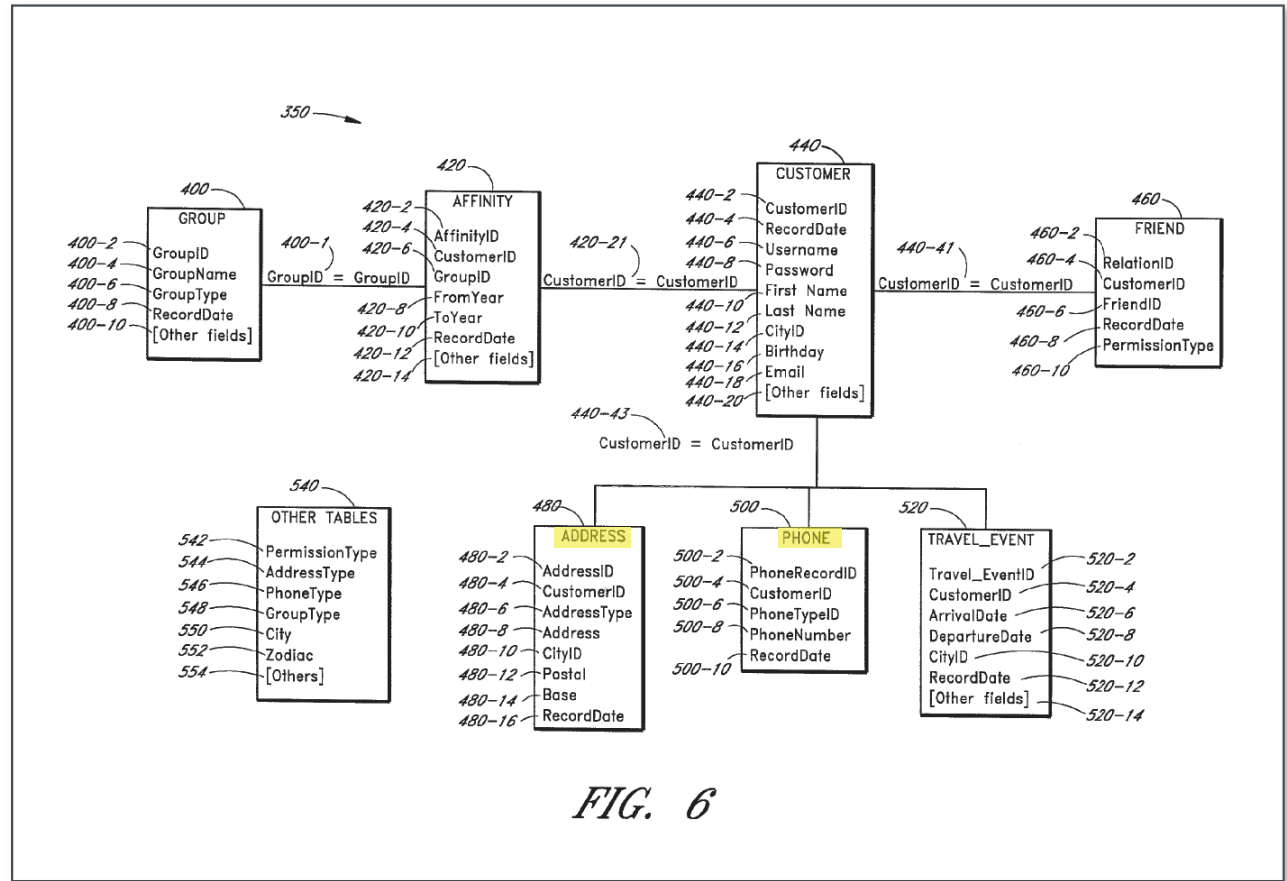
FIG. 6

FIG. 6 is a database schema diagram showing the following tables and their fields:

- GROUP (400)**: GroupID (400-2), GroupName (400-4), GroupType (400-6), RecordDate (400-8), [Other fields] (400-10)
- AFFINITY (420)**: AffinityID (420-2), CustomerID (420-4), GroupID (420-6), FromYear (420-8), ToYear (420-10), RecordDate (420-12), [Other fields] (420-14)
- CUSTOMER (440)**: CustomerID (440-2), RecordDate (440-4), Username (440-6), Password (440-8), First Name (440-10), Last Name (440-12), CityID (440-14), Birthday (440-16), Email (440-18), [Other fields] (440-20)
- FRIEND (460)**: RelationID (460-2), CustomerID (460-4), FriendID (460-6), RecordDate (460-8), PermissionType (460-10)
- ADDRESS (480)**: AddressID (480-2), CustomerID (480-4), AddressType (480-6), Address (480-8), CityID (480-10), Postal (480-12), Base (480-14), RecordDate (480-16)
- PHONE (500)**: PhoneRecordID (500-2), CustomerID (500-4), PhoneTypeID (500-6), PhoneNumber (500-8), RecordDate (500-10)
- TRAVEL_EVENT (520)**: Travel_EventID (520-2), CustomerID (520-4), ArrivalDate (520-6), DepartureDate (520-8), CityID (520-10), RecordDate (520-12), [Other fields] (520-14)
- OTHER TABLES (540)**: PermissionType (542), AddressType (544), PhoneType (546), GroupType (548), City (550), Zodiac (552), [Others] (554)

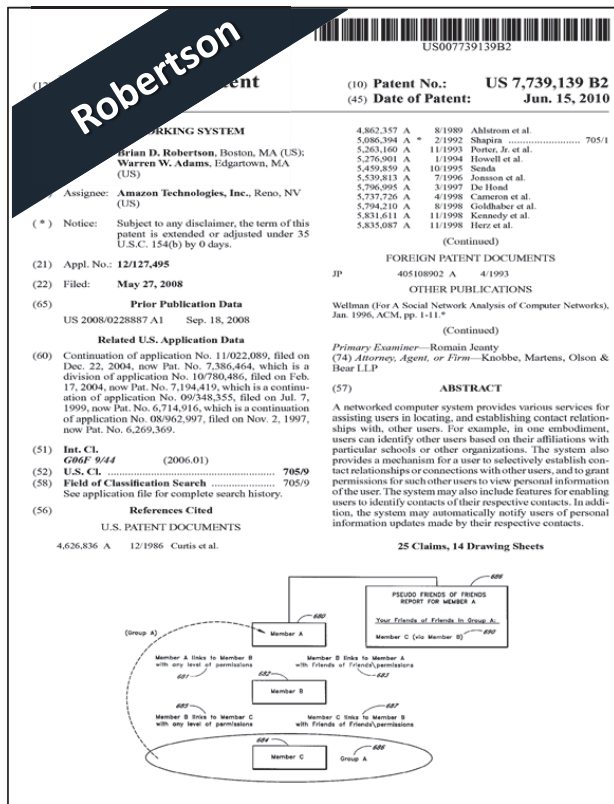
Relationships are indicated by lines and labels:

- GROUP (400) to AFFINITY (420): GroupID = GroupID (400-1)
- AFFINITY (420) to CUSTOMER (440): CustomerID = CustomerID (420-21)
- CUSTOMER (440) to FRIEND (460): CustomerID = CustomerID (440-41)
- CUSTOMER (440) to ADDRESS (480): CustomerID = CustomerID (440-43)
- CUSTOMER (440) to PHONE (500): CustomerID = CustomerID (440-43)
- CUSTOMER (440) to TRAVEL_EVENT (520): CustomerID = CustomerID (440-43)



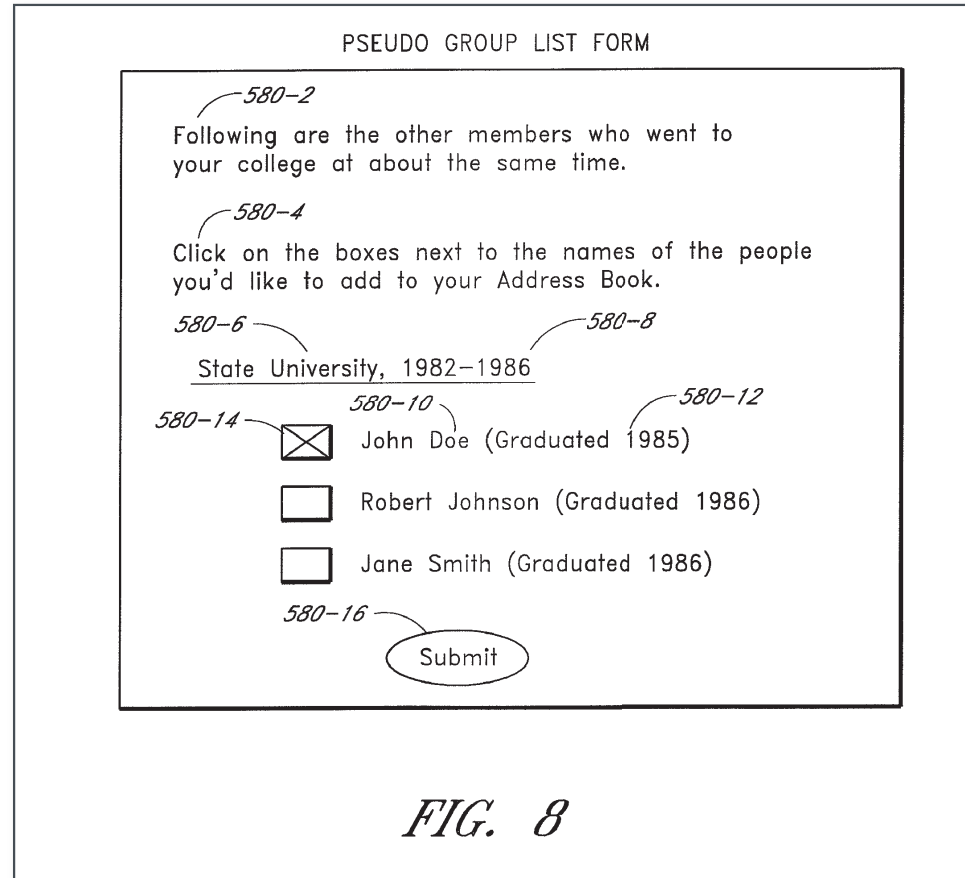
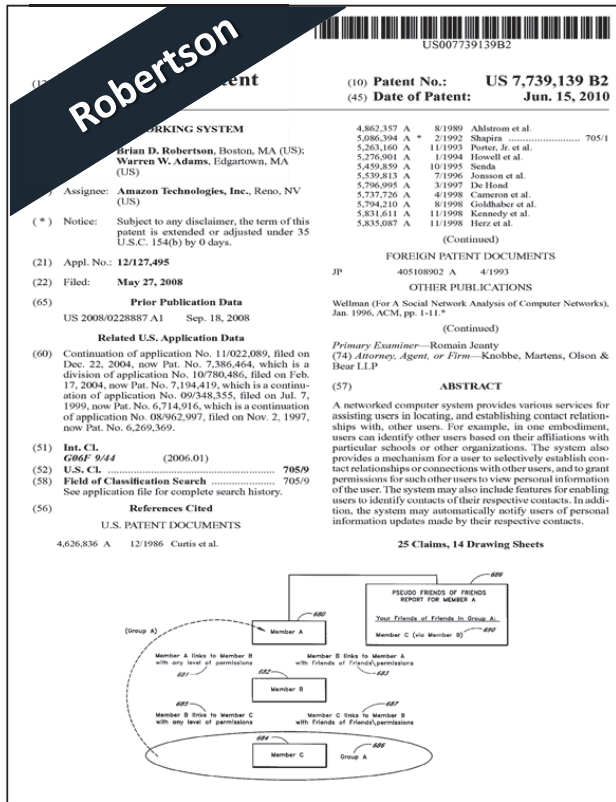
-00060: Ex. 1012 at Fig. 6

'480: Robertson's Embodiments are Contact Management Systems



-00060: Ex. 1012 at 4:10-16

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



-00060: Ex. 1012 at Fig. 8

'480: Robertson Is Not in the Same Field Simply Because It Relates to Computers



“The [cited prior] art is not in the same field of endeavor as the claimed subject matter merely because it relates to memories. It involves memory circuits in which modules of varying sizes may be added or replaced; in contrast, the subject patents teach compact modular memories.”

