UNITED STAT –	TES PATENT AND TRADEMARK OF	FICE
BEFORE THE	E PATENT TRIAL AND APPEAL BOA	ARD
L	LINKEDIN CORPORATION, Petitioner,	
	V.	
EBI	UDDY TECHNOLOGIES B.V., Patent Owner	

IPR2022-00165 U.S. Patent No. 8,402,179

### PETITIONER LINKEDIN CORPORATION'S NOTICE OF APPEAL

Pursuant to 35 U.S.C. §§ 141(c) and 142 and in accordance with 37 C.F.R. §§ 90.2(a) and 90.3, Petitioner LinkedIn Corporation ("Petitioner") appeals to the United States Court of Appeals for the Federal Circuit from the Final Written Decision (attached hereto as Exhibit 1) entered by the Patent Trial and Appeal Board ("the Board") on June 30, 2023.

Petitioner indicates that the issues on appeal include:

- The Board's determination that Petitioner did not show claims 1-3 and 6-10 of U.S. Patent No. 8,402,179 to be unpatentable by a preponderance of the evidence; and
- Any and all findings or determinations supporting or related to the Board's determination with respect to claims 1-3 and 6-10.

This notice of appeal is being filed and served concurrently with a Notice of Appeal for IPR2022-00164 involving U.S. Patent No. 8,230,135.

Simultaneous with this filing and in accordance with 37 C.F.R. § 90.2(a)(1), this Notice of Appeal is (1) being filed with the Director of the United States

Patent and Trademark Office; (2) filed with the Board; and (3) served upon the

Patent Owner in accordance with 37 C.F.R. § 1.248.

Dated: September 1, 2023

Respectfully submitted,

/ Christopher Kao /

Patrick A. Doody (Reg. No. 35,022)
PILLSBURY WINTHROP SHAW PITTMAN LLP
1650 Tysons Blvd., 14th Floor
McLean, VA 22102
Telephone: 703.770.7900

Telephone: 703.770.7900 Facsimile: 703.770.7901

patrick.doody@pillsburylaw.com

Christopher Kao (*pro hac vice*)
Brock S. Weber (*pro hac vice*)
PILLSBURY WINTHROP SHAW PITTMAN LLP
Four Embarcadero Center, 22nd Floor
San Francisco, CA 94111
Telephone: 415.983.1000
christopher.kao@pillsburylaw.com
brock.weber@pillsburylaw.com.

Counsel for Petitioner LinkedIn Corporation

#### **CERTIFICATE OF SERVICE**

I hereby certify that, in addition to being filed and served electronically through the Patent Trial and Appeal Board's P-TACTS system, a copy of the foregoing "PETITIONER LINKEDIN CORPORATION'S NOTICE OF APPEAL" was filed on this 1st day of September 2023, with the Director of the United States Patent and Trademark Office, via the United States Postal Service's Priority Express Mail at the following address:

Director of the United States Patent and Trademark Office c/o Office of the General Counsel P.O. Box 1450 Alexandria, VA 22313-1450

I also certify that on this 1st day of September, 2023, the foregoing "PETITIONER LINKEDIN CORPORATION'S NOTICE OF APPEAL," and the filing fee, were filed with the Clerk's Office of the United States Court of Appeals for the Federal Circuit, via the Court's CM/ECF system.

The undersigned also hereby certifies that a true copy of the foregoing "PETITIONER LINKEDIN CORPORATION'S NOTICE OF APPEAL" has been served in its entirety this 1st day of September, 2023, on the counsel of record for the Patent Owner via electronic mail to the following addresses:

Stephen F. Schlather (sschlather@ip-lit.com) John J. Edmonds (jedmonds@ip-lit.com)

/ Christopher Kao /

# EXHIBIT 1

Paper 40 Date: June 30, 2023

## 

LINKEDIN CORPORATION, Petitioner,

V.

EBUDDY TECHNOLOGIES B.V., Patent Owner.

IPR2022-00165 Patent 8,402,179 B1

Before JAMESON LEE, JASON M. REPKO, and JULIET MITCHELL DIRBA, *Administrative Patent Judges*.

LEE, Administrative Patent Judge.

JUDGMENT Final Written Decision Determining No Challenged Claim Unpatentable 35 U.S.C. § 318(a)

#### I. INTRODUCTION

We instituted an *inter partes* review of claims 1–3 and 6–10 ("challenged claims") of U.S. Patent No. 8,402,179 B1 (Ex. 1001, "the '179 patent") owned by eBuddy Technologies B.V. ("Patent Owner"). Paper 20 ("Decision to Institute" or "Inst. Dec."). We have authority to conduct this

*inter partes* review under 35 U.S.C. § 6. This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. We determine that LinkedIn Corporation ("Petitioner") has not proven by a preponderance of the evidence that any of claims 1–3 and 6–10 of the '179 patent is unpatentable.

#### A. Background

Petitioner filed a Petition (Paper 2, "Pet.") requesting *inter partes* review of claims 1–3 and 6–10 of the '179 patent. Patent Owner filed a Preliminary Response. Paper 11 ("Prelim. Resp."). The Decision to Institute was entered on July 13, 2022. Paper 20. Thereafter, Patent Owner filed a Response. Paper 23 ("PO Resp."). Petitioner filed a Reply. Paper 29. Patent Owner filed a Sur-Reply. Paper 35. In addition, Patent Owner filed a Motion to Exclude Evidence. Paper 33. Petitioner filed an Opposition to the Motion to Exclude, noting, *inter alia*, that the Motion to Exclude exceeded the permissible page limit. Paper 34 ("Opp. Exclude"). Patent Owner filed a Reply to Petitioner's Opposition to the Motion to Exclude. Paper 36 ("Reply Exclude").

With the Board's authorization, Patent Owner filed a Substitute Motion to Exclude which complies with the page limit for a motion. Paper 38. The initially filed Motion to Exclude is deemed to have been replaced by the Substitute Motion to Exclude, and we cite to the Substitute Motion to Exclude as "Mot. Exclude." The parties agreed that Petitioner need not file an additional opposition to the Substitute Motion to Exclude.

An oral hearing was held on April 12, 2023. A copy of the hearing transcript has been entered into the record. Paper 39 ("Tr.").

#### B. Real Parties in Interest

Petitioner identifies LinkedIn Corporation and Microsoft Corporation as real parties in interest. Pet. 1. Patent Owner identifies eBuddy Technologies B.V. as the real party in interest. Paper 3, 1.

#### C. Related Matters

Petitioner and Patent Owner each identify the following related litigation involving the '179 patent: *eBuddy Technologies B.V. v. LinkedIn Corporation*, No. 1:20-cv-01501 (D. Del.). Pet. 1; Paper 3, 2. U.S Pat. No. 8,230,135 B2, a related patent, is the subject of *inter partes* review proceeding IPR2022-00164. U.S. Pat. No. 8,510,395 B2, a related patent, is the subject of *inter partes* review proceeding IPR2022-00176. U.S. Pat. No. 9,854,453 B2, a related patent, is the subject of *inter partes* review proceeding IPR2022-00177.

#### D. The '179 Patent (Ex. 1001)

The '179 patent is directed to a technique for user notification involving "modifying a title associated with a process to include information about an event that calls for user notification." Ex. 1001, 1:65–67. "A method according to the technique may include running a process, such as, by way of example but not limitation, an IM client process, a browser, or some other process that has a title associated therewith." *Id.* at 1:67–2:3. The method may further include "processing an event, such as by way of example but not limitation, a new mail event, a new instant message event, a reminder event, a calendar event, or some other event." *Id.* at 2:3–7. The method also may further include "generating a string of characters that includes information associated with the event," and "displaying the string of characters as a title associated with the process." *Id.* at 2:7–10.

Figure 6 is reproduced below:

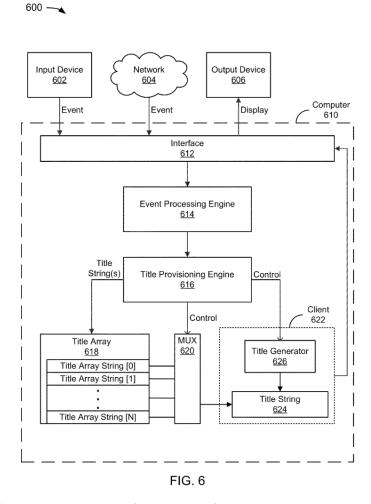


Figure 6 depicts an example of a system for programmed text event-specific title provisioning. *Id.* at 7:58–60. Computer 610 includes interface 612, event processing engine 614, title provisioning engine 616, title array 618, multiplexer 620, and client 622. *Id.* at 8:1–3. In this example, title provisioning engine 616 inputs title strings, which are strings of characters, to title array 618. *Id.* at 8:18–20. Title array 618 includes title array strings, which are referenced as title array string [0] to title array string [N]. *Id.* at 8:20–23. Client 622 also includes title string 624 and title generator 626. *Id.* at 8:44–45. Client 622 may include, by way of example but not limitation, an IM client, an email client, a VoIP client, or some other

communications-related client. *Id.* at 8:45–48. Client 622 may include a window, panel, or some other display that includes a title. *Id.* at 8:48–49. The title generator 626 generates a title for the display. *Id.* at 8:49–51.

Figure 7 is reproduced below:

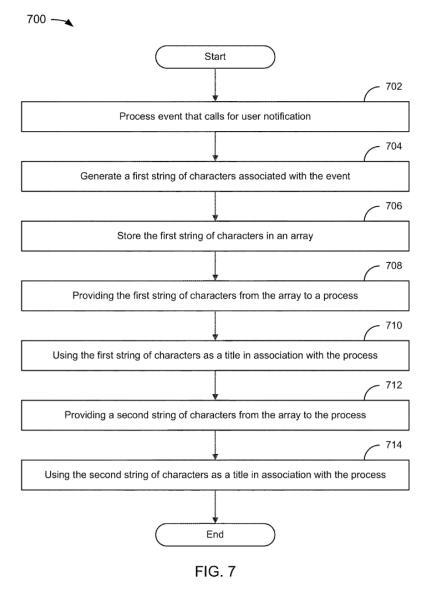


Figure 7 depicts flowchart 700 of an example of a method for displaying programmed text titles. *Id.* at 9:20-21. In step 702, an event that calls for user notification is processed. *Id.* at 9:21–23. In step 704, a first string of characters associated with the event is generated. *Id.* at 9:26–28. In step

706, the generated string of characters is stored in an array. *Id.* at 9:31–33. In step 708, the first string of characters is provided from the array to a process. *Id.* at 9:37-39. The process may include an IM client operating in a Windows® environment. *Id.* at 9:39-41.

In step 710, the first string of characters is used as a title in association with the process. *Id.* at 9:42–44. For example, if the process is an IM client operating in a Windows environment, the first string of characters could be used such that the window associated with the IM client includes the first string of characters in the titlebar. *Id.* at 9:44–50. Alternatively, the first string of characters could be displayed in a taskbar associated with the IM client. *Id.* at 9:50–52. In step 712, a second string of characters is provided from the array to the process; the second string of characters could be associated with the same event, an earlier event, or a later event. *Id.* at 9:53–61. In step 714, the second string of characters is used as a title in association with the process. *Id.* at 9:65–67.

