

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC,
Petitioner,

v.

BLACKBERRY LTD.,
Patent Owner.

Case IPR2017-00913
Patent 8,402,384 B2

Before SALLY C. MEDLEY, ROBERT J. WEINSCHENK, and
RICHARD H. MARSCHALL, *Administrative Patent Judges*.

MARSCHALL, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

Google Inc. (“Petitioner”) filed a Petition for *inter partes* review of claims 1–13 of U.S. Patent No. 8,402,384 B2 (Ex. 1001, “the ’384 patent”). Paper 1 (“Pet.”), 2. Blackberry Ltd. (“Patent Owner”) filed a Preliminary Response. Paper 6 (“Prelim. Resp.”). Upon consideration of the Petition and Preliminary Response, we instituted an *inter partes* review pursuant to 35 U.S.C. § 314, as to claims 1–13 of the ’384 patent. Paper 7 (“Dec.”).

Subsequent to institution, Patent Owner filed a Patent Owner Response (Paper 17, “PO Resp.”), Petitioner filed a Reply to Patent Owner’s Response (Paper 20, “Reply”), and Patent Owner filed a Sur-Reply (Paper 27, “Sur-Reply”).¹ On May 30, 2018, we held an oral hearing. Paper 30 (“Tr.”).²

This Final Written Decision is entered pursuant to 35 U.S.C. § 318(a). For the reasons that follow, we determine that Petitioner has demonstrated by a preponderance of the evidence that claims 1–13 of the ’384 patent are unpatentable.

A. Related Matters

The parties state that the ’384 patent is the subject of a court proceeding, *BlackBerry Limited v. BLU Products, Inc.*, Case No. 16-23535 (S.D. Fla.). Pet. 1; Paper 4, 1. Petitioner filed a Petition for *inter partes* review of claims 1–26 of U.S. Patent No. 8,713,466 B2, which is a continuation of the ’384 patent. *See id.*; IPR2017-00914, Paper 1, 2.

¹ We granted Patent Owner’s request for authorization to file the Sur-Reply in an Order dated April 24, 2018. Paper 22.

² The oral hearing included a related proceeding, IPR2017-00914. Paper 26.

B. The '384 Patent

The '384 patent is directed to a graphical user interface including a dynamic bar for displaying preview information on a main screen of the graphical user interface. Ex. 1001, Abstract. Each dynamic bar is associated with respective one or more interfaces for applications and/or functions provided by the apparatus. *Id.* Each dynamic bar has a pop-up interface for providing a preview information determined from information managed by applications and/or functions and links to invoke respective interfaces. *Id.* Figures 5 and 6 are reproduced below.

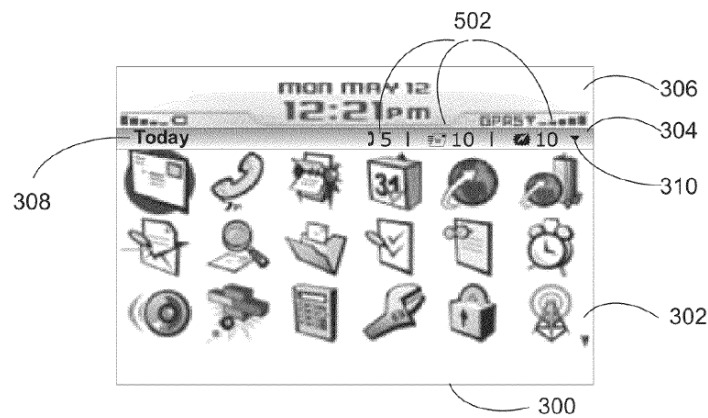


FIG. 5

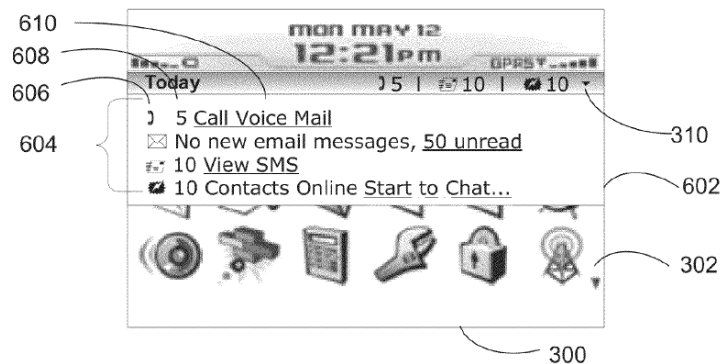


FIG. 6

Figures 5 and 6 illustrate main screen 300 with dynamic bar 304 and expansion pop-up interface 602. *Id.* at 7:43–46, 60. Dynamic bar 304