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

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

Reply

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.* ¶¶29-32; EX2021 (Bederson Tr.), 15:9-17:20, 18:17-19:11. As Dr. Bederson explained, websites such as those

-00060: Reply at 8

Dr. Bederson Reply

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. Bederson Decl. ¶¶ 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**.

-00060: Exhibit 1039 at ¶ 31
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'480: Robertson Is Not in the Same Field of Endeavor



“A reference is analogous prior art when (1) it is from the same 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

Petition

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.

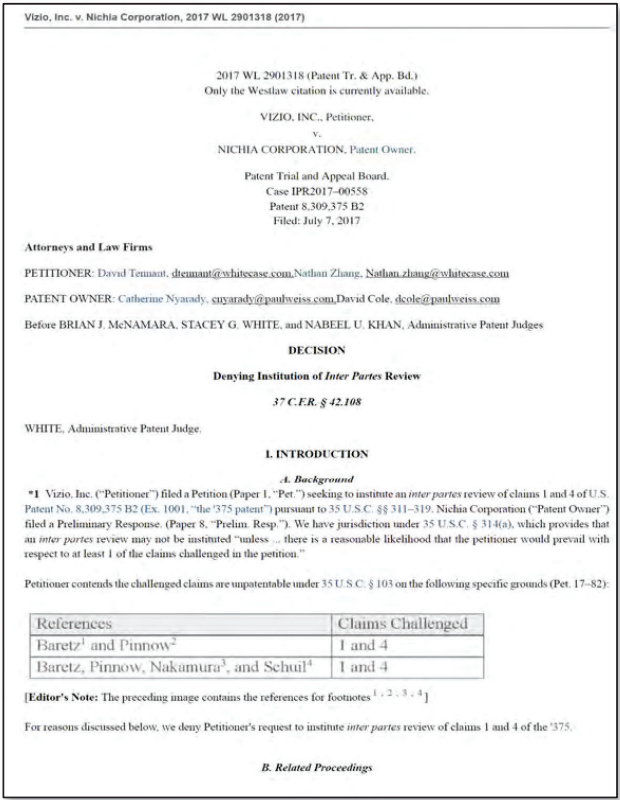
-00060: Pet. at 19

Dr. Bederson

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

-00060: Ex. 1003 at ¶ 69

'480: Robertson and the '480 Patent are in Different Fields of Endeavor



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



“[W]hen addressing whether a reference is analogous art with respect to a claimed invention under a reasonable-pertinence theory, ***the problems to which both relate must be identified and 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



“Thus, the purposes of both the invention and the prior art are important in determining whether the reference is reasonably pertinent to the problem the invention attempts to solve.”

In re Clay, 966 F.2d 656, 659 (Fed. Cir. 1992)

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

Petition

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

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 ¶47. PO has also stated that the '480 Patent “allows users to

-00060: Reply at 10-11

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

Ex. 1046 (Complaint)

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. *Id.* 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

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.

-00060: Ex. 1046 at ¶¶ 36, 47
Angel Tech Ex 2023, p. 33 of 124
Meta v. Angel Tech IPR2023-00057 33

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

Reply

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.

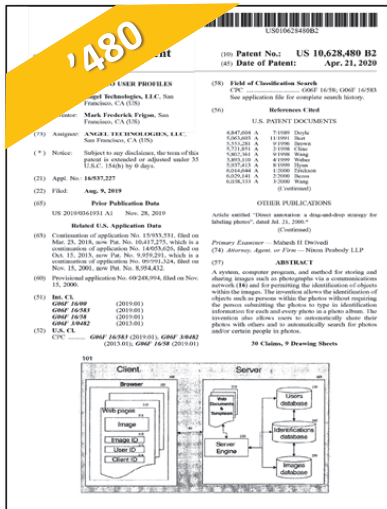
-00060: Reply at 10

wish to receive or view photographs taken by the user. The use of contacts, while not necessary, enables the system to 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.

-00060: Ex. 1001 at 9:44-48

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).

-00060: Ex. 1001 at 11:17-19



-00060: Sur-Reply at 11-12

DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

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

Smith & Nephew v. Hologic: No claim of reasonable pertinence based on similar solution

Smith & Nephew, Inc. v. Hologic, Inc., 721 Fed.Appx. 943 (2018)

721 Fed.Appx. 943
This case was not selected for publication in West's Federal Reporter.
See Fed. Rule of Appellate Procedure 32.1 generally governing citation of judicial decisions issued on or after Jan. 1, 2007. See also U.S.C.I. of App. Fed. Cir. Rule 32.1, United States Court of Appeals, Federal Circuit.

SMITH & NEPHEW, INC., Covidien LP, Appellants
v.
HOLOGIC, INC., Appellee

2017-1008
Decided: January 30, 2018

Synopsis
Background: Patentee appealed the decision of the Patent Trial and Appeal Board, which rejected patent of surgical cutting instrument as anticipated or obvious in light of prior art.

Holdings: The Court of Appeals, Hughes, Circuit Judge, held that:

[1] terms "translation" and "reciprocation" referred to moving from one place to another and moving forward and backward alternately;

[2] substantial evidence supported Board's rejection of claims as obvious;

[3] simultaneous rotation, translation, and reciprocation of cutting member would have been obvious at the time of the invention; and

[4] prior patent relating to production of glass fibers was not analogous art.

Affirmed in part, reversed in part, and remanded.

Procedural Posture(s): Review of Administrative Decision.

West Headnotes (6)

[1] **Patents** — Medical devices and appliances
Was court's construction of claim term proper? **Yes**
Terms "translation" and "reciprocation" as used in patent for surgical cutting instrument referred to, respectively, movement from one place to another and to move forward and backward alternately.
More cases on this issue

[2] **Patents** — Medical devices and appliances
Substantial evidence supported Patent Trial and Appeal Board's conclusion that person of ordinary skill in the art would have been motivated to modify prior patent's device to use helical groove in other patents, because this would have achieved less than one reciprocation per rotation, and thus evidence supported Board's rejection of claims regarding patent of surgical instrument as obvious; prior patent taught shape of cam groove affected number of reciprocations per rotation, expert indicated that using less than one reciprocation per rotation would have been obvious design choice at time of invention, and expert testified that modifying prior patent to include helical groove would require only routine engineering from one of skill in the art.
More cases on this issue

[3] **Patents** — Medical devices and appliances
Person of ordinary skill would have been motivated to implement predictable variation on prior patent, and therefore claims regarding patent involving surgical instrument with simultaneous rotation, translation, and reciprocation of cutting member, and use of helical groove on drive member to impart reciprocation in response to rotating drive member, would have been obvious at time of invention; prior patent disclosed needle biopsy instrument that was configured for needle to simultaneously rotate and reciprocate.

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
✓ Identifying objects in images and storing associations for sharing and searching	× Providing a contact management system that links individual users based on group affiliations and providing notifications when information for a particular user has changed

'480: Robertson Is Directed to an Entirely Different Problem



“The reasonably-pertinent analysis ultimately rests on the extent to which the reference of interest and the claimed invention relate to a similar problem or purpose.”

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

'480 Patent (IPR2023-00060): Disputed Issues

- 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

Claim 3

Limitation 3[b]

'480

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;

-00060: Ex. 1001 at 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]

Petition

PSEUDO REGISTRATION FORM

Name	<input type="text"/>	560-2
HomeAddress	<input type="text"/>	560-4
Home Phone	<input type="text"/>	560-6
Work Address	<input type="text"/>	560-8
Work Phone	<input type="text"/>	560-10
Birthday	<input type="text"/>	560-12
Your High School	<input type="text"/>	560-14
Year of Enrollment	<input type="checkbox"/>	560-16
Graduation Year	<input type="checkbox"/>	560-18
Your College	<input type="text"/>	560-20
Year of Enrollment	<input type="checkbox"/>	560-22
Graduation Year	<input type="checkbox"/>	560-24
<input type="button" value="Submit"/> 560-26		

Associating Input

FIG. 7

EX1012, Fig. 7 (annotated)

-00060: Pet. at 32

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

Petition

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*.

-00060: Pet. at 33

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

Claim 3

Limitation 3[b]

'480

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;

-00060: Ex. 1001 at 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/Lloyd-Jones Does Not Disclose or Suggest Limitations 3[b]/30[b]

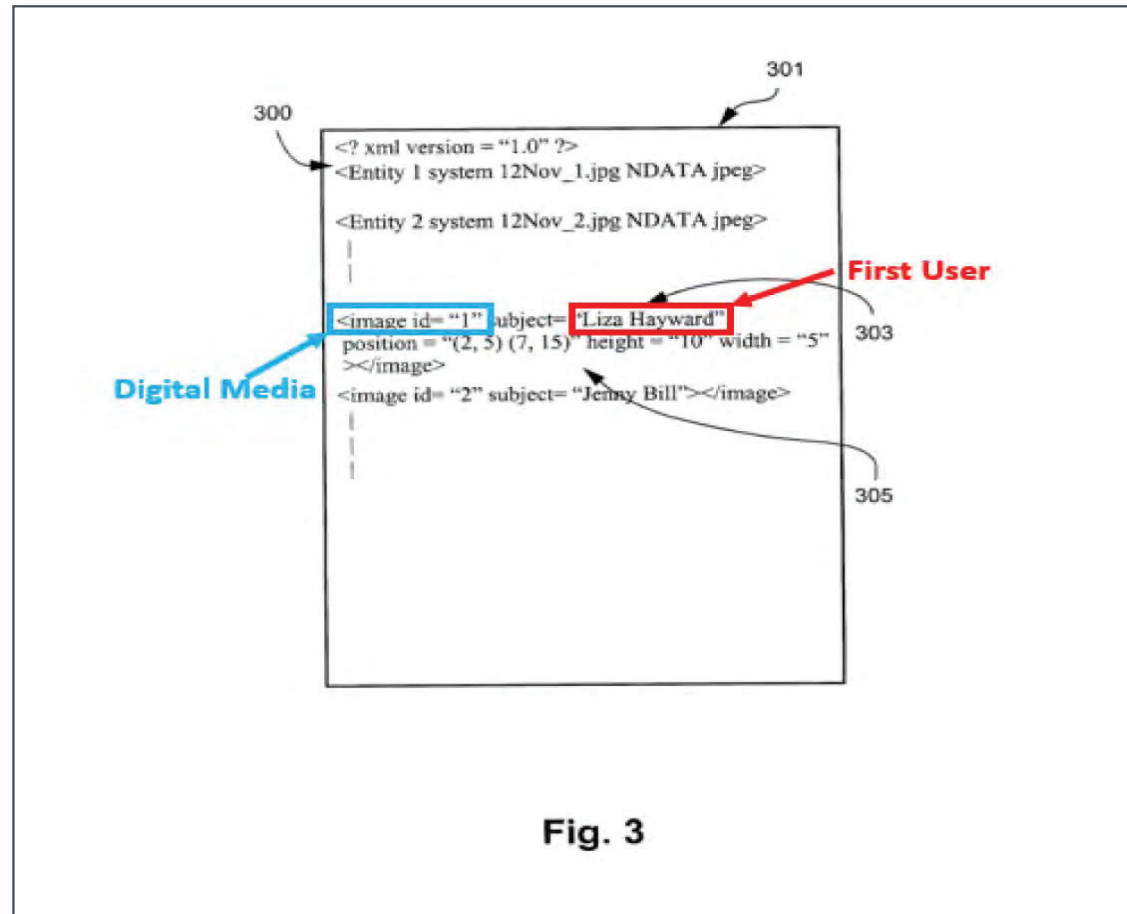
Petition

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 ¶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 34