Of the challenged claims, only claim 1 is independent and it is reproduced below:<sup>1</sup>

- 1. [Preamble] A method comprising:
- [i] processing an event that calls for user notification;
- [ii] generating an event notification for the event;
- [iii] storing the event notification in an array;
- [iv] providing the event notification from the array to a process executed by a processor;
- [v] using the event notification as a title in association with the process;

<sup>&</sup>lt;sup>1</sup> The preamble and element captions are added and used by Petitioner to reference the preamble and claim elements. *See* Pet. 24–43. We use the same captions here for ease of reference, understanding, and consistency.

IPR2022-00165 Patent 8,402,179 B1

- [vi] providing an alternative title from the array to the process;
- [vii] using the alternative title as a title in association with the process.

Id. at 12:46-56.

## E. References and Other Evidence Petitioner relies on the following patent references:<sup>2</sup>

Name	Patent Document	Date	Exhibit No.
Eaton	US 2003/0208545 A1	Published Nov. 6, 2003	1006
Cheung	US 2004/0061716 A1	Published Apr. 1, 2004	1007
Odell	US 7,590,696 B1	Issued Sept. 15, 2009	1016
Kim	Korean 2000-0036288	Published July 5, 2000	$1008^{3}$

Petitioner also relies on a Declaration (Ex. 1004) and a Supplemental Declaration (Ex. 1048) of Dean Willis. In support of the Patent Owner Response, Patent Owner relies on a first Declaration (Ex. 2009) and a second Declaration (Ex. 2020) of Rajeev Surati, Ph.D.

#### F. Asserted Grounds of Unpatentability

Petitioner asserts that the challenged claims are unpatentable on the following grounds:

<sup>&</sup>lt;sup>2</sup> The '179 patent issued from U.S. Patent Application No. 13/554,996, filed on Jul 20, 2012, which is a continuation of U.S. Patent Application No. 13/165,709, filed on June 21, 2011, now U.S. Patent No. 8,230,135. Ex. 1001, codes (21), (22), (63). Petitioner has not challenged the '179 patent's entitlement to the earlier filing date of any ancestral application. <sup>3</sup> Exhibit 1008 includes the reference itself together with a certified English translation thereof. The actual reference appears on pages 3–11 of the Exhibit. Hereinafter, for Kim, we cite to the English translation within Exhibit 1008, appearing on pages 12–20.

Claim(s) Challenged	35 U.S.C. § <sup>4</sup>	Reference(s)/Basis
1–3, 6, 7, 9	102	Eaton
1–3, 6–10	103	Eaton or Eaton and Cheung, or Eaton and Odell, or Eaton and Cheung and Odell
1–3,9	102	Kim
1–3, 6–10	103	Kim
1–3, 6–10	103	Kim and Cheung

#### II. ANALYSIS

#### A. The Burden of Proof on Challenged Patent Claims

Petitioner must demonstrate by a preponderance of the evidence that the challenged claims are unpatentable. 35 U.S.C. § 316(e) (2018); 37 C.F.R. § 42.1(d) (2021). The burden of persuasion does not shift to the patentee. *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015).

#### B. Level of Ordinary Skill in the Art

Petitioner contends that a person of ordinary skill in the art at the time of the alleged invention

would have a Bachelor's degree in Computer Science, Computer Engineering, Electrical Engineering, or a related field, plus at least two years of professional experience in telecommunications or computer networking, and would have been familiar with popular Internet applications like web browsers, Google's

\_

<sup>&</sup>lt;sup>4</sup> The Leahy-Smith America Invents Act, Pub. L. No. 112–29, 125 Stat. 284 (2011) ("AIA"), amended 35 U.S.C. §§ 102 and 103. Based on the record before us, the '179 patent has an effective filing date prior to the effective date of the applicable AIA amendments (March 16, 2013). Therefore, we refer to the pre-AIA version of 35 U.S.C. §§ 102 and 103.

Gmail, AOL Instant Messenger, ICQ, Jabber, Trillian, and Yahoo Instant Messenger; development using Microsoft Windows, Java, Linux and the X-Window System (X11); and Internet Engineering Task Force (IETF) standards including "Extensible Messaging and Presence Protocol (XMPP): Core."

Pet. 5–6 (citing Ex.  $1004 \P 9 32-35$ ).

Petitioner further asserts: "Alternatively, a PHOSITA [person having ordinary skill in the art] would possess equivalent additional formal education such as graduate studies, or work experience to replace formal education." *Id.* (citing Ex. 1004 ¶ 34). The alternative statement is confusing because it uses the term "equivalent additional" as a modifier for formal education as well as work experience, and something cannot at once be both equivalent as well as additional to something else. As such, the alternative statement does not contribute meaningfully to Petitioner's expressed level of skill. We rely, instead, on Petitioner's primary statement.

In its Response, Patent Owner makes no representation about the level of ordinary skill in the art. *See generally* PO Resp. In the Decision on Institution, we determined that Petitioner's primary statement about the level of ordinary skill is supported by the testimony of Mr. Willis and also appears consistent with the content of the applied references. Inst. Dec. 12. For that reason, we adopted Petitioner's primary statement as the level of ordinary skill in the art. *Id.* Post institution of review, neither party objected to or argued against that determined level of ordinary skill in the art.

Accordingly, we adhere to our prior determination and adopt Petitioner's primary statement as the level of ordinary skill in the art, but delete the qualifier "at least" to keep the stated level from extending to that of an expert by having no upper bound. Specifically, one with ordinary skill in the art would have a Bachelor's degree in Computer Science, Computer Engineering, Electrical Engineering, or a related field, plus two years of professional experience in telecommunications or computer networking, and would have been familiar with popular Internet applications like web browsers, Google's Gmail, AOL Instant Messenger, ICQ, Jabber, Trillian, and Yahoo Instant Messenger; development using Microsoft Windows, Java, Linux and the X-Window System (X11); and Internet Engineering Task Force (IETF) standards including "Extensible Messaging and Presence Protocol (XMPP): Core."

#### C. Claim Construction

#### 1. General Principles

We use the same claim construction standard that is used to construe a claim in a civil action under 35 U.S.C. § 282(b), including construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent. 37 C.F.R. § 42.100(b). The claim construction standard set forth in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc) is applicable.

Claim terms are generally given their ordinary and customary meaning as would be understood by one with ordinary skill in the art in the context of intrinsic record including the specification, the prosecution history, and other claims, and extrinsic evidence including expert and inventor testimony, dictionaries, and learned treatises. *Phillips*, 415 F.3d at 1312–17. Extrinsic evidence is less significant than the intrinsic record. *Id.* at 1317. Usually, the specification is dispositive, and it is the single best guide to the meaning of a disputed term. *Id.* at 1315.

The specification may reveal a special definition given to a claim term by the patentee, or the specification or prosecution history may reveal an

intentional disclaimer or disavowal of claim scope by the inventor. *Id.* at 1316. If an inventor acts as his or her own lexicographer, the definition must be set forth in the specification with reasonable clarity, deliberateness, and precision. *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1249 (Fed. Cir. 1998). The disavowal, if any, can be effectuated by language in the specification or the prosecution history. *Poly-Am., L.P. v. API Indus., Inc.*, 839 F.3d 1131, 1136 (Fed. Cir. 2016).

Only those claim terms that are in controversy need to be construed, and only to the extent necessary to resolve the controversy. *Realtime Data*, *LLC v. Iancu*, 912 F.3d 1368 (Fed. Cir. 2019) ("The Board is required to construe 'only those terms . . . that are in controversy, and only to the extent necessary to resolve the controversy." (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

#### 2. "alternative title"

The term "alternative title" appears in independent claim 1. Ex. 1001, 12:54–55. It is evident from Petitioner's arguments regarding limitations 1[vi] and 1[vii] that Petitioner treats the showing of any additional second title, even if a first title remains shown to a user, as satisfying the claimed "providing an alternative title" in limitation 1[vi] and the claimed "using the alternative title as a title" in limitation 1[vii]. Pet. 41–43. In its Preliminary Response, Patent Owner asserted that simultaneous display of something additional to what was already there is not providing an alternative. Prelim. Resp. 38–39. Patent Owner makes the same argument in the Patent Owner Response. PO Resp. 27.

In the Decision on Institution, we disagreed with Petitioner. Inst. Dec. 17. For reasons discussed below, we continue to disagree.

The specification of the '165 patent does not specially define "alternative" or "alternative title." Neither party contends that "alternative" or "alternative title" is a term of art with an art recognized meaning. In plain English, "alternative" as an adjective designates something that is another option, another choice. Dictionary.com (accessed June 23, 2022), https://www.dictionary.com/browse/alternative (Ex. 3002) ("affording a choice of two or more things, propositions, or courses of action," "(of two things, propositions, or courses) mutually exclusive so that if one is chosen the other must be rejected: *The alternative possibilities are neutrality and war.*").

The specification of the '179 patent also consistently uses the word "alternative" to mean something in lieu of or in place of another choice. For instance, the '179 patent describes:

Advantageously, data associated with the event can also (or in the alternative) be provided to the title provisioning engine 616.

Ex. 1001, 8:15–17 (distinguishing "also" from "alternative").

A given event may cause the title provisioning engine 616 to rewrite the entire title array 618 with title strings associated with the most recent events. Alternatively, a given event may cause the title provisioning engine 616 to append title strings to the end of the title array 618.

*Id.* at 8:24–28 (using "alternative" in mutually exclusive context).

Blinking can be accomplished by, conceptually, making every other title array string blank. Alternatively, a NULL string could be periodically provided instead of a title array string.

*Id.* at 9:12–15 (using "alternative" in mutually exclusive context).

Petitioner argues that the claims do not recite that any previous title must be replaced. Reply 26. But, they implicitly do because they require an "alternative" title. Identifying the meaning of such a term is why we take on

the task of claim construction. If the claim already recites that a previous title must be replaced, there is nothing to construe, because the claim would have expressly stated a feature. Thus, the argument is unpersuasive.

#### Petitioner further argues:

The '179 Patent does not even use the term "alternative title," except in the claims. The plain meaning of this term is another option or choice, but not necessarily a replacement, which is an additional limitation. *See* [Inst. Dec.] at 16–17. Where the specification uses the term "alternative" or "alternatively," it discloses options, but not replacements. *See id.* In any event, all such uses are in the detailed description of embodiments, which the '179 Patent repeatedly states are not limiting to the scope of the claimed invention. *See*, *e.g.*, Ex[1001], 1:58–61, 2:16–18, 12:33–35. This cannot form the basis for a narrowing construction. *Cont'l Cirs. LLC v. Intel Corp.*, 915 F.3d 788, 798 (Fed. Cir. 2019); *see also GE Lighting Sols.*, *LLC v. AgiLight, Inc.*, 750 F,3d 1304, 1309 (Fed. Cir. 2014).

*Id.* The above-quoted argument cites to our Decision on Institution but misreads it. What we explained there, as we do here, is that where a title is already shown to a user, the presenting of an additional title, simultaneously displayed with the preexisting title, is not providing an "alternative title" but something additional to the preexisting title.