includes counts of new events 502 (e.g., new voice mail messages, email messages, SMS messages or contacts online with which to chat). *Id.* at 7:46–49. Expansion pop-up 602 lists particular services 604 associated with dynamic bar 304, such as voice mail, email, SMS and chat, including an iconic representation of service 606 and preview information. *Id.* at 7:60–64. Preview information includes count 608 and a link 610 to invoke the associated application user interface for the service. *Id.* at 7:64–66. According to the '384 patent, “[p]review information may thus comprise information maintained by the associated applications and/or functions as well as information determined from this managed information[.]” *Id.* at 7:66–8:2.

C. Illustrative Claim

Petitioner challenges all 13 claims of the '384 patent. Claim 1 is the only independent claim and appears below.

1. A method for controlling an apparatus comprising a display, the method comprising:
 - displaying a dynamic bar on the display;
 - displaying dynamic preview information in the dynamic bar, the dynamic preview information being determined from information managed by a software application, the dynamic preview information being updated to reflect a change to the information managed by the software application;
 - expanding the dynamic bar to display an expanded dynamic bar in response to a first input from an input device, displaying the expanded dynamic bar comprising:
 - displaying additional dynamic preview information determined from the information managed by the software application, the additional dynamic preview information being different from the dynamic preview information displayed in the dynamic bar, and the additional dynamic preview information

being updated to reflect the same or different change to the information managed by the software application;
displaying a selectable link embedded in the additional dynamic preview information to invoke the software application; and
activating the software application in response to a second input invoking the link.

Ex. 1001, 11:31–12:8.

D. Instituted Grounds of Unpatentability

We instituted trial based on all asserted grounds of unpatentability as follows (Dec. 29):

Ground	References	Basis	Claims Challenged
1	Cadiz ³	§ 103(a) ⁴	1, 4–7, and 10–13
2	Cadiz and Ng ⁵	§ 103(a)	2 and 3
3	Cadiz and Matthews ⁶	§ 103(a)	8
4	Cadiz and Smith ⁷	§ 103(a)	9

³ U.S. Patent App. Pub. No. 2002/0186257 A1, filed June 8, 2001, published Dec. 12, 2002 (Ex. 1005) (“Cadiz”).

⁴ The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“AIA”), amended 35 U.S.C. § 103. Because the ’384 patent has an effective filing date before the effective date of the applicable AIA amendment, we refer to the pre-AIA version of 35 U.S.C. § 103.

⁵ U.S. Patent App. Pub. No. 2004/0075701 A1, filed Oct. 16, 2002, published Apr. 22, 2004 (Ex. 1006) (“Ng”).

⁶ U.S. Patent App. Pub. No. 2005/0198584 A1, filed Jan. 27, 2004, published Sept. 8, 2005 (Ex. 1008) (“Matthews”).

⁷ U.S. Patent No. 6,333,973 B1, filed Apr. 23, 1997, issued Dec. 25, 2001 (Ex. 1009) (“Smith”).

II. ANALYSIS

A. Principles of Law

To prevail in its challenge to Patent Owner's claims, Petitioner must demonstrate by a preponderance of the evidence that the claims are unpatentable. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d). A claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious at the time of the invention to a person having ordinary skill in the art. *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) objective evidence of nonobviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

B. Level of Ordinary Skill

In determining the level of ordinary skill in the art, various factors may be considered, including the “type of problems encountered in the art; prior art solutions to those problems; rapidity with which innovations are made; sophistication of the technology; and educational level of active workers in the field.” *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995) (citation omitted). Petitioner relies on the testimony of Dr. Olsen, who testifies that a person with ordinary skill in the art “would have had at least an undergraduate degree in computer science, electrical engineering, or equivalent thereof, and at least two years of experience in the relevant field, e.g., graphical user interfaces.” Pet. 3–4 (citing Ex. 1002 ¶¶ 13–14). Patent Owner relies on the testimony of Dr. Ligler, who mainly agrees with Dr.