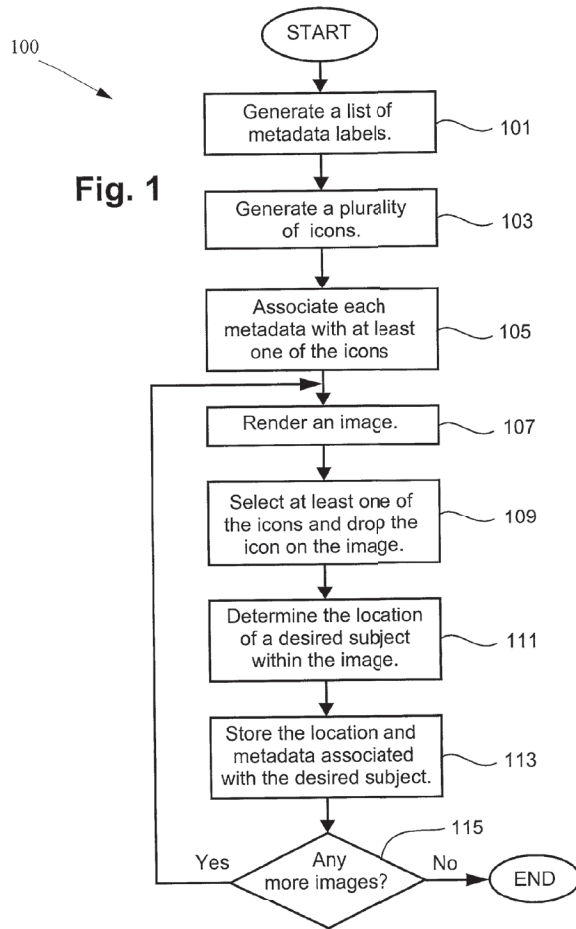
'480: Robertson/Lloyd-Jones Does Not Disclose or Suggest Limitations 3[b]/30[b]

Petition



-00060: Pet. at 35

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



-00060: Ex. 1013 at Fig. 1

Lloyd-Jones

[0029] The method of annotating an image using metadata, can now be described with reference to the flowchart 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,

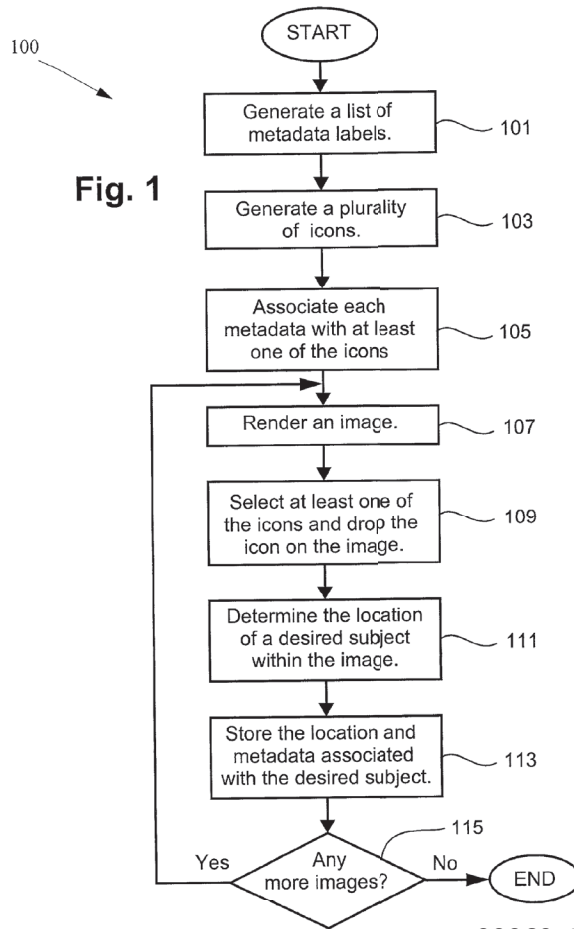
-00060: Ex. 1013 at ¶ [0029]

Lloyd-Jones

erated icons. For example, one of the icons could be associated with the name "Jenny Smith" which was included in an imported e-mail address book. The association of each

-00060: Ex. 1013 at ¶ [0029]

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



-00060: Ex. 1013 at Fig. 1

Lloyd-Jones

[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 (x,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 ¶ [0031]

Lloyd-Jones

language used for associating metadata with images. An example of the format of an XML file 301 is shown in FIG. 3. As seen in FIG. 3, the XML file includes the file name 300 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

-00060: Ex. 1013 at ¶ [0031]
Angel Tech Ex 2023, p. 46 of 124
Meta v. Angel Tech IPR2023-00057

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

Trials@uspto.gov
Tel: 571-272-7822

Paper No. 22
Entered: May 10, 2019

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AMAZON WEB SERVICES, INC., AMAZON.COM, INC., and
VADATA, INC.,
Petitioner,

v.

SAINT REGIS MOHAWK TRIBE,
Patent Owner.

Case IPR2019-00103
Patent 7,149,867 B2

Before KALYAN K. DESHPANDE, JUSTIN T. ARBES,
and CHRISTA P. ZADO, *Administrative Patent Judges*.

ZADO, *Administrative Patent Judge*.

DECISION
Denying *Inter Partes* Review
35 U.S.C. § 314

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. § 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,

Amazon Web Services, Inc. v. Saint Regis Mohawk Tribe, IPR2019-00103, Paper 22, at 16 (PTAB May 10, 2019)

Angel Tech Ex 2023, p. 47 of 124

Meta v. Angel Tech IPR2023-00057 47

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

Claim 3

Limitation 3[b]

'480

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;

-00060: Ex. 1001 at 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 Patent (IPR2023-00060): Disputed Issues

- 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

'480: Exemplary Claim 3 of the '480 Patent

'480

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 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.

-00060: Ex. 1001 at Claim 3 (annotated)

'480: The “First User” and “Viewing User” of the Claims

“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

'480: Exemplary Claim 3 of the '480 Patent

'480

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 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]

Limitation 3[c][3]

Limitation 3[d]

-00060: Ex. 1001 at Claim 3 (annotated)

'480: The “Display Data” with the “Element Configured to Provide a Prompt”

“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

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

Petition

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 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.

-00060: Pet. at 14-15

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

'480 Patent

(10) Patent No.: US 10,628,480 B2
(45) Date of Patent: Apr. 21, 2020

INVENTORS TO USER PROFILES

Inventor: Angel Technologies, LLC, San Francisco, CA (US)

Assignee: ANGEL TECHNOLOGIES, LLC, San Francisco, CA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: 16/837,227
(22) Filed: Aug. 5, 2019

(65) **Prior Publication Data**
US 2019/0361931 A1 Nov. 28, 2019

Related U.S. Application Data

(63) Continuation of application No. 15/933,531, filed on Mar. 23, 2018, now Pat. No. 10,417,275, which is a continuation of application No. 14,053,626, filed on Oct. 15, 2013, now Pat. No. 9,959,291, which is a continuation of application No. 09/991,324, filed on Nov. 15, 2001, now Pat. No. 8,954,432.

(60) Provisional application No. 60/248,994, filed on Nov. 15, 2000.

(51) Int. Cl. (2019.01)
G06F 16/00 (2019.01)
G06F 16/583 (2019.01)
G06F 16/58 (2019.01)
G06F 3/0482 (2013.01)

(52) U.S. Cl. (2019.01): G06F 16/583 (2019.01); G06F 3/0482 (2013.01); G06F 16/58 (2019.01)

30 Claims, 9 Drawing Sheets

Users database 230. 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 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.

-00060: Ex. 1001 at 9:38-48

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

Petition

[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: Pet. at 1

'480: Lloyd-Jones Does Not Disclose the Claimed "Viewing User"

Lloyd-Jones
Patent Application Publication (10) Pub. No.: US 2002/0055955 A1
 Lloyd-Jones et al. (43) Pub. Date: May 9, 2002

US 20020055955A1

(54) METHOD OF ANNOTATING AN IMAGE (30) Foreign Application Priority Data
 Apr. 28, 2000 (AU).....PO7177

(76) Inventors: Daniel John Lloyd-Jones, Canberra (AU); Alison Joan Lennon, Balmain (AU)
 Publication Classification
 (51) Int. Cl.7G06F 17/21
 (52) U.S. Cl.707/512

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(21) Appl. No.: 09/826,935
 (22) Filed: Apr. 6, 2001

(57) **ABSTRACT**
 A method and apparatus for annotating an image (407) is disclosed. The image (407) and a plurality of icons (403) are displayed such that each icon is associated with metadata. At least one of the icons is selected depending on at least one subject of the image (407) and the metadata associated with the selected icon is stored as an annotation of the subject of the image.