We find that "alternative title," where a first title is already provided, as in claim 1, must be in lieu of or in place of the preexisting title.<sup>5</sup>

#### *3.* "*array*"

The term "array" is recited in independent claim 1. Petitioner asserts that an array is a simple data structure object whose contents can be referenced by an integer index from one to a number that is the size of the array. Pet. 68. Patent Owner asserts: "The term 'array' has an understood

<sup>&</sup>lt;sup>5</sup> Also, the fact that the '179 patent states its described embodiments are exemplary and not limiting does not mean its claims have unbounded scope.

meaning in the art: 'a list of data values, all of the same type, any element of which can be referenced by an expression consisting of the array name followed by an indexing expression. Arrays are data structures . . . . " PO Resp. 8–9. Patent Owner disputes Petitioner's statement of what is an array, because "an index can . . . be from zero to a number instead of from one to a number." *Id.* at 9.

During oral hearing, counsel for Petitioner clarified that the index to an array may start from "0" rather than "1" and that the index also need not be a number. Tr. 18:13–19:19. With that clarification, counsel for Patent Owner indicated that there no longer is any dispute with regard to the meaning of "array." Tr. 61:14–25.

Accordingly, we have no need to construe the term "array."

#### *4.* "*event*"

The term "event" is recited in independent claim 1. The specification of the '179 patent states: "The method may further include processing an event, such as by way of example but not limitation, a new mail event, a new instant message event, a reminder event, a calendar event, or some other event." Ex. 1001, 2:3–7. Patent Owner asserts that an event is a "detectable condition of a system that can trigger a notification." PO Resp. 9. Petitioner asserts that an "event" is an "action or occurrence to which a program might respond." Reply 2.

We do not see a meaningful difference between the constructions proposed by Patent Owner and by Petitioner. With regard to Patent Owner's proposal, we note that in a computer system, the receipt of information is a condition detected by the computer, any condition detected by the computer can potentially trigger a notification, and that even under Patent Owner's proposal, actual notification is not required. With regard to Petitioner's

IPR2022-00165 Patent 8,402,179 B1

proposal, we note that a computer program cannot respond to something it is not aware of and therefore it is implicit that Petitioner's proposal requires a condition detectable by the computer. During oral hearing, counsel for Petitioner acknowledged as follows:

But I believe that there would not be a meaningful difference between the parties' construction as you've pointed out based on the fact that the prior art discloses this and that they're all computerized events. It's not just some action on the moon that no system can receive. In Kim and Eaton all the things that are being received are computer events. They're computerized. They are receiving information.

Tr. 22:1-6.

Our analysis does not require a construction of "event."

5. "event notification"

The term "event notification" is recited in independent claim 1. Patent Owner asserts that "event notification" is an "event-triggered signal to a run-time-defined recipient' also known as a subscriber." PO Resp. 10. Patent Owner asserts that event notification "cannot be assumed just because text [is caused to appear] in a title [bar]." *Id.* at 11. Patent Owner explains: "Although an event-triggered signal could have a variety of content including event-related information, there must still be such an event-triggered signal. Eviscerating the distinction between an event and an event notification is erroneous." *Id.* 

For purposes of this Final Written Decision, we need not construe "event notification" beyond noting that Patent Owner's proposed construction allows displaying information about an event to be "event notification" for the event. For instance, assuming that receipt of breaking news or stock price at a computer is the event, then that breaking news or stock price, if caused to be displayed on a screen for the user to see, would

constitute "event notification" to inform the user that receipt of such information, i.e., the event, has occurred. The receipt triggers the display; the receipt causes the notification; and a distinction between "event" and "event notification" is maintained. Although the received information and the displayed information are the same, the event and the notification are different.

#### D. Alleged Anticipation of Claims 1, 2, 3, 6, 7, and 9 by Eaton

#### 1. Principles of Anticipation

To establish anticipation, each and every element in a claim, arranged as recited in the claim, must be found in a single prior art reference. *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008). The anticipation inquiry takes into account the literal teachings of the prior art reference, as well as inferences the ordinarily skilled person would draw from it. *Eli Lilly & Co. v. L.A. Biomed. Res. Inst. at Harbor-UCIA Med. Ctr.*, 849 F.3d 1073, 1074–75 (Fed. Cir. 2017); *Dayco Prods., Inc. v. Total Containment, Inc.*, 329 F.3d 1358, 1368 (Fed. Cir. 2003); *In re Baxter Travenol Labs.*, 952 F.2d 388, 390 (Fed. Cir. 1991).

Although the elements must be arranged in the same way as is recited in the claim, "the reference need not satisfy an *ipsissimis verbis* test." *In re Gleave*, 560 F.3d 1331, 1334 (Fed. Cir. 2009); *In re Bond*, 910 F.2d 831, 832–33 (Fed. Cir. 1990)). Thus, identity of terminology between the prior art reference and the claim is not required.

#### 2. Overview of Eaton

Eaton discloses an instant message communication system that provides notification of one or more events. Ex. 1006, code (57). Figure 1 is reproduced below:

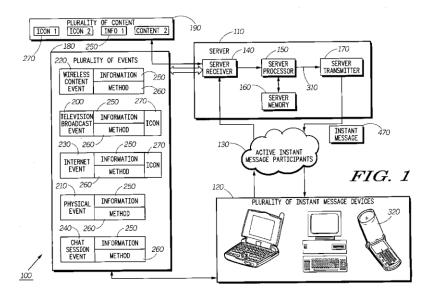


Figure 1 is a block diagram of one embodiment of an instant message communication system. *Id.* ¶ 14. Instant message communication system 100 includes server 110 and a plurality of instant message devices 120 selectively communicating as active instant message participants 130. *Id.* ¶ 26. Server receiver 140 within server 110 is coupled to and receives information about a plurality of events 180. *Id.* ¶ 28. Regarding what can be events, Eaton states as follows:

It will be appreciated by those of ordinary skill in the art that the plurality of events 180 can include, for example, physical events 210 such as sporting events, television or radio broadcast events 200, wireless content events 220, internet events 230, chat session events 240, or an equivalent.

Id.

Figure 2 of Eaton is reproduced below:

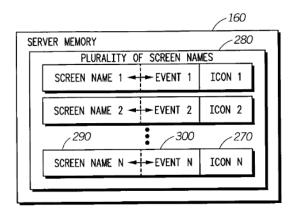


FIG. 2

Figure 2 illustrates a server memory in Eaton's instant message communication system. *Id.* ¶ 15. Server memory 160 stores a plurality of screen names 280. *Id.* ¶ 31. Each screen name 290 of the plurality of screen names 280 represents one or more events such as event 300 of the plurality of events 180. *Id.* 

Figure 4 of Eaton is reproduced below:

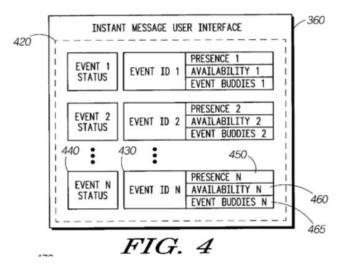


Figure 4 illustrates one embodiment of instant message user interface 360. Id. ¶ 45. Instant message user interface 360 includes information displayed regarding one or more events of interest 420. Id. For each event of interest, at least one of event identifier 430, event status 440, event presence indicator

450, and/or event availability indicator 460 can be displayed within instant message user interface 360. *Id.* Each event identifier 430 preferably has associated event status 440. *Id.* ¶ 47. Event status 440 provides visual and/or audible notification to the device user of the presence of event 300. *Id.* 

SERVER MEMORY 520 PLURALITY OF TOPIC SCREEN NAMES TOPIC SCREEN NAME 1-- TOPIC 1 EVENT N1 EVENT A2 EVENT B2 TOPIC SCREEN NAME 2-TOPIC 2 EVENT N2 540 670 530 EVENT AN 680 EVENT BN -TOPIC N TOPIC SCREEN NAME N-EVENT NN

Figure 6 of Eaton is reproduced below:

Figure 6 is a block diagram of an alternate embodiment of a server memory for use within a server of the instant message communication system. *Id.* ¶ 19. Server memory 160 preferably stores a plurality of topic screen names 520. *Id.* ¶ 57. Each topic screen name 530 of the plurality of topic screen names 520 represents topic 540 including a plurality of topic events 550. *Id.* Topic screen name 530, topic 540, and the plurality of topic events 550 are stored within server memory 160. *Id.* 

Figure 7 of Eaton is reproduced below:

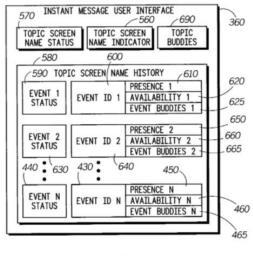


FIG. 7

Figure 7 illustrates an alternate embodiment of an instant message user interface for use within the instant message device of Figure 3. *Id.* ¶ 20. For each topic 540, topic screen name indicator 560, topic screen name status 570, and topic screen name history 580 can be displayed within instant message user interface 360. *Id.* ¶ 59. Topic screen name indicator 560 represents topic 540 of the plurality of topics of interest to the device user. *Id.* ¶ 60. Each topic screen name indicator 560 has an associated topic screen name status 570. *Id.* ¶ 61. Topic screen name status 570 provides visual and/or audible notification to the device user of the presence of the information associated with topic 540. *Id.* Topic screen name history 580 preferably includes information associated with the plurality of topic events 550 such as topic screen name history 580 includes event identifier 430, event status indicator 440, event presence indicator 450, and event availability indicator 460 for event 300 of the plurality of topic events 550. *Id.* ¶ 62.

#### 3. Independent Claim 1

#### a) Limitation 1[i]

Claim 1 recites limitation 1[i] as follows: "processing an event that calls for user notification." Ex. 1001, 12:47. Petitioner asserts that Eaton discloses limitation 1[i]. Pet. 24. Petitioner explains:

Eaton discloses a server receiver 140 that is "coupled to and receives information about a plurality of events 180" that "can include, for example, physical events 210 such as sporting events, television or radio broadcast events 200, wireless content events 220, internet events 230, chat session events 240, or an equivalent." EX[1006] at [0028]. "Each event can be separately designated within the instant message communications system 100, or alternatively can be grouped within one or more topics (not shown)."

*Id.* at 25; *see also* Reply 21. Petitioner presents (Pet. 26) an annotated version of Eaton's Figure 1, reproduced below:

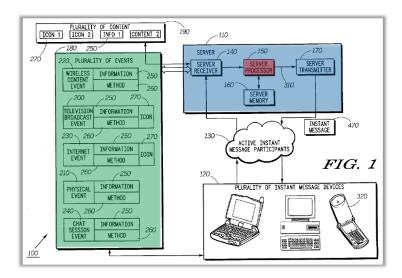


Figure 1 is a block diagram of one embodiment of an instant message communication system of Eaton, and Petitioner has shaded green what Petitioner regards as a plurality of events, shaded blue server 110, and shaded red server processor 150. Ex. 1006¶14. Petitioner further explains: "Eaton discloses that the 'server processor 150 utilizes conventional signal

processing techniques for processing received signals from the server receiver 140,' such as the events described above." Pet. 26 (quoting Ex.  $1006 \, \P \, 30$ ).

Patent Owner argues that Petitioner has not shown that what are labeled by Petitioner as events in Eaton "are events in the context of an event-driven system." PO Resp. 15–16. Patent Owner asserts that in the context of the '179 patent, an event is a "detectable condition of a system that can trigger a notification." *Id.* at 9. However, even under the construction proposed by Patent Owner, Petitioner has made a persuasive showing for limitation 1[i]. It is manifestly evident that, as identified by Petitioner, Eaton's *receipt* of "information about a plurality of events 180," i.e., television or radio broadcast events 200, wireless content events 220, internet events 230, and chat session events 240, is a "detectable condition of a system that can trigger a notification."