Olsen’s assessment, but disagrees that the relevant field includes graphical user interfaces generally, and instead opines that the relevant field is “graphical user interfaces for communication devices, such as cellular telephones, personal digital assistants (PDAs), and other communication devices, particularly those which communicate over a wireless network.” PO Resp. 9 (citing Ex. 2007 ¶¶ 37–40).

While we agree with Dr. Ligler’s assessment that the ’384 patent describes its invention in the context of graphical user interfaces on communication devices (Ex. 2007 ¶ 41), the ’384 patent also describes that the mobile station devices with the user interfaces described “may be usefully incorporated into other computing devices which may not be mobile such as personal computers, workstations, telephone headsets and the like.” Ex. 1001, 11:18–21. Accordingly, we adopt Petitioner’s definition of the level of ordinary skill in the art, but note that our analysis would be the same under either definition.

C. Claim Construction

In an *inter partes* review, we construe claim terms in an unexpired patent according to their broadest reasonable construction in light of the specification of the patent in which they appear.⁸ 37 C.F.R. § 42.100(b). Consistent with the broadest reasonable construction, claim terms are presumed to have their ordinary and customary meaning as understood by a person of ordinary skill in the art in the context of the entire patent

⁸ We would construe the claim term discussed below the same under *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc).

disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007).

For purposes of this decision, we find it necessary to construe “a selectable link embedded in the additional dynamic preview information.” Claim 1 recites “displaying a selectable link embedded in the additional dynamic preview information to invoke the software application.” In the Decision on Institution, based on the parties’ arguments, we preliminarily determined “that as long as some of the preview information in a display window, for example, contains dynamic preview information not shown in the dynamic bar, the entirety of the preview information may be considered ‘additional dynamic preview information.’” Dec. 12. In addition, we stated that the prosecution history supports a construction that covers a link that is static but is next to dynamic information, such as the “seemingly static ‘call voice mail’ link that appears next to dynamic information ‘5’” in Figure 6 of the ’384 patent. *Id.* at 11.

Patent Owner disagrees with that determination and argues that “a selectable link embedded in the additional dynamic preview information” “requires the ‘*additional dynamic preview information*’ to be preview information that is dynamic and requires the ‘*selectable link*’ to include such dynamic preview information.” PO Resp. 11. Figure 6 from the ’384 patent, shown below as annotated by Patent Owner (PO Resp. 21), illustrates Patent Owner’s position.