-00060: Ex. 1013 at Fig. 5

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

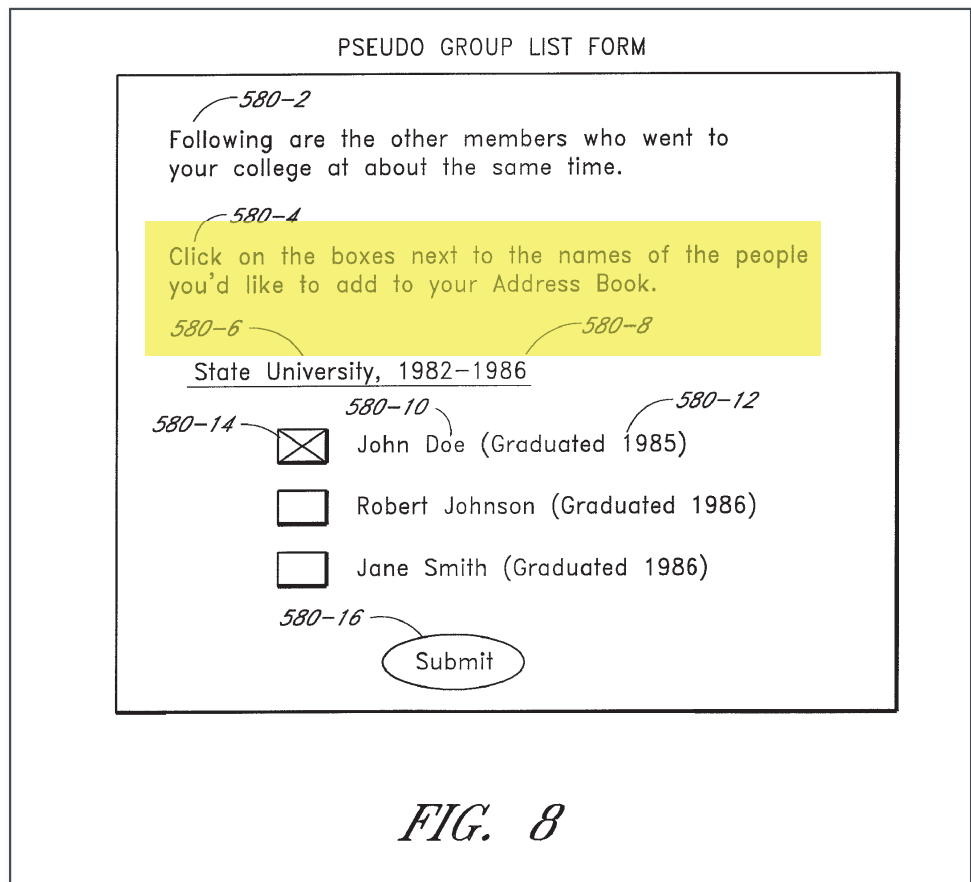
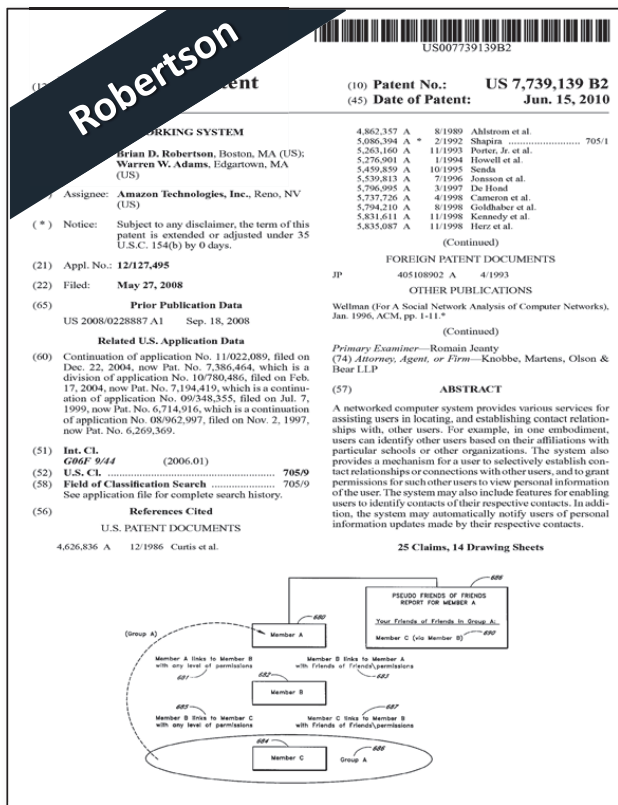
Dr. Bederson

Q. Does Lloyd-Jones disclose a prompt to add a contact from an image?

A. ... **So I don't think I have a specific opinion about whether Lloyd-Jones itself discloses adding a prompt to add a contact from an image.**

-00060: Ex. 2021 at 49:11-50:5

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



-00060: Ex. 1012 at Fig. 8

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

Robertson

(10) Patent No.: **US 7,739,139 B2**
 (45) Date of Patent: **Jun. 15, 2010**

INVENTOR
 Brian D. Robertson, Boston, MA (US);
 Warren W. Adams, Edgartown, MA (US)

ASSIGNEE
 Amazon Technologies, Inc., Reno, NV (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **12/127,495**
 (22) Filed: **May 27, 2008**

(65) **Prior Publication Data**
 US 2008/0228887 A1 Sep. 18, 2008

Related U.S. Application Data
 (60) Continuation of application No. 11/022,089, filed on Dec. 22, 2004, now Pat. No. 7,386,464, which is a division of application No. 10/780,486, filed on Feb. 17, 2004, now Pat. No. 7,194,419, which is a continuation of application No. 09/348,355, filed on Jul. 7, 1999, now Pat. No. 6,714,916, which is a continuation of application No. 08/962,997, filed on Nov. 2, 1997, now Pat. No. 6,269,369.

(51) **Int. Cl.**
G06F 9/44 (2006.01) **705/9**

(52) **U.S. Cl.** **705/9**

(58) **Field of Classification Search** **705/9**
 See application file for complete search history.

(56) **References Cited**
 U.S. PATENT DOCUMENTS
 4,626,836 A 12/1986 Curtis et al.

25 Claims, 14 Drawing Sheets

PSEUDO MEMBER UPDATE

Member Update ⁶⁵⁰⁻²
 December 7, 1998

The following of your contacts have upcoming birthdays: ⁶⁵⁰⁻⁴

- Avery Rogers (Dec. 11) ⁶⁵⁰⁻⁶
- Jane Bigelow (Dec. 14)

Your contacts have registered the following address changes: ⁶⁵⁰⁻⁸

- Tom Kohn
 New work address: ⁶⁵⁰⁻¹⁰
 1000 Wilson Boulevard
 Arlington, Va 22229
- New work phone: ⁶⁵⁰⁻¹²
 703-558-3312

The following new members have affiliated with the same groups as you: ⁶⁵⁰⁻¹⁴

- Gary Clayton (State College, 1985) ⁶⁵⁰⁻¹⁶

The following members have linked to you and have requested that you reciprocate: ⁶⁵⁰⁻¹⁸

- Jun Ohama ⁶⁵⁰⁻²⁰
- Lee Rogers

You have scheduled a trip to Phoenix on December 14. The following of your contacts live in Phoenix or will be in Phoenix on that date: ⁶⁵⁰⁻²²

- Andrew Kress ⁶⁵⁰⁻²⁴
- Taylor Pierce

According to Astrology, the following of your contacts are compatible with you today (Libras) ⁶⁵⁰⁻²⁶

- Bryan Jamieson ⁶⁵⁰⁻²⁸
- Anne Thierry

FIG. 11

-00060: Ex. 1012 at Fig. 11

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

Robertson

US007739139B2

(10) Patent No.: **US 7,739,139 B2**
 (45) Date of Patent: **Jun. 15, 2010**

WORKING SYSTEM
 Brian D. Robertson, Boston, MA (US);
 Warren W. Adams, Edgartown, MA (US)
 Assignee: Amazon Technologies, Inc., Reno, NV (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **12/127,495**
 (22) Filed: **May 27, 2008**

(65) **Prior Publication Data**
 US 2008/022887 A1 Sep. 18, 2008

Related U.S. Application Data
 (60) Continuation of application No. 11/022,089, filed on Dec. 22, 2004, now Pat. No. 7,286,464, which is a division of application No. 10/780,486, filed on Feb. 17, 2004, now Pat. No. 7,194,419, which is a continuation of application No. 09/348,355, filed on Jul. 7, 1999, now Pat. No. 6,714,916, which is a continuation of application No. 08/962,997, filed on Nov. 2, 1997, now Pat. No. 6,269,369.

(51) **Int. Cl.**
G06F 9/44 (2006.01) **705/9**

(52) **U.S. Cl.** **705/9**

(58) **Field of Classification Search** **705/9**
 See application file for complete search history.

(56) **References Cited**
 U.S. PATENT DOCUMENTS
 4,626,836 A 12/1986 Curtis et al.

25 Claims, 14 Drawing Sheets

65

Referring now to FIG. 8, a pseudo GUI 580 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

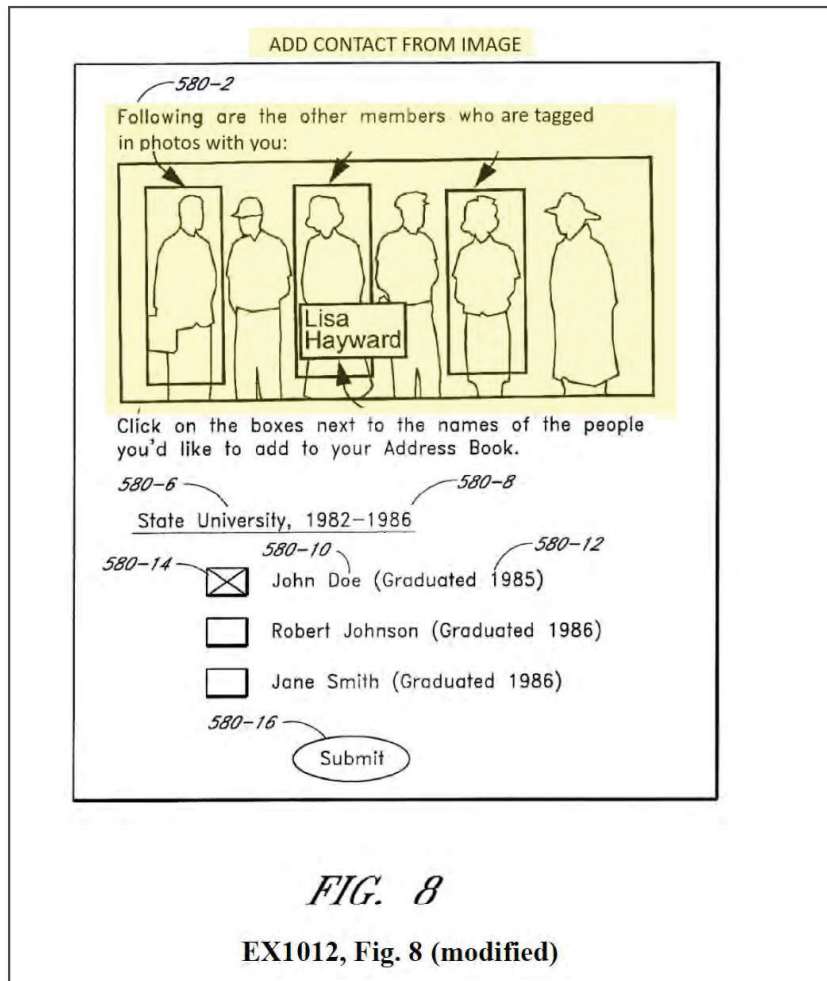
-00060: Ex. 1012 at 6:65-67

In another portion of the member update pseudo GUI 650 shown in FIG. 11, if one or more members has affiliated with 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.

-00060: Ex. 1012 at 11:14-20

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

Petition



No "first user"

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

No "viewing user"

'480: The Combination Does Not Disclose the Claimed “Prompt” or “Viewing User”

Reply

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

-00060: Reply at 17

'480: Petitioner Cannot Resort to “Creativity” or “Common Sense”



“[W]e conclude that while ‘common sense’ can be invoked, even potentially to supply a limitation missing from the prior art, it must still be supported by evidence and a reasoned explanation.”