Patent Owner argues that it is not the Petitioner's theory that the receipt of such information constitutes a event. *Id.* at 10. But the Petition includes such a showing whether or not Petitioner expressly refers to receipt of information as events, and the Decision on Institution gave Patent Owner and Petitioner specific notice of this accounting for the claim limitation. *See* Inst. Dec. 47–48.

Note also that the Petition specifically states: "Eaton discloses that the 'server processor 150 utilizes conventional signal processing techniques for *processing received signals from the server receiver 140*,' such as the events described above." Pet. 26 (quoting Ex. 1006¶ 30) (emphasis added).

Even so, we agree with Patent Owner that the Petition is not a model of clarity. PO Resp. 10. For example, Eaton uses the term event to specifically refer to "physical events 210 such as sporting events, television

or radio broadcast events 200, wireless content events 220, internet events 230, chat session events 240, or an equivalent." Ex. 1006 ¶ 28. The Petition quotes this part of Eaton without explaining that it is mapping the claimed "events" to the receipt of the signals corresponding to these events—not the events themselves. *See* Pet. 25. Because Eaton uses the term "event" to describe something different from what Petitioner mapped to the claimed "event," it would have been helpful for Petitioner to clarify that it was using the term "event" in a different way than Eaton does. *Id.* So, to avoid any confusion caused by the different uses of the word "event," the Decision on Institution expressly stated that the receipt of the signals was understood to be the claimed event in Petitioner's challenge. Inst. Dec. 47–48.

Based on the understanding that the Petition mapped the receipt of the signal from the server to the claimed event, Petitioner has shown that Eaton discloses limitation 1[i]. To the extent that Petitioner intended Eaton's events 180 to correspond to the claimed events, Petitioner failed to explain how Eaton's server processor 150 allegedly "process[es]" those events. Computer processing is the manipulation and transformation of data (*see* Pet. 24–25), and a computer does not "process[]" a physical event itself.

#### b) Limitation 1[ii]

Claim 1 recites limitation 1[ii] as follows: "generating an event notification for the event." Ex. 1001, 12:48. Petitioner asserts that Eaton discloses this step. Pet. 28. However, it is unclear precisely what Petitioner has identified as the event notification that it asserts Eaton generates.

#### Petitioner explains:

The "server processor 150 is coupled to the server memory 160," and the "server processor 150 . . . is programmed to activate at least one of the plurality of screen names 280 such as the screen name 290 stored in the server memory 160 in response

to the presence of one or more events such as the event 300 represented by the screen name 290." Id., [0031], [0032] (emphasis added); see also id., [0034]. After a screen name that represents an event is activated, the screen name functions as "one of the active instant message participants 130 of the instant message communication system 100," depicted in Figure 1 above. *Id.* This means that "server transmitter 170 is coupled to and receives one or more command signals 310 from the server processor 150, and in response to a command signal, communicates instant messages as an active instant message participant." Id., [0035]. As such, the server transmitter will send "event presence notification messages" for events activated by the server processor 150 to an instant message device 320, as depicted in Figure 3, above. See id., [0035]-[0038]. These "event presence notification messages can be received by the device receiver 330 from the server 110." *Id.* (emphasis added).

Accordingly, Eaton discloses "generating an event notification for the event" by "activating" an event (the first one being "Event 1" shown in Figure 2 as being stored in the server memory 160) in a server in response to the presence of event information and sending a message with the event notification from the server to an IM device, in which the message comprises at least a "string of characters that includes information associated with the event." *See also* Ex[1004], ¶¶88-93.

Pet. 29–30.

We understand from the above-quoted explanation that two things occur in response to the presence of an event, i.e., the activation of a screen name that represents an event, with resulting functional effects or consequences, and the sending of an event presence notification message for the activated event. Petitioner does not clearly state what it regards as the claimed generated event notification.

In its Reply, Petitioner clarifies its position by expressly stating that the event presence notification message ("EPNM") is what it regards as the claimed "event notification." Reply 21–22. We continue our analysis of the

remaining limitations of claim 1 by treating the event presence notification message as the claimed event notification. In that light, Petitioner has shown that Eaton discloses limitation 1[ii].

#### c) Limitation 1[iii]

Claim 1 recites limitation 1[iii] as follows: "storing the event notification in an array." Ex. 1001, 12:49.

Petitioner contends that the '179 patent discloses that an array is simply a table or list of event information or event strings. Pet. 30. On that basis, Petitioner asserts that Eaton discloses server memory 160 which stores a plurality of screen names 280 and that each screen name 290 of the plurality of screen names 280 represents one or more events such as event 300 of the plurality of events 180. *Id.* In that regard, Petitioner produces an annotated version of Eaton's Figure 2, placed side-by-side to an annotated portion of Figure 6 of the '179 patent, reproduced below (*id.* at 31):

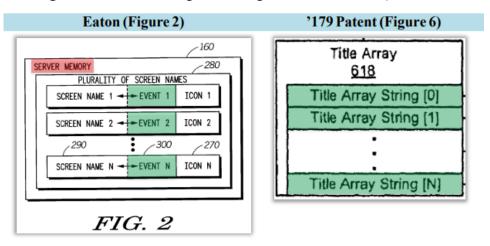


Figure 2 of Eaton illustrates a server memory in Eaton's instant message communication system and Petitioner has shaded the EVENT 1–N column green and the words "SERVER MEMORY" red. Ex. 1006 ¶ 15. The portion of Figure 6 of the '179 patent produced above illustrates a title array

in the system of the '179 patent and Petitioner has shaded green the multiple entries of the array. Ex. 1001, 2:29–30.

According to Petitioner, the EVENT 1–N column in Eaton's Figure 2, reproduced above, are "event messages / strings 300 (shaded in green)." Pet. 30 (citing Ex. 1006 ¶ 31). But the cited evidence does not support that assertion. Paragraph 31 of Eaton describes the referenced column simply as "associated event 300." Ex. 1006 ¶ 31. Further, even if the column stores associated event messages, Petitioner cites nothing to show that the associated messages in server memory column 300 are the event presence notification messages discussed above in the context of limitation 1[ii].

Alternatively, Petitioner relies on Eaton's Figure 6 embodiment. Pet. 31. Petitioner asserts (*id.*) that in the Figure 6 embodiment server memory 160 stores an array of event notifications, referencing an annotated version of Eaton's Figure 6, reproduced below:

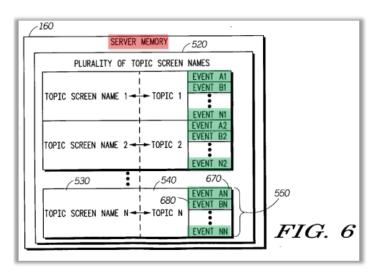


Figure 6 is a block diagram of an alternate embodiment of a server memory for use within a server of the instant message communication system, and Petitioner has shaded the EVENT AN–NN column green and the words "SERVER MEMORY" red. Ex.  $1006 \, \P \, 19$ .

Petitioner asserts that both the TOPIC N column 540 and the EVENT AN-NN column 670 as the stored event notifications. Pet. 31 (citing Ex. 1006 ¶¶ 56–58). But the assertion is not supported by the cited evidence. Paragraphs 56–58 of Eaton do not indicate that either topic entries 540 or event entries 670 are the event presence notification messages discussed above in the context of limitation 1[ii].

In its Reply, Petitioner asserts that event presence notification message EPNM "is associated with the character strings labelled Topics [1]-[N], and using 'Topic N' as the example, it is tied to 'Event[s] AN-NN' (representing the 'events' from the plurality of events 180 discussed in Claim 1[i])." Reply 22. Even assuming that there is an association, Petitioner still has not shown that EPNM is any of Topics [1]-[N] in Figure 6. Similarly, Petitioner has not shown that EPNM is any of Event [1]-[N] in Figure 2.

Petitioner has not shown that Eaton discloses limitation 1[iii].

#### d) Limitation 1[iv]

Claim 1 recites limitation 1[iv] as follows: "providing the event notification from the array to a process executed by a processor." Ex. 1001, 12:50–51. On pages 33–34 of the Petition, Petitioner reiterates the same assertions it makes to account for limitation 1[ii], i.e., "generating an event notification for the event." Pet. 33–34. On that basis, Petitioner asserts:

Therefore, the event notification array 280 that is stored in the server memory 160 is coupled and provided to the server processor 150 for processing, including the creation of an event notification message—including for the "Event 1" of Figure 2 and the "Event AN" of Figure 6—that is sent from the server to an IM device. And, again, the IM device includes a "device processor 340 [that] utilizes conventional signal processing techniques for processing received signals from the device

IPR2022-00165 Patent 8,402,179 B1

receiver 330 including the event presence notification messages" sent from the server 110. *Id.*, [0040]. Accordingly, Eaton discloses this claim limitation because the event notification array 280 is provided to a process executed by a processor on the server (server processor 150) as well as to a process executed by a processor on the IM device (device processor 340). *See also* Ex[1004], ¶¶ 98–100.

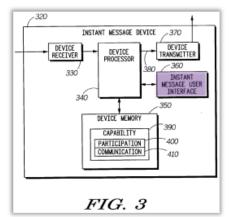
Id.

The assertion is circular and not understood. In Petitioner's discussion about limitation 1[ii], the "event presence notification message" is the event notification allegedly stored in the claimed array. Here, Petitioner contends that the array is provided to the server processor for the purpose of creating the event notification message. We identified this deficiency in the Decision to Institute. Inst. Dec. 52. Petitioner provides no clarification in its Reply.

Petitioner has not shown that Eaton discloses limitation 1[iv].

#### *e)* Limitation 1[v]

Claim 1 recites limitation 1[v] as follows: "using the event notification as a title in association with the process." Ex. 1001, 12:52–53. Petitioner cites to instant message user interface 360 shown in Eaton's Figures 3 and 4. Pet. 35. Figures 3 and 4 of Eaton, annotated by Petitioner (*id.*), are reproduced below:



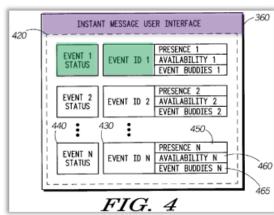


Figure 3 illustrates a block diagram of one embodiment of Eaton's instant messaging device, and Petitioner has shaded the Instant Message User Interface purple. Ex. 1006 ¶ 16. Figure 4 illustrates one embodiment of instant message user interface 360, in which Petitioner has shaded an area labeled "Instant Message User Interface" purple and two blocks, labeled "Event 1 Status" and "Event ID 1," green. *Id.* ¶ 45. According to Petitioner, the "Event 1 Status" box and the "Event ID 1" box in Figure 4 together constitute the event notification that is used as the title in association with the process. Pet. 36. In that regard, Petitioner asserts that EVENT ID N column 430 in Figure 4 is the same as the SCREEN NAMEN column 290 in Figure 2.6 *Id.* (citing Ex. 1006 ¶ 46). But Petitioner has not shown that EVENT N STATUS column 440 is the same as anything within server memory 160 shown in Figure 2. Thus, the alleged title in Figure 4 has not been shown to have an exact counterpart stored within server memory 160 in Figure 2.