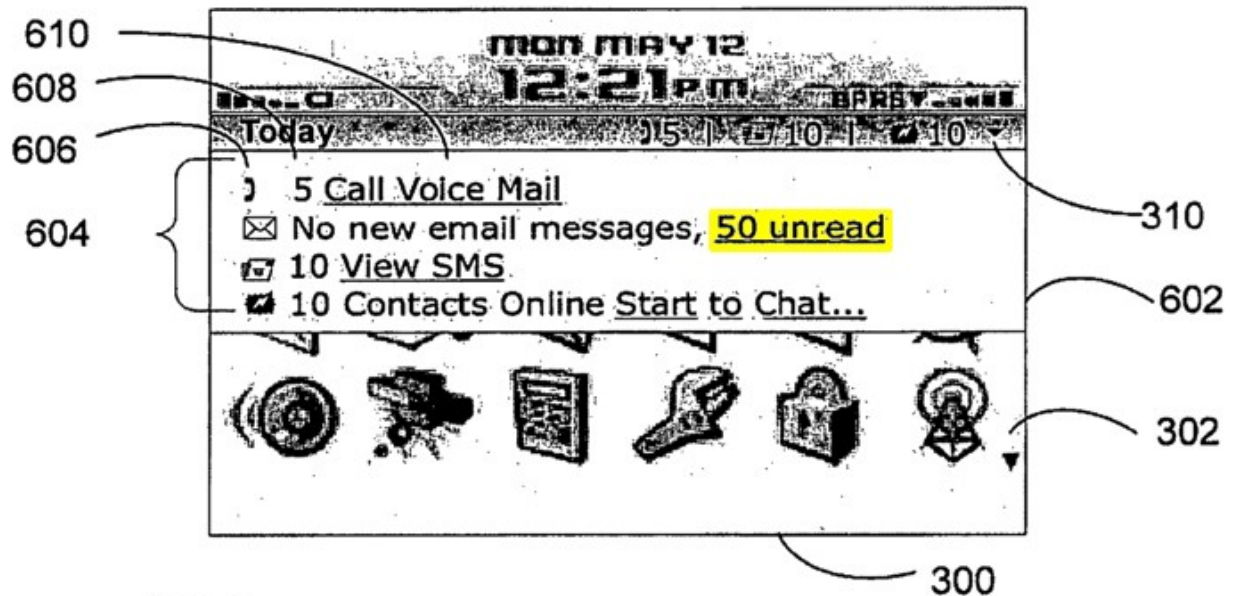


FIG. 6

Figure 6 from the '384 patent, annotated by Patent Owner, illustrates a main screen following user action. From the above figure, Patent Owner contends that the ““50 unread” selectable link is ‘embedded’ in the ‘*additional dynamic preview information*’ because the link includes dynamic information (e.g., 50).” PO Resp. 22. Patent Owner contends that the other links, for example the “5 Call Voice Mail,” would not satisfy the disputed phrase requirement because, even though the “5” is dynamic (e.g., because the number of Voice Mail changes), it is not part of the link “Call Voice Mail.” *Id.*; Tr. 51–53.

Petitioner disagrees with Patent Owner’s construction and contends that additional dynamic preview information includes dynamic information, but it can also include other types of information such that the “selectable link” may or may not include dynamic information. Reply 2. For example, with respect to annotated Figure 6 from above, Petitioner argues “the only selectable link specifically identified in FIG. 6 and described in the

specification is selectable link 610 [5 Call Voice Mail], which does not include but is next to dynamic information (i.e., count 608).” Reply 4 (citing Ex. 1001, 7:60–8:2, Fig. 6). Petitioner argues that selectable link 610 exemplifies “a selectable link embedded in the additional dynamic preview information” because it is the only selectable link from Figure 6 that is described in the specification and because the additional dynamic preview information in interface 602 includes dynamic count 608. *Id.* at 3–4.

It is necessary for us to construe the phrase because there is a dispute about whether the prior art (Cadiz) discloses “a selectable link embedded in the additional dynamic preview information.” In particular, Patent Owner does not dispute that Cadiz describes additional dynamic preview information, but argues that Cadiz does not disclose links that include dynamic information. PO Resp. 30–34. For the reasons that follow, we agree with Petitioner’s construction and determine that additional dynamic preview information includes dynamic information, but can also include other types of information such that the “selectable link” may or may not include dynamic information.⁹

1. Claim Language

We begin with the plain language of claim 1. On its face, the claim requires “displaying a selectable link embedded in the additional dynamic preview information.” The claim does not state that “the additional dynamic preview information” comprises only dynamic information, or that the selectable link includes dynamic preview information. Patent Owner argues

⁹ This determination is consistent with our preliminary determination. Dec. 12.

that based on the plain language of the claim, “it logically follows that the selectable link must also include information that is dynamic.” PO Resp. 14. But Patent Owner does not explain why the phrase requires all parts of the additional dynamic preview information, e.g., the static link, to be dynamic. The claim language allows for the possibility that the “additional dynamic preview information” may include non-dynamic information as well dynamic information as Petitioner contends. Reply 2. Accordingly, we are not persuaded by Patent Owner’s argument that the plain language requires a selectable link that includes additional dynamic preview information.

2. *Specification*

The specification further supports Petitioner’s position. The phrase “additional dynamic preview information” was added during prosecution of the ’384 patent. Ex. 1004, 108–111. While the specification of the ’384 patent describes dynamic preview information, the ’384 patent does not describe or use the phrase “*additional* dynamic preview information.” Both parties agree, however, that the description of “dynamic preview information” would have informed the understanding of a person having ordinary skill in the art at the time of the invention regarding the meaning of “additional dynamic preview information.” PO Resp. 15, n.1; Reply 1–2.