Arendi S.A.R.L. v. Apple Inc., 832 F.3d 1355, 1366-67 (Fed. Cir. 2016)

'480: Petitioner Cannot Resort to “Creativity” or “Common Sense”



“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”



“In cases in which ‘common sense’ is used to supply a missing limitation, as distinct from a motivation to combine, moreover, our search for a reasoned basis for resort to common sense ***must be searching***. And, this is particularly true where the missing limitation goes to the ***heart of an invention***.”

Arendi S.A.R.L. v. Apple Inc., 832 F.3d 1355, 1366-67 (Fed. Cir. 2016) (emphasis added)

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

DSS Tech. Management v. Apple: Rejected similarly conclusory expert testimony

885 F.3d 1367
United States Court of Appeals, Federal Circuit

DSS TECHNOLOGY MANAGEMENT, INC., Appellant
v.
APPLE INC., Appellee

2016-2523, 2016-2524
Decided: March 23, 2018

Synopsis

Background: Competitor petitioned for inter partes review of patent for reducing power consumption in bidirectional wireless data communication networks. The Patent Trial and Appeal Board, 2016 WL 3382361 and 2016 WL 3382464, determined claims were unpatentable as obvious. Patent owner appealed.

Holding: The Court of Appeals O'Malley, Circuit Judge, held that board's obviousness finding was not supported by substantial evidence that it would have been obvious to modify base station transmitter in prior art to be energized in low duty cycle radio frequency bursts as required by claims of patent.

Reversed.

Newman, Circuit Judge, filed dissenting opinion.

Procedural Posture(s): Review of Administrative Decision.

West Headnotes (10)

1 Patents 2919800 Questions of law or fact
Obviousness of a patent claim is a question of law based on underlying findings of fact. 35 U.S.C.A. § 103(a).
1 Case that cites this headnote

2 Patents 29181137 Scope of Review
Court of Appeals reviews the factual findings underlying the Patent Trial and Appeal Board's obviousness determination in an inter partes examination for substantial evidence, whereas court reviews board's legal conclusions de novo. 35 U.S.C.A. § 103(a).

3 Patents 2918682 Prior Art and Relation of Claimed Invention Thereof
In appropriate circumstances, a patent can be obvious in light of a single prior art reference if it would have been obvious to modify that reference to arrive at the patented invention. 35 U.S.C.A. § 103(a).
2 Cases that cite this headnote More cases on this issue

4 Patents 2918761 Radio and telecommunications equipment.

- “Because the base and mobile stations have the same physical structure, this **would have been no more than using a known technique** to improve similar devices in the same way”
- “It would have been obvious to a [person of ordinary skill in the art] to have **the base station [in Natarajan] operate in an analogous manner**”
- “The RF systems of the base station and mobile stations in Natarajan have **the same physical structure**”
- A person of skill in the art “applying the exact design disclosed in Natarajan to an application exactly as described in Natarajan,” where most users are likely to be inactive most of the time, **“would have conceived a system in which ... the transmitter and the receiver of the base station ... operate in ‘low duty cycle RF bursts’”**

'480 Patent (IPR2023-00060): Disputed Issues

- 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

'480: Petitioner Fails to Establish Motivation to Combine



“[O]bviousness requires the additional showing that a person of ordinary skill at the time of the invention would have selected and combined those prior art elements in the normal course of research and development to ***yield the claimed invention.***”

Unigene Labs., Inc. v. Apotex, Inc., 655 F.3d 1352, 1360 (Fed. Cir. 2011) (emphasis added)

'480: Petitioner Fails to Establish Motivation to Combine

Petition for *Inter Partes* Review
U.S. Patent No. 10,628,480

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re *Inter Partes* Review of:)
U.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**

FILED VIA P-TACTS

PETITION FOR *INTER PARTES* REVIEW OF
U.S. 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

'480: Petitioner Fails to Establish Motivation to Yield the Claimed Invention

Petition

A. Motivation to Combine

A POSA would have been motivated to combine the teachings of Robertson and Lloyd-Jones. Bederson ¶¶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 relationships. *Id.*

-00060: Pet. at 24

'480: Petitioner Fails to Establish Motivation to Yield the Claimed Invention



“The inquiry is ***not*** whether a relevant artisan would combine a first reference’s feature with a second reference’s feature to meet requirements of the first reference that are not requirements of the claims at issue.”

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

'480: Petitioner Fails to Establish Why a POSITA Would Start with Robertson

Personal Web Techs. v. Apple: It is not enough to show that a POSITA, once presented with two references, would have understood they *could be* combined

Personal Web Technologies, LLC v. Apple, Inc., 848 F.3d 987 (2017)
121 U.S.P.Q.2d 1578

KeyCite Yellow Flag - Negative Treatment
Distinguished by: PDS Geophysical AS v. Inco, Fed.Cir., June 7, 2018

848 F.3d 987
United States Court of Appeals, Federal Circuit.

PERSONAL WEB TECHNOLOGIES, LLC, Appellant
v.
APPLE, INC., Appellee

2016-1174
Decided: February 14, 2017

Synopsis
Background: Computer manufacturer filed petition for inter partes review of various claims of patent for controlling access to data in data processing system. The United States Patent and Trademark Office, Patent Trial and Appeal Board, 2015 WL 1777147, construed claims and found them unpatentable for obviousness. Patentee appealed.

Holdings: The Court of Appeals, Taranto, Circuit Judge, held that:

[1] term "content-based identifier" meant identifier for data item being based, at least in part, on given function of at least some bits in particular sequence of bits of particular data item, and

[2] Board did not sufficiently explain and support its conclusions.

Affirmed in part, vacated in part, and remanded.

West Headnotes (12)

[1] **Patents** - Questions of law or fact
Patents - Construction and Operation of Patents
Patent claim construction is legal issue reviewed de novo, based on underlying factual findings that are reviewed for substantial evidence.

16 Cases that cite this headnote

[2] **Patents** - Data processing
Did claim term require construction by the court? **Yes**
Term "content-based identifier," as used in patent for controlling access to data in data processing system, meant identifier for data item being based, at least in part, on given function of at least some bits in particular sequence of bits of particular data item, but did not require identifier to rely on all data in data item.
3 Cases that cite this headnote
More cases on this issue

[3] **Patents** - Scope of Review
Court of Appeals reviews Patent Trial and Appeal Board's ultimate determination of obviousness de novo and its underlying factual determinations for substantial evidence.
24 Cases that cite this headnote

[4] **Patents** - Scope of Review
On factual components of inquiry as to patent's obviousness, court asks whether reasonable fact finder could have arrived at agency's decision, which requires examination of record as a whole, taking into account evidence that both justifies and detracts from agency's decision.
9 Cases that cite this headnote

[5] **Patents** - Combination of Elements
Patents - Level of Ordinary Skill in the Art
In conducting obviousness inquiry, in order to determine whether there was apparent reason to combine known elements in fashion claimed by patent at issue, court may look at variety of facts, including prior-art teachings and marketplace demands and artisans' background knowledge.
1 Case that cites this headnote

[6] **Patents** - Evidence and Determination

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*

'480: Petitioner Fails to Establish Why a POSITA Would Start with Robertson



“The real question is whether that skilled artisan would have plucked one reference **out of the sea of prior art** (Phipps) and combined it with conventional coolant elements to address some need present in the field (the need for low-carbon monoxide emission marine gen-sets).”

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

'480: Petitioner's Motivation to Combine Arguments Are Conclusory and Unsupported

Petition

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 ¶139. Specifically, a POSA would have recognized the importance of images to establishing relationships and connections. *Id.*; *see also*,

Further, the image annotation and associations taught by Lloyd-Jones would have been a natural extension of Robertson's Travel Event feature. Bederson ¶140. 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.* ¶141. 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*

-00060: Pet. at 25-26

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



“Absent some articulated rationale, a finding that a combination of prior art would have been ‘common sense’ or ‘intuitive’ is no different than merely stating the combination ‘would have been obvious.’ Such a conclusory assertion with no explanation is inadequate to support a finding that there would have been a motivation to combine.”

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

'480: Conclusory Expert Testimony is Inadequate to Support Obviousness



“[K]nowledge of a problem and motivation to solve it are entirely different from motivation to combine particular references to reach the particular claimed method.”

Innogenetics, N.V. v. Abbott Labs., 512 F.3d 1363, 1373 (Fed. Cir. 2008)

'480: Conclusory Expert Testimony is Inadequate to Support Obviousness

ActiveVideo Networks, Inc. v. Verizon Communications, Inc., 694 F.3d 1312 (2012)
104 U.S.P.Q.2d 1241

KeyCite Yellow Flag - Negative Treatment
Declined to Extend by *Verinata Health, Inc. v. Anova Diagnostics, Inc.*, N.D.Cal., January 13, 2014

694 F.3d 1312
United States Court of Appeals, Federal Circuit.

ACTIVEVIDEO NETWORKS, INC., Plaintiff-Cross Appellant,
v.
VERIZON COMMUNICATIONS, INC., Verizon Services Corp., Verizon Virginia Inc., and Verizon South Inc., Defendants-Appellants.

Nos. 2011-1538, 2011-1567, 2012-1129, 2012-1201
1
Aug. 24, 2012.

Synopsis
Background: Patentee brought action against video service provider, alleging infringement of patents relating to interactive television systems. Video service provider counterclaimed, seeking declaratory judgments of noninfringement and invalidity of asserted patents, and alleging patentee's infringement of video service provider's patents. Patentee counterclaimed alleging invalidity and non-infringement of video service provider's patents. Following a three week jury trial, the United States District Court for the Eastern District of Virginia, Raymond A. Jackson, J., 807 F.Supp.2d 544, granted both patentee's and video service provider's motions for judgment as a matter of law (JMOL) on validity. Subsequently, the jury found that the parties infringed each others' patents, and the District Court, Jackson, J., granted patentee's motion for prejudgment interest, post-judgment interest, and damages, 2011 WL 489922, denied video service provider's motion to alter or amend the judgment, 2011 WL 5358022, entered a permanent injunction against video service provider, and established a sunset royalty for video service provider's continued infringement until the injunction was to take effect, 827 F.Supp.2d 641, and denied video service provider's motions for judgment as a matter of law (JMOL) or new trial on infringement, damages, and invalidity, and denied patentee's motions for partial new trial on infringement and invalidity. Both parties appealed.

Holdings: The Court of Appeals, Moore, Circuit Judge, held that:

- [1] substantial evidence supported finding that video service provider's accused system infringed "information service" limitation;
- [2] substantial evidence supported finding that video service provider's accused system infringed "television communication" limitation;
- [3] substantial evidence did not support finding that accused system infringed "individually assignable processors" limitation;
- [4] record evidence was insufficient to support a determination of obviousness of patentee's patents;
- [5] evidence was insufficient to support a determination of anticipation of patentee's patents;
- [6] evidence was insufficient to support determination of anticipation of video service provider's patents;
- [7] fact issue existed as to whether prior art patent anticipated certain claims of video service provider's patent; and
- [8] district court abused its discretion in granting a permanent injunction enjoining video service provider from future infringement.