Petitioner presents an alternative argument for limitation 1[v] based on Eaton's other embodiment shown in Figures 6 and 7. Pet. 37–41. Figures 6 and 7 of Eaton, annotated by Petitioner (*id.* at 39), are reproduced below:

<sup>-</sup>

 $<sup>^6</sup>$  Eaton indicates that screen names in server memory 160 of Figure 2 are stored in the server memory even prior to the occurrence of any event. Ex.  $1006 \, \P \, 45$ . That would mean screen names in server memory  $160 \, \text{cannot}$  be the generated event notification.

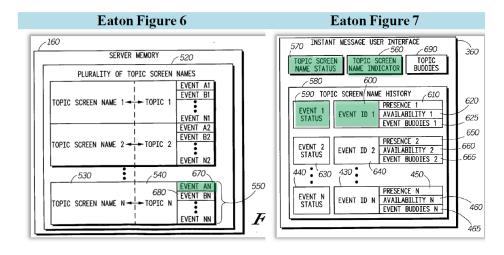


Figure 6 illustrates a block diagram of another embodiment of a server memory in Eaton's instant message communication system, and Petitioner has shaded green the first element in a column, labeled "EVENT AN 670." Ex. 1006 ¶ 19. Figure 7 illustrates an alternate embodiment of an instant message user interface for use within the instant message device of Figure 3, and Petitioner has shaded green each one of four boxes, labeled "TOPIC SCREEN NAME STATUS 570," "TOPIC SCREEN NAME INDICATOR 560," "EVENT 1 STATUS 590," and "EVENT ID 1 600." *Id.* ¶ 20.

According to Petitioner, "each of the 'topic screen name indicator 560,' 'topic screen name status 570,' 'event identifier 600,' and 'first event status indicator 590' shown in Figure 7 (all shaded in green) disclose 'using the event notification as a title in association with the process." Pet. 40–41. But Petitioner has not shown that any one of "TOPIC SCREENNAME STATUS 570," "TOPIC SCREEN NAME INDICATOR 560," "EVENT 1 STATUS 590," and "EVENT ID 1 600" is the same as anything within server memory 160 shown in Figure 6. Thus, the alleged title in Figure 7 has not been shown to have an exact counterpart stored within server memory 160 in Figure 6.

Further, as discussed above in the context of limitation 1[iii], Petitioner has not shown that the event notification presence message (ENPM) is stored within the server memory shown in either Figure 2 or Figure 6. In its Reply, Petitioner asserts "there is a direct tie between what is displayed and the event notification." Reply 24. But a mere association in some respect is not enough. Limitation 1[v] requires using the event notification itself, the event notification presence message ENPM, as a title.

Petitioner has not shown that Eaton discloses limitation 1[v].

#### f) Limitations 1[vi] and 1[vii]

Claim 1 recites limitation 1[vi] as follows: "providing an alternative title from the array to the process." Ex. 1001, 12:54. Claim 1 recites limitation 1[vii] as follows: "using the alternative title as a title in association with the process." *Id.* at 12:55–56.

Petitioner presents (Pet. 42) another set of annotated Figures 6 and 7 of Eaton, reproduced below:

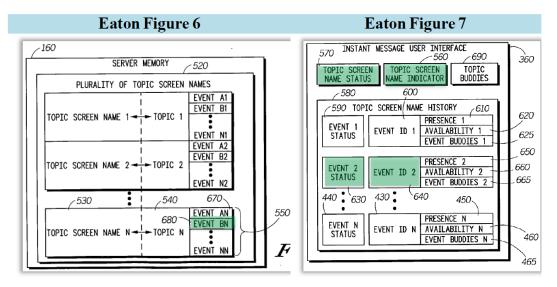


Figure 6 illustrates a block diagram of another embodiment of a server memory in Eaton's instant message communication system, and Petitioner has shaded green the second element in a column, labeled "EVENT BN

680." Ex. 1006 ¶ 19. Figure 7 illustrates an alternate embodiment of an instant message user interface for use within the instant message device of Figure 3, and Petitioner has shaded green each one of four boxes, labeled "TOPIC SCREEN NAME STATUS 570," "TOPIC SCREEN NAME INDICATOR 560," "EVENT 2 STATUS 630," and "EVENT ID 2 640." *Id.* ¶ 20. Petitioner identifies each of these four shaded elements 560, 570, 630, and 640 in Figure 7 as an alternative title provided from the array to the process and used as a title. Pet. 42–43.

As in the case of limitation 1[iv] discussed above regarding using the event notification as a title, Petitioner has not sufficiently shown that any of elements 560, 570, 630, and 640 has an exact counterpart in server memory 160 shown in Figure 6. Further, Petitioner has not shown that any of 560, 570, 630, and 640 constitutes an "alternative title," because none has been shown to replace or stand in lieu of another title. Specifically, the title Petitioner identified in the context of limitation 1[v], i.e., elements 560, 570, 590, and 600, has not been replaced by the alleged new title provided for a second event, EVENT BN 680 in Figure 6, which belongs to the same TOPIC N as first event AN 670. Note also that elements 590 and 600 are still displayed when elements 630 and 640 are displayed.

In its Reply, Petitioner argues that an alternative title as claimed need not be in lieu or in place of any other title. Reply 26. We addressed and rejected this argument above in Section II.C.2.

Petitioner has not shown that Eaton discloses limitation 1[vi] and limitation 1[vii].

4. *Dependent Claims* 2, 3, 6, 7, and 9

Claims 2, 3, 6, 7, and 9 each depend, directly or indirectly, from claim 1. Thus, each of these claims includes all of the limitations of claim 1.

The deficiencies of the Petition, as discussed above in the context of claim 1, equally apply to claims 2, 3, 6, 7, and 9.

#### 5. Conclusion

Petitioner has not proven, by a preponderance of the evidence, that any of claims 1–3, 6, 7, and 9 is anticipated by Eaton.

- E. Alleged Obviousness of Claims 1–3 and 6–10 over Eaton
  - 1. Claims 1–3, 6, 7, 9

Petitioner asserts: "Eaton anticipates Claims 1–3, 6, 7, and 9 of the '179 Patent as provided above in Ground 1. To the extent that there are arguably any meaningful differences between those claims and Eaton's disclosures, those differences would have been trivial and obvious modifications to make for a PHOSITA." Pet. 49. This conclusory assertion of obviousness does not specifically identify any difference between the claimed invention and Eaton, and does not provide any reasoning or rational underpinning to support the assertion. Conclusory assertions of obviousness are insufficient to satisfy Petitioner's burden of proof. *In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016).

Petitioner asserts that to the extent that Eaton discloses various, "distinct" embodiments, it would have been obvious to one with ordinary skill in the art to combine Eaton's teachings into a single system. Pet. 49. Petitioner also asserts that one with ordinary skill in the art "would understand that Eaton discloses possible configurations and/or operations of the same system, and to the extent that it is argued or found otherwise, the functions would have been entirely obvious to combine for [one of ordinary skill in the art] given Eaton's express disclosures." *Id*.

It is uncertain what distinct embodiments are referred to by Petitioner. However, even assuming that the disclosures of Eaton's embodiments, already discussed by Petitioner, are properly combinable, there still remains the deficiencies, discussed above in the alleged anticipation of claim 1 by Eaton, relating to the step of storing the event notification in an array, the step of providing the event notification from the array to a process executed by a processor, and the step of providing an alternative title from the array to the process. *Accord* Inst. Dec. 57.

### 2. Dependent Claims 8 and 10

Claims 8 and 10 each depend, directly or indirectly, from claim 1. Thus, each of these claims includes all of the limitations of claim 1. The deficiencies of the Petition, as discussed above in the context of alleged obviousness of claim 1 over Eaton alone, still apply to claims 8 and 10 and are not cured by Petitioner's discussion of claims 8 and 10 (Pet. 54–55, 59).

#### 3. Conclusion

Petitioner has not proven, by a preponderance of the evidence, that any of claims 1–3 and 6–10 would have been obvious over Eaton.

# F. Alleged Obviousness of Claims 1–3 and 6–10 over Eaton and Cheung 1. Overview of Cheung

Cheung discloses a central notifications manager user interface for presenting and managing notifications and alerts received from a plurality of different sources. Ex. 1007, code (57). For example, the different sources can be a spreadsheet program, email application, or messaging service that produce alerts transmitted over the Internet. *Id.* Pop-up reminders are displayed to notify the user when a task becomes due. *Id.* An entire list of notifications and alerts that are active can be selectively displayed, thus enabling the user to manage the notifications and alerts. *Id.* 

Figure 3A of Cheung is reproduced below:

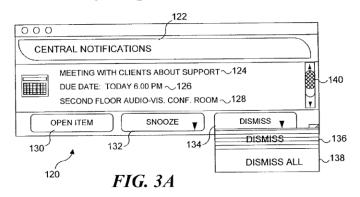


Figure 3A depicts an exemplary central notification user interface 120 that automatically pops open for display on the user's monitor. Id. ¶ 30. The user's focus does not shift to the central notification user interface until the user clicks on one of the options displayed therein. Id. ¶ 32. "A title bar 122 indicates that the current notification is generated by one of the OFFICE<sup>TM</sup> software programs." Id. ¶ 30.

Figure 5B of Cheung is reproduced below:

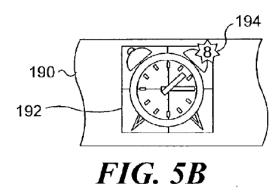


Figure 5B illustrates icon 192 that appears in the dock or taskbar while the central notification manager is running. *Id.* ¶¶ 18, 38. Icon 192 shows count 194, which identifies the number of active notifications and alerts that can be accessed if the user opens the central notification user interface. *Id.*  $\P$  38.

Figure 5A of Cheung is reproduced below:

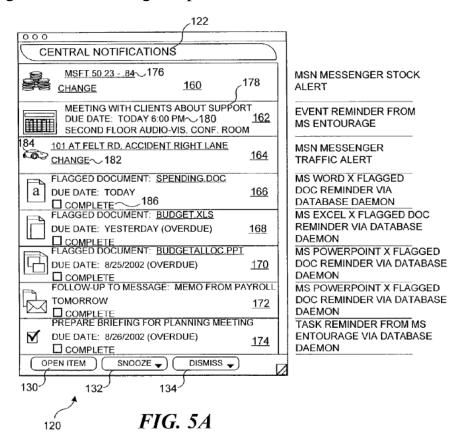


Figure 5A illustrates active notifications and alerts provided by Cheung's central notification manager for review by the user when the user opens the central notification user interface. *Id.* ¶¶ 17, 35. Notifications and alerts 160 through 174 are displayed to a user in a central notification manager user interface. *Id.*  $\P$  35. Adjacent to the shown display are descriptions identifying the particular alert or notification that appears in the user interface immediately to the left. *Id.* 

### 2. Analysis

Cheung, as applied by Petitioner, does not make up for the deficiencies discussed above with regard to the alleged obviousness of claims 1–3 and 6–10 over Eaton. Petitioner relies on Cheung, in the alternative, to argue that the notification information placed generally on the

screen in Eaton "can also be provided in the title bar of the IM application" or "in the corresponding task bar," thus constituting usage as a title. Pet. 54.

#### 3. Conclusion

Petitioner has not proven, by a preponderance of the evidence, that any of claims 1–3 and 6–10 of the '179 patent would have been obvious over Eaton and Cheung.