The specification of the ’384 patent states that “dynamic preview information need not be limited to a count” and that “the [dynamic preview] information may include some details of a recent event” such as “Missed call from NNN.” Ex. 1001, 7:60–65. Although the ’384 patent does not explicitly define “dynamic” information, the ’384 patent does describe what is considered static information by explaining that “[a]n application icon or information or text (*e.g. name or title*) describing the application is

generally static and as such is not particularly useful for representing changing information associated with the application activated by the icon.” Ex. 1001, 1:49–53 (emphasis added). To us, information such as “Missed call from NNN” falls into the category of including static “information or text (e.g., name or title) describing the application” as described in the ’384 patent, because such information is not limited to changing information associated with the application. This type of information, however, is described, *along with a dynamic count*, as exemplary of “dynamic preview information.” *Id.* at 7:52–57. Accordingly, we agree with Petitioner, and find that the ’384 patent describes “dynamic preview information” as information that can include information that is not dynamic. Reply 1–2.

Patent Owner does not sufficiently explain why the description of “dynamic preview information” in the ’384 patent discussed above supports its contentions that the claimed “selectable link” must include dynamic preview information. PO Resp. 14–15. It is not enough for Patent Owner to merely highlight the passage and conclude that it “describes information that is itself dynamic (e.g., counts of new events, information about a missed call).” *Id.* (citing Ex. 1001, 7:46–59). Patent Owner never explains why the specification describes information such as “Missed call from NNN” as dynamic information despite its inclusion of static information, and why a selectable link embedded in such a phrase must contain dynamic information

as Patent Owner proposes in its construction.¹⁰ The link could encompass “Missed call,” i.e., static information, and nevertheless be “embedded in” what the specification describes as “dynamic preview information,” i.e., “Missed call from NNN.” Patent Owner does not reconcile the portions of the specification that appear to undermine its claim construction with those that arguably do support its construction. We will not construe terms narrowly without a reasoned explanation for doing so.

3. *Prosecution History*

Patent Owner argues that the prosecution history of the ’384 patent supports its construction. *Id.* at 15–22. Patent Owner argues that during prosecution of the ’384 patent, it amended the claims to overcome a rejection in view of Ögren¹¹ to include “displaying a selectable link embedded in the additional dynamic preview information to invoke the software application.” PO Resp. 16 (citing Ex. 1004, 109) (emphasis omitted). Patent Owner argues that it explained that the selectable link is embedded in the additional dynamic preview information, such that the selectable link may be selected by selecting a portion of the additional dynamic preview information, such as by moving a cursor over a portion of the dynamic preview information and actuating an input device. *Id.* (citing

¹⁰ During oral argument, counsel for Patent Owner indicated that the entire content (e.g., each word or symbol) must be dynamic (e.g., changes) in order for such information to qualify as “additional dynamic preview information.” *See, e.g.*, Tr. 47:24–48:1. This clarification of Patent Owner’s proposed construction goes further than requiring some portion of the selectable link to include dynamic information, and finds less support in the intrinsic record.

¹¹ EP 1434411 A1, filed Dec. 23, 2002, pub. June 30, 2004 (“Ögren”).

Ex. 1004, 114–115). Patent Owner asserts that because it was explained during prosecution that the “selectable link” is a “portion” of the additional dynamic preview information, the selectable link must include dynamic preview information. *Id.* at 16. Such reasoning does not follow from the representations made to the Office. Rather, during prosecution, Patent Owner explained that the selectable link is a portion of the additional dynamic preview information, but did not explain in any way what makes up the additional dynamic preview information or that the selectable link must itself include additional dynamic preview information as Patent Owner now asserts. Ex. 1004, 114–115.

According to Patent Owner, the Examiner subsequently rejected the claims as obvious in view of Ögren and Aaltonen¹² and relied on Aaltonen’s Figure 22E for the limitation “displaying a selectable link embedded in the additional dynamic preview information to invoke the software application.” PO Resp. 16 (citing Ex. 1004, 84–85) (emphasis omitted). Patent Owner argues that it distinguished Aaltonen by explaining that Aaltonen’s Figure 22E does not disclose a selectable link embedded in the additional dynamic preview information, because Aaltonen’s link is not embedded in the additional dynamic preview information. *Id.* at 17–18 (citing Ex. 1004, 70–71). Patent Owner argues that it again emphasized that the selectable link may be selected by selecting a portion of the additional dynamic preview information, such as by moving a cursor over a portion of the dynamic preview information and actuating an input device. *Id.* Patent Owner

¹² U.S. Patent Application Publication 2006/0020904 A1, filed July 11, 2005, pub. Jan. 26, 2006 (“Aaltonen”).