Affirmed in part, reversed in part, vacated in part, and remanded.

Procedural Posture(s): On Appeal, Motion for Judgment as a Matter of Law (JMOL) Directed Verdict.

West Headnotes (43)

[1] **Courts** — Particular questions or subject matter
Federal Circuit Court of Appeals reviews the denial or grant of judgment as a matter of law (JMOL) under regional circuit law. Fed.Rules Civ.Proc.Rule 50, 28 U.S.C.A.

4 Cases that cite this headnote

***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



The Board must avoid “hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning.”

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

'480 Patent (IPR2023-00060): Disputed Issues

- 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

'480: Conclusory Expert Testimony is Inadequate to Support Obviousness

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

ActiveVideo Networks, Inc. v. Verizon Communications, Inc., 694 F.3d 1312 (2012)
104 U.S.P.Q.2d 1241

KeyCite Yellow Flag - Negative Treatment
Declined to Extend by *Verinata Health, Inc. v. Ariosa Diagnostics, Inc.*,
N.D.Cal., January 13, 2014

694 F.3d 1312
United States Court of Appeals, Federal Circuit.

ACTIVEVIDEO NETWORKS,
INC., Plaintiff-Cross Appellant,
v.
VERIZON COMMUNICATIONS, INC., Verizon
Services Corp., Verizon Virginia Inc., and
Verizon South Inc., Defendants-Appellants.

Nos. 2011-1538, 2011-1567, 2012-1129, 2012-1201
I
Aug. 24, 2012.

Synopsis
Background: Patenteo brought action against video service provider, alleging infringement of patents relating to interactive television systems. Video service provider counterclaimed, seeking declaratory judgments of noninfringement and invalidity of asserted patents, and alleging patenteo's infringement of video service provider's patents. Patenteo counterclaimed alleging invalidity and non-infringement of video service provider's patents. Following a three-week jury trial, the United States District Court for the Eastern District of Virginia, Raymond A. Jackson, J., 807 F.Supp.2d 544, granted both patenteo's and video service provider's motions for judgment as a matter of law (JMOL) on validity. Subsequently, the jury found that the parties infringed each others' patents, and the District Court, Jackson, J., granted patenteo's motion for prejudgment interest, post-judgment interest, and damages, 2011 WL 4899922, denied video service provider's motion to alter or amend the judgment, 2011 WL 5358022, entered a permanent injunction against video service provider, and established a sunset royalty for video service provider's continued infringement until the injunction was to take effect, 827 F.Supp.2d 641, and denied video service provider's motions for judgment as a matter of law (JMOL) or new trial on infringement, damages, and invalidity, and denied patenteo's motions for partial new trial on infringement and invalidity. Both parties appealed.

Holdings: The Court of Appeals, Moore, Circuit Judge, held that:

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- [2] substantial evidence supported finding that video service provider's accused system infringed "television communication" limitation;
- [3] substantial evidence did not support finding that accused system infringed "individually assignable processors" limitation;
- [4] record evidence was insufficient to support a determination of obviousness of patenteo's patents;
- [5] evidence was insufficient to support a determination of anticipation of patenteo's patents;
- [6] evidence was insufficient to support determination of anticipation of video service provider's patents;
- [7] fact issue existed as to whether prior art patent anticipated certain claims of video service provider's patent; and
- [8] district court abused its discretion in granting a permanent injunction enjoining video service provider from future infringement.

Affirmed in part, reversed in part, vacated in part, and remanded.

Procedural Posture(s): On Appeal, Motion for Judgment as a Matter of Law (JMOL) Directed Verdict.

West Headnotes (43)

[1] **Courts** — Particular questions or subject matter
Federal Circuit Court of Appeals reviews the denial or grant of judgment as a matter of law (JMOL) under regional circuit law. Fed.Rules Civ.Proc.Rule 50, 28 U.S.C.A.

4 Cases that cite this headnote

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 add 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

'480: Dr. Bederson Provides No Explanation How to Implement Tagging

Dr. Bederson

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

-00060: Ex. 1003 at ¶ 144

'480: Conclusory Expert Testimony is Inadequate to Support Obviousness

Daifuku v. Murata Machinery: Must provide a specific engineering and technical analysis of how the combination would have worked

Trials@uspto.gov Paper10
Tel: 571-272-7822 Entered: May 4, 2015

UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD

DAIFUKU CO., LTD. AND DAIFUKU AMERICA CORP.,
Petitioner,

v.

MURATA MACHINERY, LTD.,
Patent Owner.

Case IPR2015-00084 (Patent 7,771,153 B2)
Case IPR2015-00087 (Patent 7,165,927 B2)¹

Before KEN B. BARRETT, BARRY L. GROSSMAN, and
BRIAN P. MURPHY, *Administrative Patent Judges*,
MURPHY, *Administrative Patent Judge*.

DECISION
Denying Institution of *Inter Partes* Review
37 C.F.R. § 42.108

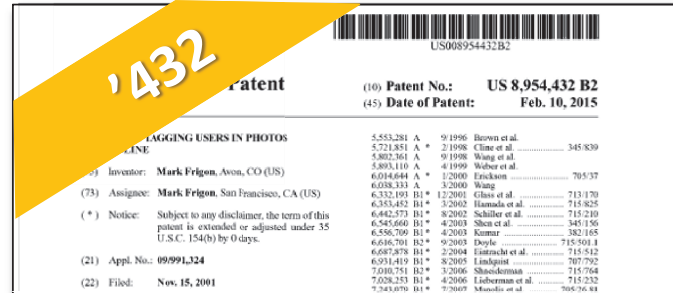
¹ This Decision addresses the same legal and factual issues raised in IPR2015-00084 and IPR2015-00087. The patents at issue in both cases are related, and the claim limitations at issue are very similar. The arguments made by Petitioner and Patent Owner are largely the same in both cases. Therefore, we issue one Decision to be entered in each case.

Although the quoted statement is consistent with *KSR*, 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*

'480 Patent (IPR2023-00060): Disputed Issues

- 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**

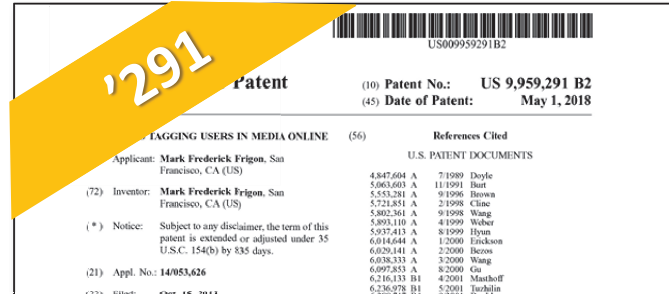
'432 Patent (IPR2023-00057): Instituted Grounds



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



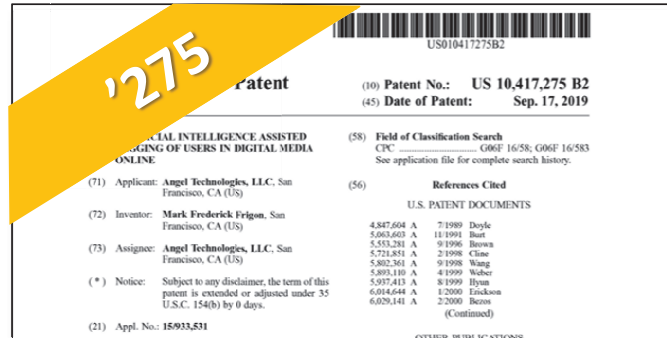
'291 Patent (IPR2023-00058): Instituted Grounds



Ground 1	Claims 1, 5 and 10-26 are obvious over Sharpe in view of knowledge of POSITA
Ground 2	Claims 1-26 are obvious over Sharpe and Eintracht in view of knowledge of POSITA
Ground 3	Claims 18, 19 and 26 are obvious over Sharpe and Carey in view of knowledge of POSITA
Ground 4	Claims 18, 19 and 26 are obvious over Sharpe, Eintracht and Carey in view of knowledge of POSITA



'275 Patent (IPR2023-00059): Instituted Grounds

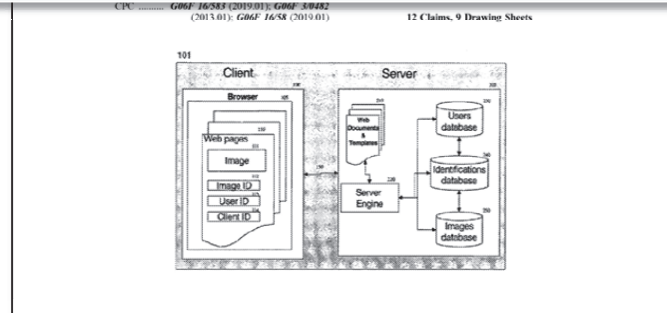


Ground 1

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

Ground 2

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



'432/'291/'275 Patents: Selected Disputed Issues

- **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)

'432: Sharpe Does Not Disclose or Suggest the Claimed “pictured user unique identifier”

Claim 6

Limitation 6[e]

'432

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;

-00057: Ex. 1001 at Claim 6

'291: Sharpe Does Not Disclose or Suggest the Claimed "Unique User Identifier"

Claim 26

Limitation 26[d]

'291

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

-00058: Ex. 1001 at Claim 26

'275: Sharpe Does Not Disclose or Suggest the Claimed "unique user identifier"

Claim 1

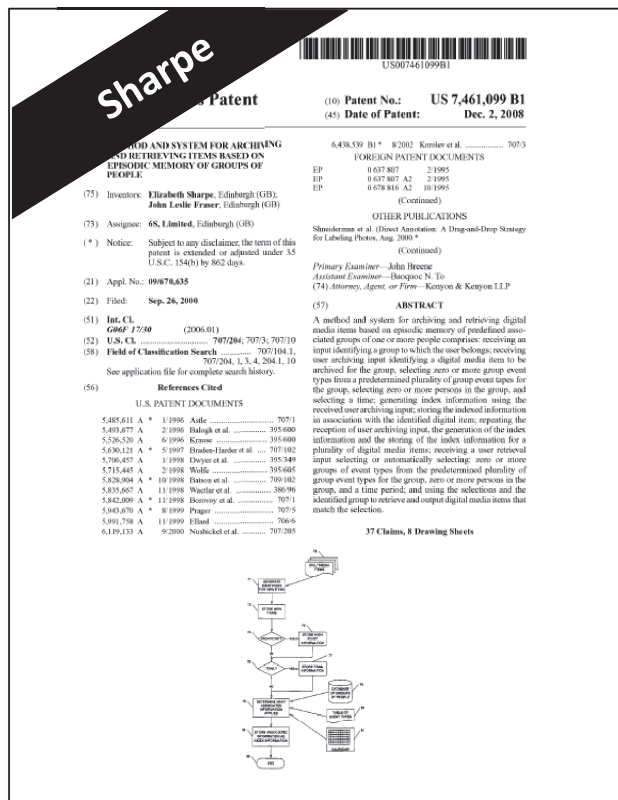
Limitation 1[d]

'275

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;

-00059: Ex. 1001 at Claim 1

'432/'291/'275: Sharpe's Single Disclosure Regarding a "User Name"



Before the storage process begins, when the registration process (2 in FIG. 1) is carried out by a member or members of the groups, information is stored in a group table 6a. 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.