## G. Alleged Obviousness of Claims 1–3 and 6–10 over Eaton and Odell

### 1. Overview of Odell

Odell discloses a graphical user interface on a display device of a computer. Ex. 1016, code (57). Figure 16A of Odell is reproduced below:

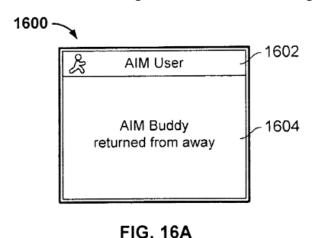


Figure 16A depicts notification 1600 which is presented on the display after occurrence of one of a specified series of events relating to the accounts listed on the buddy lists of a set of linked accounts. *Id.* at 19:44–46. Header 1602 of notification 1600 contains the screen name of the linked account whose buddy list contains the account that triggered the notification. *Id.* at 19:46–49. Body 1604 of the notification contains the screen name of the account that triggered the notification as well as a description of the event that triggered the notification. *Id.* at 19:49–52.

#### 2. Analysis

Odell, as applied by Petitioner, does not make up for the deficiencies discussed above with regard to the alleged obviousness of claims 1–3 and 6–10 over Eaton. Petitioner relies on Odell, in the alternative, to argue that the notification information placed generally on the screen in Eaton "can also be provided in the title bar of the IM application," thus constituting usage as a title. Pet. 54.

#### 3. Conclusion

Petitioner has not proven, by a preponderance of the evidence, that any of claims 1–3 and 6–10 would have been obvious over Eaton and Odell.

## H. Alleged Obviousness of Claims 1–3 and 6–10 over Eaton, Cheung, and Odell

As discussed above, Cheung and Odell, as applied by Petitioner, do not make up for the deficiencies discussed above with regard to the alleged obviousness of claims 1–3 and 6–10 over Eaton. Petitioner has not proven, by a preponderance of the evidence, that any of claims 1–3 and 6–10 would have been obvious over Eaton, Cheung, and Odell.

## I. Alleged Anticipation of Claims 1–3 and 9 by Kim

## 1. Overview of Kim

Kim discloses a system and method to enable a user to obtain information whenever necessary by accessing real-time information service servers and receiving information therefrom such as stock prices, advertisements, and breaking news, and placing the received information on the title bar of the currently active window on a display screen. Ex. 1008, 12 (Abstract).

Figure 2 of Kim is reproduced below:

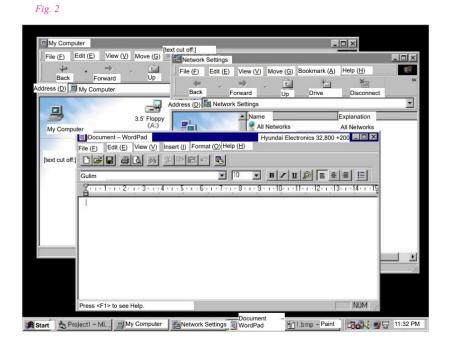


Figure 2 depicts an illustrative display screen when Kim's real-time information system is executed, showing the display of stock price in a title bar. *Id* at 12.

Figure 3 of Kim is reproduced below:

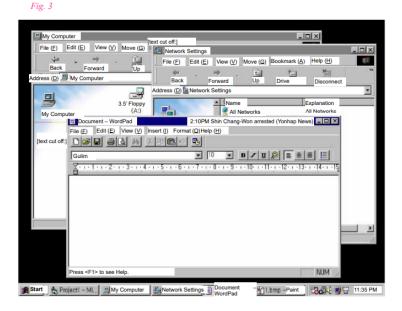


Figure 3 depicts another illustrative display screen when Kim's real-time information system is executed, showing the display of breaking news in a title bar. *Id*.

Figure 4 of Kim is reproduced below:

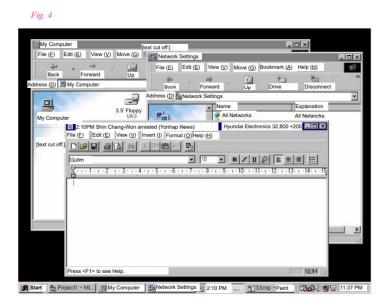


Figure 4 depicts another illustrative display screen when Kim's real-time information system is executed, showing the display of breaking news and stock price in a title bar. *Id*.

Kim provides a user the ability to select desired information from the title bar of the active window according to his or her preference and to obtain such desired information by clicking on the corresponding icon in the title bar. *Id.* at 14. Kim states "the present invention has the effect of providing convenience to the user in that real-time information can be searched without interference with other programs by presenting information provided in real-time on the title bar of the currently active window of Windows." *Id.* 

#### 2. Independent Claim 1

#### *a) Preamble*

Claim 1 begins with this preamble: "A method, comprising." Ex. 1001, 12:46. Petitioner asserts that Kim discloses a method to enable a user to obtain information whenever necessary by accessing a real-time information server, and receiving data such as stock prices, advertisements, and breaking news on the title bar of a currently active window. Pet. 62–63 (citing Ex. 1008, 13). Patent Owner does not dispute that Kim describes such a method. Petitioner has sufficiently accounted for the preamble recitation of a "method."

#### b) Limitation 1[i]

Limitation 1[i] recites "processing an event that calls for user notification." Ex. 1001, 12:47. Petitioner asserts that Kim discloses such processing in the form of receiving, storing, and displaying real-time information to be displayed in an application's title bar. Pet. 63 (citing Ex. 1004 ¶ 196). Petitioner explains:

For example, Kim discloses "<u>receiv[ing]</u> real-time information to be displayed on the title bar on the Windows display screen of the personal computer from the information server and <u>stor[ing]</u> it in temporary memory, and <u>display[ing]</u> the information on the title bar whenever new information is provided to allow the users to easily obtain information at any time." Ex[1008], 9–2 (emphasis added).

*Id.* (alterations in original). With regard to "event that calls for user notification," Petitioner explains: "Kim discloses that this real-time information can include events such as 'stock prices, advertisements, and breaking news' (Ex[1008], Abstract) *received* at the user's computer from, for example, 'a stock information server, an advertisement server, a breaking

news server, [] a text broadcasting server, or a combination thereof.' *Id.*, 9-2." Pet. 63–64 (emphasis added, alterations in original).

Petitioner's assertions are supported by the cited evidence. As indicated by Petitioner, the "event that calls for user notification" is the receipt at the user's computer of a stock price or breaking news. Pet. 63–64. The purpose of receiving real-time stock price and real-time breaking news is to inform the user about such stock price and breaking news. Thus, these receptions are events that call for user notification. Notwithstanding Patent Owner's arguments to the contrary, discussed below, Petitioner has persuasively shown that Kim discloses limitation 1[i].

Patent Owner argues that in the context of the '179 patent, an event is a "detectable condition of a system that can trigger a notification." PO Resp. 9. However, even under the construction proposed by Patent Owner, Petitioner has made a persuasive showing for limitation 1[i]. The receipt by the user's computer of the real-time stock price and the receipt by the user's computer of the real-time breaking news are each a detectable condition of the computer that can trigger a notification, e.g., a message for display.

Patent Owner argues that it is not the Petitioner's theory that the receipt of such real-time information constitutes an event. *Id.* at 10. Similar to Petitioner's challenge based on Eaton, it would have been helpful for Petitioner to clarify how it was mapping the term "event" to avoid confusion. The Petition specifically states: "Kim discloses that this real-time information can include events such as 'stock prices, advertisements, and breaking news' (Ex[1008], Abstract) *received* at the user's computer from, for example, 'a stock information server, an advertisement server, a breaking news server, [] a text broadcasting server, or a combination thereof.' *Id.*, 9-2." Pet. 63–64 (emphasis added). This sentence could be

interpreted in multiple ways. First, the sentence could be interpreted to mean that the "stock prices, advertisements, and breaking news" could be the events, and those events were received. Second, the sentence could be interpreted to mean that the receipt itself was the event. To avoid any ambiguity, in the Decision on Institution, we expressly stated that "[w]e read the Petition as having identified the receipt at the user's computer of real-time information from outside servers as the claimed event." Inst. Dec. 21.7 We believed this better aligned with the Petition's discussion of events. So the parties had notice of our understanding of Petitioner's challenge, and we proceed with that understanding in the rest of this decision.<sup>8</sup>

In its Response, Patent Owner does not explain why receipt of real-time information at the user's computer is not a "detectable condition of a system that can trigger a notification." We find that it is. Even a dictionary definition submitted by Patent Owner supports a finding that it is. Note Exhibit 2015 (https://www.computerhope.com/jargon/e/event.htm) which states:

In programming, an **event** is an action that occurs as a result of the user or another source, such as a mouse click. An **event handler** is a routine that deals with the event, allowing a programmer to write code that is executed when the event occurs.

<sup>-</sup>

<sup>&</sup>lt;sup>7</sup> In its Reply, Petitioner asserts that "event" means an "action or occurrence to which a program might respond." Reply 2. As explained above in Section II.C.4, we see no meaningful difference between that articulation and Patent Owner's proposed construction.

<sup>&</sup>lt;sup>8</sup> Moreover, Petitioner's argument that Kim's events (e.g., stock prices) teach the claimed "events" is not persuasive because Petitioner fails to explain how Kim's server allegedly "process[es]" those events (as opposed to the real-time information regarding those events). *See* Pet. 63–64. Computer processing is the manipulation and transformation of data (*see* Pet. 24–25), and a computer does not "process[]" a physical event itself.

### Other common event examples

- A web browser completely loading a web page.
- A file being created or modified on a filesystem.
- A hardware sensor such as a webcam or microphone receiving sensory input.
- The arrival of incoming network traffic.
- The occurrence of an error at the program or system level.

Ex. 2015, 1. The receipt of real-time information is an event just like the loading of a web page or the arrival of incoming network traffic. Further, examples in the '179 patent of events include a new mail event and a new instant message event. Ex. 1001, 2:10–12. The reception of real-time information also is an event just like receiving new email or new instant message at the computer.

The receipt of real-time information at the user's computer is the detectable condition. That receipt can trigger a notification, because the user's computer is capable of providing a notification to the user. Patent Owner's construction states "can trigger a notification," not "must trigger a notification."

Patent Owner asserts that none of Petitioner's examples from Kim, e.g., stock price, is a detectable condition of a system. PO Resp. 46. The assertion fails to consider "receipt" of real-time stock price at the computer as a condition detectable by the computer and thus an event. Patent Owner asserts that the Petition does not "make any connection between Kim's mere 'real time information' and 'an event that calls for user notification." *Id.* But, again, the assertion fails to consider "receipt" of real-time stock price at the computer as a condition detectable by the computer and thus an event. As we have determined above, the receipt of real-time information at a

user's computer is a "detectable condition of a system that can trigger a notification."

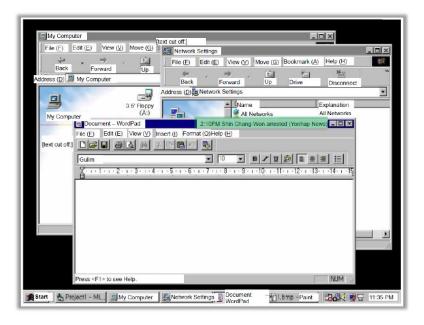
Patent Owner further asserts "Kim does not disclose 'receiving information of an event that calls for user notification,' at least because the system of Kim displays any real-time information it receives." *Id.* at 47. However, the argument is misplaced, because the limitation in claim 1 is "processing an event that calls for user notification," not "receiving information of an event that calls for user notification." In Kim, the computer system processes its receipt of real-time information by all the actions it takes to effect display of that information on the screen.