asserts that because it was explained during prosecution that the “selectable link” is a “portion” of the additional dynamic preview information, the selectable link must include dynamic preview information. *Id.* For similar reasons articulated above, we are not persuaded that Patent Owner explained in any way that the selectable link must include additional dynamic preview information. Ex. 1004, 70–71. Moreover, the arguments that Ögren and Aaltonen do not disclose a selectable link “embedded in the additional dynamic preview information” were “expressly disclaim[ed]” in an interview summary noting the argument that Aaltonen is not prior art. *Id.* at 63. As we stated in our Decision on Institution, we are reluctant to rely on statements expressly disclaimed during prosecution and that the Examiner never accepted, and for that reason we find that the disclaimed arguments based on Ögren and Aaltonen do not form the basis of claim disavowal or disclaimer. Dec. 10.

According to Patent Owner, the Examiner subsequently rejected the claims again as obvious in view of Ögren and Wagner¹³ and relied on Wagner to meet “displaying a selectable link embedded in the additional dynamic preview information to invoke the software application.” PO Resp. 18 (citing Ex. 1004, 48–50). Patent Owner argues that it again emphasized that the selectable link may be selected by selecting a portion of the additional dynamic preview information, such as by moving a cursor over a portion of the dynamic preview information and actuating an input device. *Id.* (citing Ex. 1004, 39). Patent Owner asserts that because it was explained

¹³ U.S. Patent App. Pub. 2004/0155908 A1, filed June 20, 2003, pub. Aug. 12, 2004 (“Wagner”).

during prosecution that the “selectable link” is a “portion” of the additional dynamic preview information, the selectable link must include dynamic preview information. *Id.* For similar reasons articulated above, we are not persuaded that Patent Owner explained in any way that the selectable link must include additional dynamic preview information. Ex. 1004, 39.

Patent Owner also argues that during an interview with the Examiner, the Patent Owner and Examiner agreed that presentation of static icons in, for example, a dynamic bar was distinct from presentation of dynamic preview information in a dynamic bar. PO Resp. 19 (citing Ex. 1004, 62). That “agreement” was with respect to information in a dynamic bar, and not in an expanded dynamic bar, and, therefore Patent Owner’s arguments are not commensurate in scope with the disputed phrase. Moreover, such agreement does not mean, necessarily, that dynamic information cannot include a static link or icon, *along with dynamic information beside it*. Patent Owner did not explain in any way that the selectable link must include additional dynamic preview information, even if a part of or next to dynamic information as Patent Owner now asserts. Ex. 1004, 62.

In summary, Patent Owner’s arguments based on the prosecution history of the ’384 patent do not persuade us that “a selectable link embedded in the additional dynamic preview information” must be interpreted as narrowly as Patent Owner suggests for the reasons above. As explained above, the prosecution history on this point is equivocal, and does not persuade us of a clear and unmistakable disavowal or disclaimer of the scope of the term to exclude information such as an icon or link next to dynamic descriptive information. *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1325–26 (Fed. Cir. 2003).

Other portions of the prosecution history underscore the lack of any disavowal or disclaimer of such claim scope during prosecution, and in fact support Petitioner’s narrower construction. During prosecution, Patent Owner relied on portions of the specification of the ’384 patent to provide written description support for the “selectable link embedded in the additional dynamic preview information” limitation. According to statements made during prosecution, support for “a selectable link embedded in the additional dynamic preview information” is found in Figures 4 and 6 (the same Figures 4 and 6 in the ’384 patent) and paragraphs in the original specification that correspond to the same paragraphs in the ’384 patent. *See* Ex. 1001, 7:21–42, 7:60–8:2; *see also* Ex. 1004, 114–15. In particular, the prosecution history includes the following statement:

Claim 28 describes the expanded dynamic bar including additional dynamic preview information and “a selectable link embedded in the additional dynamic preview information to invoke the software application.” This is shown, for example, in FIGS. 4 and 6 of the present application, and described in paragraphs [0046] and [0048]. A person skilled in the art would understand that a “*selectable link*” is a portion of the display, often text, that a user can select, for example by positioning a cursor over the link and actuating an input device, such as a mouse button or a clickable trackball switch. This selectable link is *embedded* in the additional dynamic preview information of the expanded dynamic bar. That is, *the selectable link may be selected by selecting a portion of the additional dynamic preview information*, such as by moving a cursor over a portion of the dynamic preview information and actuating an input device.