-00057/-00058/-00059: Ex. 1005 at 7:35-41

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

'432 Petition

"Sharpe's system **would use** an identifier or 'primary key' that is unique...Sharpe's system **would have used** a person's username as the unique identifier...Sharpe's user name **would be** a primary key."

-00057: Pet. at 31

'291 Petition

"A POSA would understand the username **would be** the primary key for the database 3."

-00058: Pet. at 36

'275 Petition

"A POSA **would understand** that to create relationships between the tables, the system **would need to use** a unique identifier or "primary key"...A POSA **would understand** the username **would be** the primary key for the database 3."

-00059: Pet. at 46-47

'432/'291/'275: Petitioner's Assertions Are Classic Words of Inherency



“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)

'432/'291/'275: The Petition Does not Establish Inherency



Inherency requires a “stringent standard.”

Amgen Inc. v. Sandoz Inc., 66 F.4th 952, 966 (Fed. Cir. 2023)

'432/'291/'275: The Petition Ignores Another Possible Way to Implement Sharpe

Dr. Saber

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[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

-00057: Ex. 2021 at ¶ 81

'432/'291/'275: Petitioner Has Not Presented Sufficient Obviousness Analysis

Petition

also EX1005, 7:39-41. Implementing Sharpe with the username as the unique identifier would have been a known design choice, and the most obvious design choice given that each user already required a username to logon to the system. Bederson ¶307.

-00057: Pet. at 32

Dr. Bederson

password thus identifying themselves as a member of a group.”). Using the username as the primary key would have been a matter of design choice to a POSA. Usernames are often used as primary keys in database schemas, and the most obvious design choice for the Sharpe system given that each user already required a username to log on to the system.

-00057: Ex. 1003 at ¶ 307

'432/'291/'275: Patent Owner's Argument

Patent Owner's Sur-Reply

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).

'432/'291/'275 Patents: Selected Disputed Issues

- 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)

'432: Petition's Argument for '432 Limitation 1[h]

Claim 1

Limitation
1[h]

'432

receiving from a second tagging user a request to identify users in said image data wherein said request contains said image identification and the user identification of said second tagging user;

-00057: Ex. 1001 at Claim 1

'432: Petition's Argument for '432 Limitation 1[h]

Petition

Sharpe discloses a collaborative system specifically intended to enable users to interact with images. *Id.* ¶224. Sharpe consistently explains that multiple users can employ the functionalities described. *Id.* ¶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 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 system—for 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]).

-00057: Pet. at 55

'432: Petition's Argument for '432 Limitation 7[a], [b]

Claim 7

Limitation 7[a], [b]

'432

obtaining identification data from a second tagging user of said computer network, wherein said identification data obtained from said second tagging user comprises said unique image identifier and an additional pictured user unique identifier of a user of said computer network pictured in said image data;
storing said identification data from said second tagging user store an identifications database accessible by other computers of said network whereby a user identifier may be associated with one or more image identifiers and an image identifier may be associated with one or more users identifiers.

-00057: Ex. 1001 at Claim 7

'432: Petitioner Mischaracterizes PO's Arguments Regarding a Second Tagging User

Reply

"[I]t would have been obvious to implement the claimed tagging features for a second user."

-00057: Reply at 4

Sur-Reply

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 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.**

-00057: Sur-Reply at 7

'432/'291/'275 Patents: Selected Disputed Issues

- 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)

'432: "Said Image Data" in Claim 8

Claim 8

Limitations 8[a], [b]

'432

receiving a request for **said image data** from a viewing user of said computer network;
displaying list of pictured users of said network that have been identified by said first tagging user and said second tagging user in **said image data**.

-00057: Ex. 1001 at Claim 8

'432: "Said Image Data" in Limitation 1[d]

Claim 1

Limitation
1[d]

'432

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;

-00057: Ex. 1001 at Claim 1

'432: "Said Image Data" in Limitation 1[h]

Claim 1

Limitation
1[h]

'432

receiving from a second tagging user a request to identify users in **said image data** wherein said request contains said image identification and the user identification of said second tagging user;

-00057: Ex. 1001 at Claim 1

'432: "Said Image Data" in Limitation 1[b]

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;

-00057: Ex. 1001 at Claim 1

'432: Sharpe's System Does Not Seek to Retrieve a Specific Digital Media Item



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.

-00057/-00058/-00059: Ex. 1005 at 2:16-19

'432: Sharpe's Retrieval

Sharpe Patent

US 7,461,099 B1
Date of Patent: Dec. 2, 2008

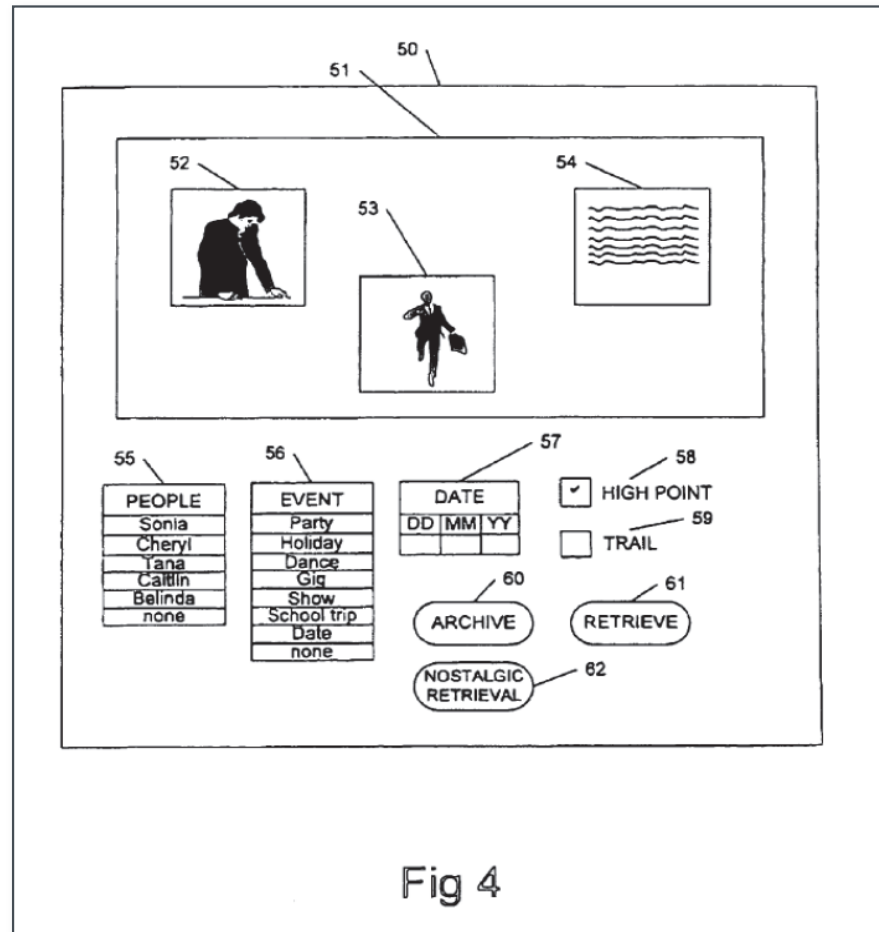
ABSTRACT
A method and system for archiving and retrieving digital media items based on episodic memory of predefined associated groups of one or more people comprises: receiving an input identifying a group to which the user belongs; receiving user archiving input identifying a digital media item to be archived for the group; selecting zero or more group event types from a predetermined plurality of group-event types for the group; selecting zero or more persons in the group; and selecting a time; generating index information using the received user archiving input; storing the indexed information in association with the identified digital item; repeating the reception of user archiving input; the generation of the index information and the storing of the index information for a plurality of digital media items; receiving a user retrieval input selecting or automatically selecting zero or more groups of event types from the predetermined plurality of group-event types for the group; zero or more persons in the group; and a time period; and using the selection and the identified group to retrieve and output digital media items that match the selection.

References Cited

U.S. PATENT DOCUMENTS

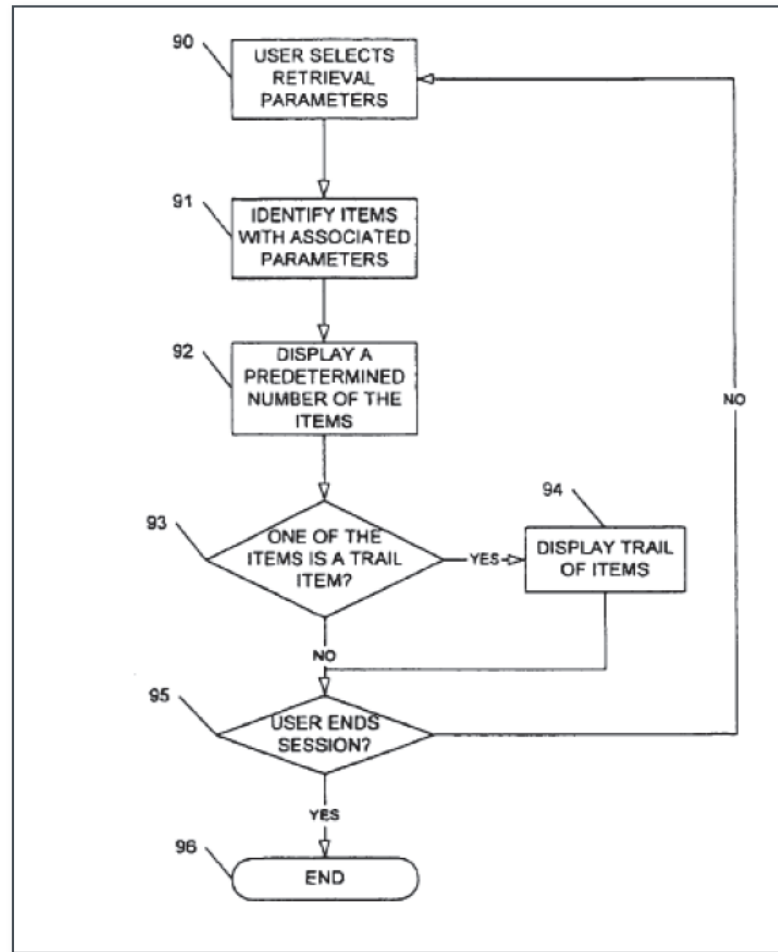
5,485,811 A	*	1/1996	Aude	7071
5,493,877 A		2/1996	Shalghaj et al.	395,600
5,528,520 A		6/1996	Kruse	395,600
5,630,121 A	*	5/1997	Braden-Barker et al.	707102
5,726,457 A		1/1998	Tracy et al.	395,549
5,715,445 A		2/1998	Wald	395,605
5,829,004 A	*	10/1998	Datta et al.	709102
5,833,967 A		11/1998	Wachter et al.	395,996
5,842,009 A	*	11/1998	Koosny et al.	7071
5,843,078 A	*	8/1999	Pagan	70715
5,991,758 A		11/1999	Elliad	7066
6,149,133 A		9/2000	Nusbeck et al.	707205

37 Claims, 8 Drawing Sheets



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

'432: Sharpe's Retrieval



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

'432: Sharpe Doesn't Disclose "Receiving a Request for Said Image Data"

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.