Petitioner has shown that Kim discloses limitation 1[i].

#### c) Limitation 1[ii]

Limitation 1[ii] recites "generating an event notification for the event." Ex. 1001, 12:48.

Petitioner identifies in Kim's Figure 3 the text "2:10pm Shin Chang-Won arrested (Yonhap News)" provided on the title bar of a Microsoft WordPad application window as the event notification that is generated after the computer receives that breaking news. Pet. 65. Figure 3 of Kim, color annotated by Petitioner, is reproduced below:



Annotated Figure 3 depicts what is displayed on the display screen in Kim's real-time information system, in a title bar, when breaking news is received, and Petitioner has colored green the received breaking news that is then placed in the title bar. Ex. 1008, 12; Pet. 66.

Petitioner explains that the user's computer, which has received the breaking news, generates an event notification for the event by creating a message for display in the title bar, which message is a string of characters that includes information associated with the event. Pet. 66 (citing Ex. 1004 ¶¶ 199–203). Petitioner's assertions are supported by the cited evidence. The event is the computer's receipt of the real-time information, and the event notification is the displayed message which is the information received by the computer.

Patent Owner asserts that even if real-time information could be considered information of an event that calls for user notification, Kim "merely displays such real-time information – it does not generate an event notification for any such event. [EX2020,  $\P222$ ]. A [person of ordinary skill in the art] would understand that an event notification . . . is an 'event

triggered signal to a run-timed-defined recipient' also known as subscriber." PO Resp. 49.

We disagree. Displaying the received real-time information in the title bar of an open application on the computer for the user to see notifies the user that the computer has just received the information. Thus, where the "event" is receipt by the computer of certain real-time information, the displayed text of that information in the title bar of an open application on the computer constitutes the generated "event notification for the event." As a result, even assuming an event notification is an "event triggered signal to a run-time-defined recipient," as Patent Owner asserts, Kim discloses the claimed "event notification."

Patent Owner further argues: "[T]he system of Kim receives information and displays that same real-time information – it does not generate an event notification of any such event. Data passed along is not a notification of itself." Id. at 50. The argument is unavailing, because it ignores or fails to consider "receipt" of real-time information at the computer as the "event," in which case the event and the "event notification" are not the same. As discussed above, "receipt" at the computer of real-time information is the "event," whether or not the user is informed, and the resulting text displayed in the title bar of an open application, even if the same as the information received, is an "event notification for the event" to inform the user of the event. Patent Owner fails to appreciate a difference between "receipt" of real-time information at a computer and the content of that information. The two are not the same. Also, immediately displaying the content of the information as it is received by the computer notifies the user that the information has been received. There is no requirement in the claim that pertinent information about an event may not serve as event

notification, and we find such information would be an effective notification for the event. For instance, the display of breaking news notifies the user that the computer has received that breaking news.

## Patent Owner further argues:

Petitioner's theory, which it should be held to, is that the "real time information server 'generat[es] an event notification for the event' by sending a message with the event notification ...." [Pet.; 66]. Petitioner's theory is that the event occurs at the server, not upon local receipt of information from the server. [See, e.g., Pet., 25–26].... Further, by arguing that the event notification is "sent from the server to the user's computer," Petitioner makes clear that any event could not occur at the user's computer (i.e., receipt of information by the user's computer could not be an event).

PO Resp. 49–50 (alteration in original). The argument is unavailing, because Petitioner sets forth two alternative contentions, including one that asserts the local computer generates an event notification for the event. Pet. 66. Patent Owner fails to acknowledge this theory. Specifically, the Petition states: "[T]he user's computer also 'generat[es] an event notification for the event' by creating the message for display in the title bar, in which the message comprises at least a 'string of characters that includes information associated with the event." *Id.* (alteration in original). We also specifically identified it in our Institution Decision.

Patent Owner argues that the user's computer in Kim does not create the message displayed in Kim's title bar but, rather, the real-time

<sup>&</sup>lt;sup>9</sup> Patent Owner asserts that Petitioner's argument that the user computer creates the message for display is "incorrect" because the assertion is inconsistent with Petitioner's other contention that the real-time information server creates the event notification. PO Resp. 50. We disagree. Petitioner simply has made two alternative contentions.

information server creates it and the user computer simply receives it and displays it. PO Resp. 50. The issue is whether simply passing information or a received message along to a title bar is creating a message as argued by Petitioner. We need not resolve that question, however, because Petitioner, as discussed below, does not make a sufficient showing for limitations [vi] and [vii]. Here, we assume the user computer's enabling received information to appear in a title bar is "generating an event notification for the event" as recited in limitation 1[ii], where the event is receipt of that information, to provide context for discussing the remaining claim elements.

#### d) Limitation 1[iii]

Limitation 1[iii] recites "storing the event notification in an array." Ex. 1001, 12:49. Petitioner explains that the event notification in Kim has to be stored by noting that alternative event notifications are depicted "in Figures 2–4 of Kim (in which the title bar alternates between a stock price update, a breaking news event, and a combination of both, respectively)." Pet. 67. Petitioner further explains:

Thus, Kim discloses that a list of real-time information events is "store[d] in temporary memory" so that the title bar can be updated as new information is received, including with new or combined event notifications (the combination showing that events are stored in a list so that a previously stored message can be displayed with the most recent event, as in Figure 4). A PHOSITA would understand that such information would be stored in some type of list in Kim's "temporary memory," which the '179 Patent indicates is a type of array. Ex[1004], ¶¶ 204–206.

Pet. 67–68. This explanation characterized Kim's illustrations of Figures 2–4 as a timed sequence of progressions resulting from first receiving the stock price and then receiving the breaking news some time later.

Even assuming (1) that Petitioner's characterization of Figures 2–4 as a timed sequence of progressions resulting from first receiving the stock price and then receiving the breaking news is correct, (2) that all received information over a time progression interval would be stored in temporary memory so they can be later combined, and (3) that a list constitutes an array, Petitioner does not persuade us that Kim discloses a "list" stored in memory.

Kim makes no mention of any "list" or "array." Even assuming that two event notifications are shown concurrently in the title bar, that does not mean they necessarily are stored as a list or array. And even if a series of event notifications have to be stored in memory, that also does not mean they necessarily have to be stored in a list type data structure. Mr. Willis, Petitioner's expert witness, provides no explanation in that regard. Ex. 1004 ¶¶ 204–206.

Accordingly, Petitioner has not sufficiently shown that Kim discloses limitation 1[iii].

## e) Limitations 1[iv] and 1[v]

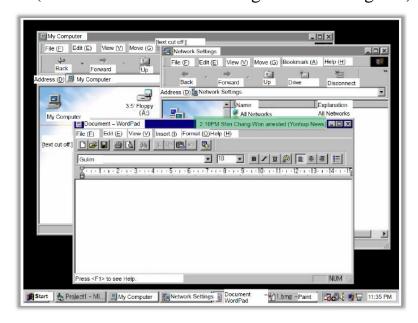
Limitation 1[iv] recites "providing the event notification from the array to a process executed by a processor." Ex. 1001, 12:50–51. Limitation 1[v] recites "using the event notification as a title in association with the process." *Id.* at 12:52–53. As discussed above in the context of limitation 1[ii], we proceed by assuming that Kim discloses generating an event notification for the event.

Because, as discussed above in the context of limitation 1[iii], Kim does not disclose storing an event notification in an array, Kim also does not disclose limitation 1[iv] and 1[v]. However, because Petitioner asserts another ground based on obviousness over Kim, addressed below, which

may account for limitation 1[iii], we proceed further here to analyze limitations 1[iv] and 1[v] by assuming an event notification is stored in an array.

#### Petitioner asserts:

Figures 2–4 of Kim show event notifications being provided (from the array as discussed in Claim 1[iii]) to a process executed by a processor (namely, the Microsoft WordPad process executed by a processor on the user's IPB-PC-based personal computer). Ex[1008], Abstract, 9–1, 9–2; Ex[1004], ¶¶211–13. For example, Figure 3 below shows that a breaking news event notification ("2:10PM Shin-Won arrested (Yonhap News)") is provided on the title bar of a Microsoft WordPad application window (the event notification message is shaded in green).



Pet. 69–70. Annotated Figure 3 depicts what is displayed on the display screen in Kim's real-time information system, in a title bar, when breaking news is received. Ex. 1008, 12. Petitioner has colored green the received breaking news that is now placed in the title bar. Pet. 69. Petitioner explains that breaking news as event notification is used as a title because it is placed in the title bar of the Microsoft WordPad application window as

shown in Kim's Figure 3. *Id.* at 70–72 (citing Ex. 1008, 12–14, Figs. 2–4; Ex. 1004  $\P$ ¶ 214–18).

Petitioner's assertions are supported by the cited evidence. Patent Owner reiterates numerous argument which already have been addressed above in the context of other limitations of claim 1, e.g., Kim does not disclose an event, Kim does not generate or store an event notification, and need not be discussed again here.

Further, although Kim does not expressly state that the event notification stored in its temporary memory is provided to the WordPad process for display, what a reference discloses reasonably can be inferred based on other disclosure. *See Eli Lilly*, 849 F.3d at 1074–75; *Dayco*, 329 F.3d at 1368.

Patent Owner additionally argues that Petitioner "conflates what it claims as an event (i.e., 'real-time information) [see Pet.; 63–64] and what it argues is an event notification (i.e., 'real-time information')." PO Resp. 54–55 (alteration in original). That argument, however, fails to consider "receipt" of real-time information as the event as we have discussed above. Patent Owner asserts that Kim does not "disclose using any event notification as a title," because "the only information displayed is the real-time information received from the real-time information service server." *Id.* at 55. We explained above that we need not decide whether the local computer's placing received information into a title bar for the user to see constitutes event notification but proceed by assuming that it does, for purposes of analyzing the remaining claim elements. Here, Patent Owner does not explain why words placed in the title bar are not used as a title.

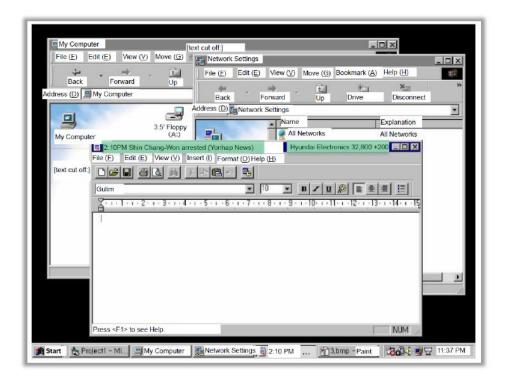
Limitations 1[iii], 1[iv], and 1[v] are related such that if limitation 1[iii] is not met, neither are limitations 1[iv] and 1[v]. If limitation 1[iii] is

met, then Petitioner persuasively has shown that Kim discloses limitations 1[iv] and 1[v] including, specifically, using the event notification as a title in association with the process. Because we determine Kim does not disclose limitation 1[iii], Kim also does not disclose limitations 1[iv] and 1[v].