Ex. 1004, 114–115 (emphasis omitted, italics added).

We do not discern from the prosecution history a clear disavowal or disclaimer of the scope of the term “additional dynamic preview

information” to exclude a link, for example, that is next to dynamic information, especially in light of the above passage. Based on the above passage, referring to the same Figures 4 and 6, a static link that is next to dynamic information would all be considered part of “additional dynamic preview information.” This is shown in Figure 6 reproduced above, for example, where the seemingly static “call voice mail” link is next to dynamic information “5.”

Patent Owner does not address the above statement from the prosecution history, but rather argues that Figures 4 and 6 and the specification explaining those figures supports its construction. PO Resp. 20–22. Figure 6 is shown above, and Figure 4, annotated by Patent Owner, is reproduced below.

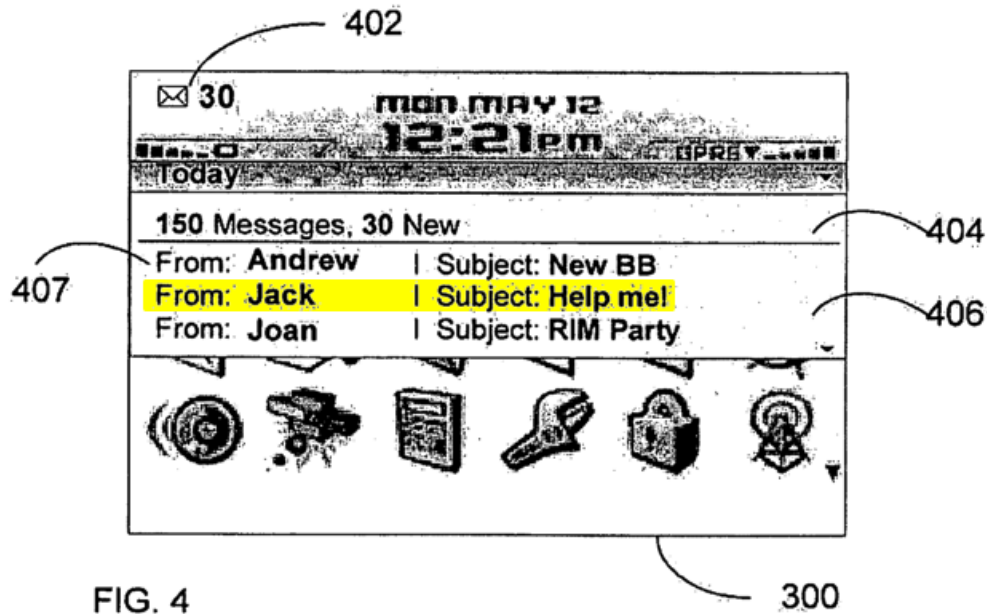


Figure 4 from the '384 patent, annotated by Patent Owner, illustrates a main screen following user action. With respect to Figure 4, Patent Owner argues that “the displayed unread messages 404 / recent new emails 406 make up the additional *dynamic* preview information of expanded drop

down 407 and the “*selectable link*” is “*embedded*” in the dynamic information because the link (*e.g.*, the list) includes dynamic information (*e.g.*, unread messages 404 / recent new emails 406).” *Id.* at 20 (footnote omitted). The specification, however, describes the list, what Patent Owner argues is the link, as the “recent emails,” which a person having ordinary skill in the art would have understood means what is seen in 407. Ex. 1001, 7:32–40. The list or link includes static information, in that it is not changing, even though the list is beside or part of the dynamic preview information seen in 404. Accordingly, we are not persuaded by Patent Owner’s argument with respect to Figure 4, because it is not consistent with the actual written description in the specification. Moreover, Patent Owner’s arguments that the highlighted portion seen above in reproduced Figure 4 is dynamic (PO Resp. 20, n.3) have not been explained adequately with support from the specification, and would appear to be inconsistent with Patent Owner’s arguments regarding Figure 6.