'432: Petitioner Conflates The '432 Patent's Search Functionality with Tagging Functionality

Petitioner's Reply

"PO's interpretation would exclude the preferred embodiment disclosed in the '432... 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..."

-00057: Ex. 1001 at 10:2-36

'432/'291/'275 Patents: Selected Disputed Issues

- 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)

'432: "List of Pictured Users" in Limitation 1[m]

Claim 1

Limitation
1[m]

'432

displaying list of pictured users of said network that have been identified by said first tagging user and said second tagging user in said image data.

-00057: Ex. 1001 at Claim 1

'432: "List of Pictured Users" in Limitation 8[b]

Claim 8

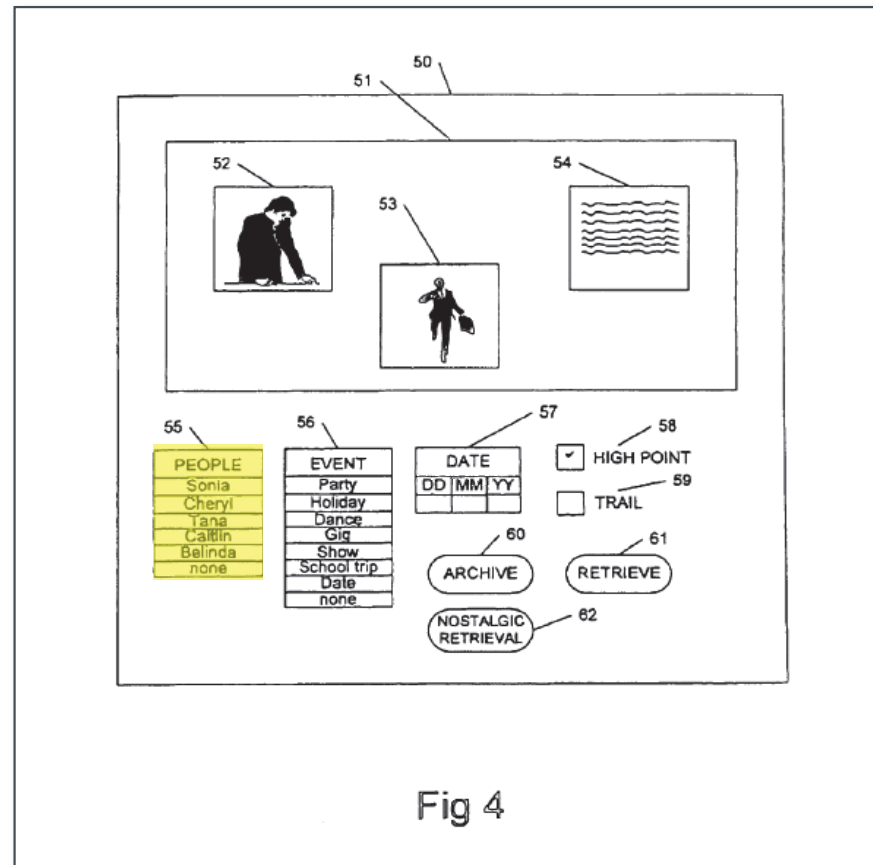
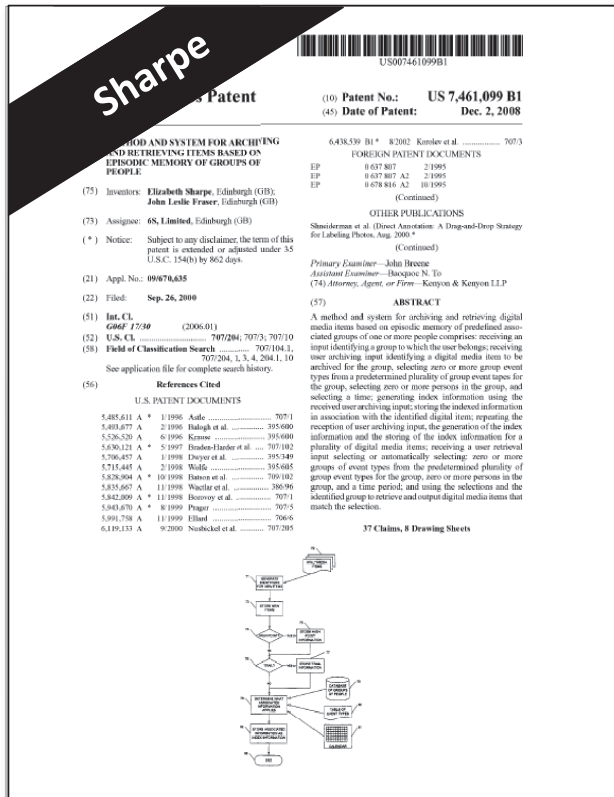
Limitation
8[b]

'432

displaying list of pictured users of said network that have been identified by said first tagging user and said second tagging user in said image data.

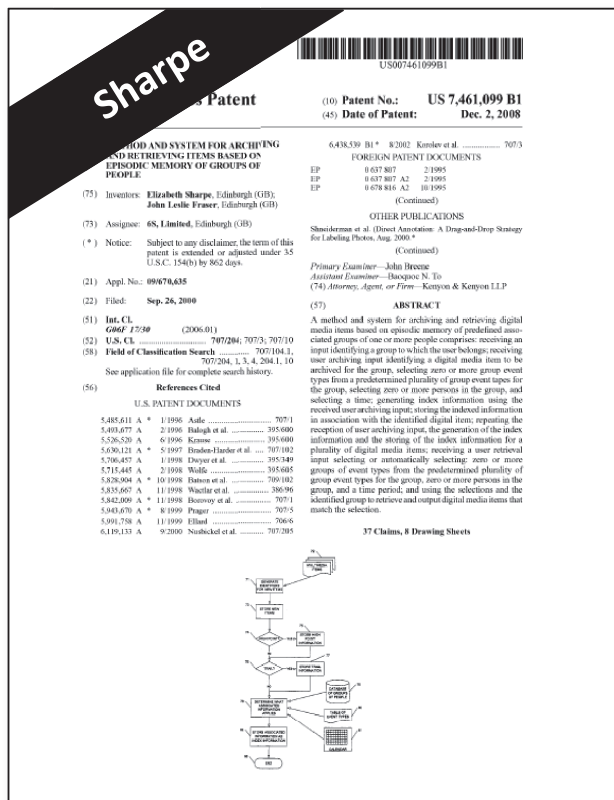
-00057: Ex. 1001 at Claim 8

'432: Sharpe's Drop Down Box 55



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

'432: Sharpe's Drop Down Box 55



items. Beneath work space 51 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.

-00057/-00058/-00059: Ex. 1005 at 6:65-7:2

'432: Sharpe Does Not Disclose Displaying A “List of Pictured Users”

Dr. Saber

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 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.

'432/'291/'275 Patents: Selected Disputed Issues

- 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)**

'432: "Coordinates" in Claim 2

Claim 2

'432

2. The method of 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.

-00057: Ex. 1001 at Claim 2

'291: "Coordinates" in Claim 6

Claim 6

'291

6. The method of claim 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.

-00058: Ex. 1001 at Claim 6

'275: "Coordinates" in Limitation 1[e]

Claim 1

Limitation
1[e]

'275

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

-00059: Ex. 1001 at Claim 1

'432/'291/'275: Eintracht's Disclosures Regarding Coordinates

Eintracht

US0006687878B1

(10) Patent No.: **US 6,687,878 B1**
 (45) Date of Patent: **Feb. 3, 2004**

6,052,695 A * 4/2000 Abe et al. 707/202
 6,081,291 A * 6/2000 Ludwig, Jr. 348/16
 6,081,829 A * 6/2000 Sidani 709/203

(List continued on next page.)

OTHER PUBLICATIONS
 Tügg et al. "Supporting Collaboration in Notecards", Proceedings of the 1986 ACM conference on Computer-supported cooperative work, Dec. 1986, pp. 153-162.*

Primary Examiner—Stephen S. Hong
Assistant Examiner—Cesar B. Paula
 (74) *Attorney, Agent, or Firm*—Howard Zarztsky

ABSTRACT
 (57)
 A system for collaborative document annotation whereby notes (i.e. annotations) associated with a document, such as an image or text document, are stored in a notes database on a central notes server. The documents and associated annotations are treated independently from each other whereby separate data structures are created for the documents and for the associated annotations. A web server application on the server side functions to capture requests from one or more note client applications for creating, storing, editing and retrieving annotations related to specific documents stored on the notes server. On the client side, the notes client functions to display the document that the user wishes to annotate and provides the tools necessary to permit the user to create, edit, delete, retrieve and store notes. A synchronization process transmits the annotations generated by the user from the notes client to the notes server. In response, the notes server transmits back an acknowledgement along with any new notes that other notes clients may have posted since the last synchronization was performed thus enabling multiple notes clients to annotate a document asynchronously with respect to each other. When annotations are posted to the notes server by a notes client, the state of the annotation database is synchronized such that all other notes clients can retrieve the current, up to date annotations associated with a document.

96 Claims, 13 Drawing Sheets

U.S. PATENT DOCUMENTS

5,165,012 A	11/1992	Crandall et al.	345/347
5,220,637 A *	6/1993	By et al.	711/152
5,231,378 A	7/1993	Levin et al.	707/512
5,392,400 A	2/1995	Beckowitz et al.	709/203
5,671,428 A	9/1997	Munaga et al.	345/329
5,806,079 A	9/1998	Riveste et al.	707/512
5,821,031 A	10/1998	Hopfl et al.	345/346
5,831,615 A *	11/1998	Drews et al.	342/344
5,832,424 A *	11/1998	Reppold et al.	307/2
5,838,014 A	12/1998	Carlson et al.	709/204
5,845,301 A	12/1998	Riveste et al.	707/512
5,860,074 A	1/1999	Rowe et al.	707/226
5,870,547 A	2/1999	Pommier et al.	709/204
5,870,739 A *	2/1999	Bauer et al.	707/201
5,880,177 A *	3/1999	Moody et al.	715/511
5,966,512 A *	10/1999	Bates et al.	709/205
6,052,514 A *	4/2000	Gill et al.	345/733

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.

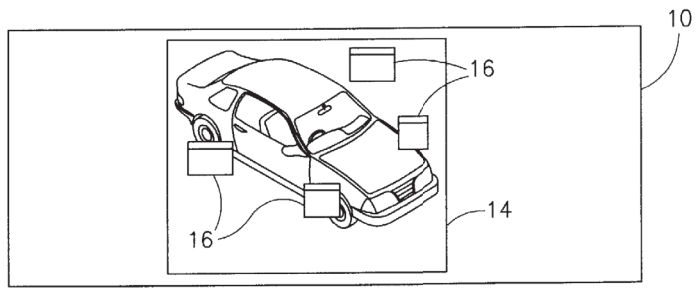


FIG. 1B

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