## f) Limitations 1[vi] and 1[vii]

Limitation 1[vi] recites "providing an alternative title from the array to the process." Ex. 1001, 12:54. Limitation 1[vii] recites "using the alternative title as a title in association with the process." *Id.* at 12:55–56.

Petitioner provides (Pet. 74) an annotated Figure 4 of Kim, reproduced below:



Annotated Figure 4 depicts what is displayed on the display screen in Kim's real-time information system, in a title bar, when stock price information and breaking news have been received, and Petitioner has colored green the breaking news and the stock price information in the title bar. Ex. 1008, 12; Pet. 74.

Here, according to Petitioner and relative to what was previously shown in Kim's Figure 3, the breaking news has replaced the initial title "Document-Wordpad" in the title bar, and the stock price has been placed within the title bar, in a position previously occupied by the breaking news. Pet. 73–74.

#### Petitioner explains:

Figure 4 of Kim shows that an alternative title is provided from the array to the process (the WordPadprocess). In this example, the user's computer replaces the "Document - WordPad" title in the WordPad title bar with the breaking news alternative title, "2:10pm Shin Chang-Won arrested (Yonhap News)," and replaces the previous title showing that same message on the right side of the title bar [Figure 3] with the new, alternative title based on a stock price event, "Hyundai Electronics 32,800+200." Ex[1008], 9-1; see also id., 9-3 ("the handle value on the currently active window is extracted according to the task management of the task management unit to replace the title bar value of the corresponding window with the information provided in real-time").

Id.

Petitioner's assertion depends on its regarding Kim's illustrations of Figures 2–4 as a sequence or progression resulting from first receiving the stock price and then receiving the breaking news some time later. *See* Pet. 67–68. Patent Owner argues, however:

Kim does not disclose that Figures 2–4 show a progression of the display of real-time information; rather they show alternative embodiments wherein different types of real-time information may be displayed. Since Kim only discloses the sending and receiving of a single title bar value, Kim discloses no functionality for such progression or repetition.

PO Resp. 60–61 (citing Ex.  $2020 \, \P \, 256$ ). Patent Owner's assertion is supported by the testimony of Dr. Surati. Ex.  $2020 \, \P \, 256$ . Dr. Surati

explains that Kim describes Figures 2–4 separately as displaying different types of real-time information received from the server:

Fig. 2 is a diagram of a display screen when a real-time information system is executed on a Windows title bar and information on stock process is displayed according to the present invention.

Fig. 3 is a diagram of a display screen when a real-time information system is executed on a Windows title bar and information on breaking news is displayed according to the present invention.

Fig. 4 is a diagram of a display screen when a real-time information system is executed on a Windows title bar and information on stock process and breaking news is displayed according to the present invention.

## Id. ¶ 256 (quoting Ex. 1008, 12). Dr. Surati further explains:

Kim has no disclosure that any of the real-time information shown in Figures 2–4 is reused [breaking news is shown in Figure 3 and again in Figure 4; stock price is shown in Figure 2 and again in Figure 4]. Rather, a [person of ordinary skill in the art] would understand, for example, that Figures 2–4 merely show multiple separate embodiments where a single character string may be used to display one (in the case of Figures 2 and 3) or more (in the case of Figure 4) types of information until new information is obtained and/or provided in the form of a title bar value.

*Id.* In contrast, Petitioner's expert, Mr. Willis, simply states, without explanation: "288 Kim teaches in Figure 4 that the breaking news event notification is displayed again (first displayed in Figure 3) with the stock price event notification." Ex. 1004 ¶ 235.

We find Patent Owner's reading of Kim is more consistent with Kim's disclosure, and we credit Dr. Surati's testimony over the conclusory and inadequately explained testimony of Mr. Willis with regard to whether Figures 2–4 of Kim represent a sequence or progression. We find that, on the evidence presented before us, they are not.

Petitioner has not explained why Kim would, after first receiving and displaying the stock price in Figure 2, remove it from the display in Figure 3 if, and when, breaking news is received, only to bring it back again in Figure 4. The disappearance and reappearance is irrational and unexplained. At oral hearing, counsel for Petitioner asserted that the timestamp at the bottom right of each of Figures 2–4 confirms that the figures are in a progression. Tr. 71:17–24. That argument was not made in the Petition and it would be unfair to Patent Owner to consider it now. We decline to consider it. However, even if we do look at the timestamps on the figures, Petitioner's argument is not persuasive, for three reasons.

First, the complete removal of the stock price information in Figure 3 still is unexplained and still is irrational if Figures 2–4 are a sequence or progression. If it already is decided that the stock price information should be removed, then there is no reason to bring it back at a later time, when Kim's system is about displaying real-time information. Second, Figure 1 has a timestamp between the times of Figures 2 and 3 and is reproduced below:

Fig. 1

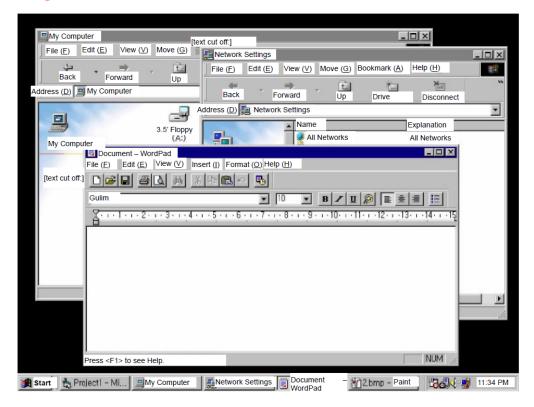


Figure 1 is a diagram of a display screen when a real-time information system is not executed on a Windows title bar. Ex. 1008, 12. That the real-time information system is not being executed during a time interval between the timestamps of Figures 2 and 3 indicates that Figures 2 and 3 are not in a sequence or progression produced during execution of the real-time information system of Kim. Third, Petitioner has not addressed why the timestamps cannot simply be the time the illustrations were made by a draftsman who created the figures on a computer screen and then took screen shots of the whole display.

Petitioner has not shown that Kim discloses limitations 1[vi] and 1[vii].

## g) Conclusion

Petitioner has not proven, by a preponderance of the evidence, that claim 1 is anticipated by Kim.

#### 3. Dependent Claims 2, 3, and 9

Claims 2, 3, and 9 each depend from claim 1 and thus incorporate all of the limitations of claim 1. The deficiencies of Petitioner's analysis, as discussed above in the context of claim 1, equally apply to claims 2, 3, and 9. Accordingly, Petitioner has not proven, by a preponderance of the evidence, that any of claims 2, 3, and 9 is anticipated by Kim.

### *J.* Alleged Obviousness of Claims 1–3 and 6–10 over Kim

Petitioner alternatively asserts that if Kim does not disclose the use of an array then the use of an array to store the event notification and to provide the event notification to the process would have been obvious to one with ordinary skill in the art. Pet. 68–69, 76–77. This assertion, even if assumed to be true, does not cure the deficiencies discussed above regarding the "alternative title" limitation. At oral hearing, counsel for Petitioner acknowledged that if we find Kim's Figures 2–4 do *not* depict a sequence or progression, then Petitioner would not prevail even as to independent claim 1. Tr. 16:18–17:20.

Furthermore, for claims 1–3 and 9, Petitioner asserts:

Kim anticipates and/or renders obvious Claims 1-3 and 9 of the '179 Patent as provided above in [the anticipation and obviousness analysis over Kim]. To the extent that there are arguably any meaningful differences between those claims and Kim's disclosures, those differences would have been trivial and obvious modifications to make for a PHOSITA. *See* Ex[1004], ¶248.

Pet. 77–78. This conclusory assertion of obviousness does not specifically identify any difference between the claimed invention and Kim, and does not provide any reasoning or rational underpinning to support the assertion. Conclusory assertions of obviousness as such are insufficient to satisfy Petitioner's burden of proof. *In re Magnum Oil Tools*, 829 F.3d at 1380.

The deficiencies of Kim, as discussed above in the alleged anticipation of claim 1 by Kim, are not cured by this conclusory assertion of obviousness.

Claims 2, 3, and 6–10 each depend directly from independent claim 1 (Ex. 1001, 12:57–67, 13:6–21) and thus each incorporate all of the limitations of independent claim 1. Petitioner's accounting for the alleged obviousness of claims 2, 3, and 6–10 over Kim alone (Pet. 75–82) does not cure the deficiencies of Petitioner's obviousness analysis of claim 1 over Kim. Accordingly, Petitioner has not proven, by a preponderance of the evidence, that any of claims 1–3 and 6–10 would have been obvious over Kim.

## K. Alleged Obviousness of Claims 1–3 and 6–10 over Kim and Cheung

Petitioner relies on Cheung solely for Petitioner's obviousness assertion of dependent claims 6, 7, 8, and 10. Pet. 78–82. Claims 6–10 each depend directly from independent claim 1 (Ex. 1001, 13:6–21) and thus each incorporate all of the limitations of independent claim 1. As applied by Petitioner, the addition of Cheung does not cure the deficiencies of Petitioner's obviousness analysis of claim 1 over Kim. Accordingly, Petitioner has not proven, by a preponderance of the evidence, that any of claims 1–3 and 6–10 would have been obvious over Kim and Cheung.

#### L. Patent Owner's Substitute Motion to Exclude

In its Substitute Motion to Exclude (Paper 38), Patent Owner seeks to exclude Petitioner's Exhibits 1017–1020, 1022–1026, 1030, 1032, 1033, 1034, and 1036. Mot. Exclude. 1. Even without excluding any of these exhibits, Petitioner has not proven any of the challenged claims as unpatentable. Therefore, we need not decide Patent Owner's Substitute Motion to Exclude.

#### III. CONCLUSION

The outcome for challenged claims 1–3 and 6–10 of the '179 patent is set forth in the table below:

Claims	35 U.S.C. §	Reference(s)/Basis	Claims Shown Unpatentable	Claims Not Shown Unpatentable
1–3, 6, 7, 9	102	Eaton		1–3, 6, 7, 9
1–3, 6–10	103	Eaton		1–3, 6–10
1–3, 6–10	103	Eaton, Cheung		1–3, 6–10
1-3, 6-10	103	Eaton, Odell		1-3, 6-10
1–3, 6–10	103	Eaton, Cheung, Odell		1-3, 6-10
1–3, 9	102	Kim		1–3, 9
1–3, 6–10	103	Kim		1–3, 6–10
1–3, 6–10	103	Kim, Cheung		1-3, 6-10
Overall Outcome				1–3, 6–10

#### IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that Petitioner has not proven by a preponderance of the evidence that any of claims 1–3 and 6–10 of the '179 patent is unpatentable;

FURTHER ORDERED that Patent Owner's Substitute Motion to Exclude is *dismissed* as moot; and

FURTHER ORDERED that, because this is a Final Written Decision, parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

## FOR PETITIONER:

Patrick A. Doody Christopher Kao Brock S. Weber PILLSBURY WINTHROP SHAW PITTMAN LLP patrick.doody@pillsburylaw.com christopher.kao@pillsburylaw.com brock.weber@pillsburylaw.com

#### FOR PATENT OWNER:

Stephen F. Schlather John J. Edmonds EDMONDS & SCHLATHER, PLLC sschlather@ip-lit.com jedmonds@ip-lit.com

Tarek Fahmi ASCENDA LAW GROUP, PC tarek.fahmi@ascendalaw.com