With respect to Figure 6, Patent Owner argues that the “50 unread” is the only link that meets the disputed phrase because the link includes dynamic information (*e.g.*, 50). *Id.* at 21–22. The specification, however, describes in detail link 610 (“Call Voice Mail”) as exemplary of the type of link found in the expansion pop-up 602. Ex. 1001, 7:60–66. There is no discussion of the “50 unread” link as representative of the claimed invention. Patent Owner’s suggestion that the claims cover the portion of the figure disclosing the “50 unread” link, but not link 610, lacks adequate support. See PO Resp. 23. We find that the only described link, link 610, along with element 608 (the dynamic count of voicemails, “5,” next to link 610), provide support for the disputed phrase, because the combination of the two

(e.g., “5 Call Voice Mail”) is “additional dynamic information” that includes a selectable link (“Call Voice Mail”).

We also have considered the testimony of Dr. Ligler, to which we are directed. See PO Resp. 22 (citing Ex. 2007 ¶¶ 42–45). His brief testimony on the matter does not assist us much at all and is based on the same flawed premises we have addressed already. See, e.g., Ex. 2007 ¶ 45 (“[I]t would seem to logically follow that the ‘selectable link’ must itself contain dynamic preview information.”).

For all of the reasons discussed above, we are not persuaded by Patent Owner’s arguments that “a selectable link embedded in the additional dynamic preview information” requires the additional dynamic preview information to be preview information that is entirely dynamic and requires the selectable link to include such dynamic preview information. PO Resp. 11. Based on the record before us, “a selectable link embedded in the additional dynamic preview information” means that additional dynamic preview information includes dynamic information, but it can also include other types of information such that the “selectable link” may or may not include dynamic information.

D. Obviousness Based On Cadiz

Petitioner alleges that claims 1, 4–7, and 10–13 are unpatentable as obvious over Cadiz under 35 U.S.C. § 103(a). Pet. 21–44. In support of its showing, Petitioner relies upon the declaration of Dr. Dan R. Olsen, Jr. *Id.* (citing Ex. 1002). Petitioner asserts that the claims would have been obvious based on the “person-centric interface” and, alternatively, based on the “email-centric interface.” See, e.g., Pet. 15–16.

1. Cadiz

Cadiz describes a system and method of providing peripheral awareness of information to a user. Ex. 1005, Abstract. The method automatically and dynamically provides current information in an interactive peripheral display utilizing a customizable dynamic object, or “ticket,” paired with a “viewer.” *Id.* Each ticket is represented by a data structure such as an XML data file and includes instructions as to what information or communications contact is to be presented by the ticket as well as pointers to particular services that represent means for accessing or interacting with the information or communications contacts. *Id.* ¶ 66.

Figure 2 of Cadiz is reproduced below.

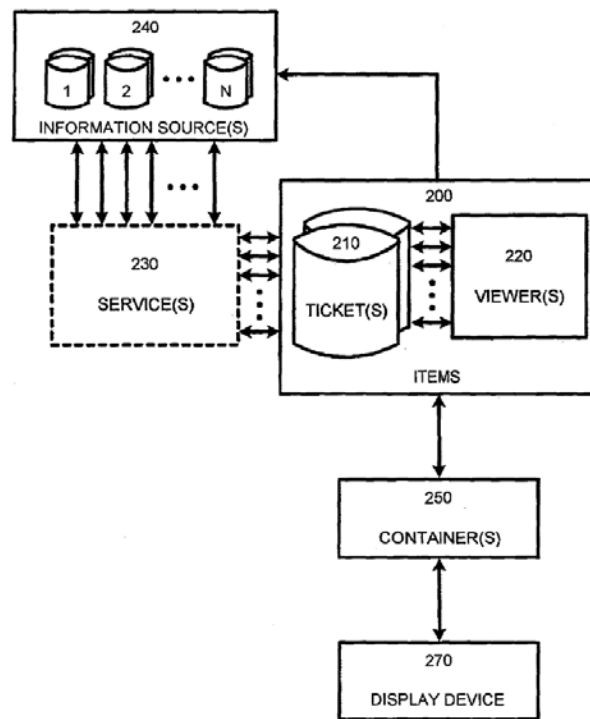


FIG. 2

Figure 2 depicts a “high level general architectural diagram illustrating exemplary system components.” *Id.* ¶ 57. Figure 2 shows the paired tickets

and viewers forming items 200 that may make use of services 230 that “dynamically track, interact with, and/or watch one or more particular information sources 240.” *Id.* ¶ 76. “[S]ervices 230 are not limited to merely providing communications” to sources of information, and “represent shared code or functions that provide functionality for accessing, receiving, retrieving, and/or otherwise interacting with any conventional information, source of information, or communications contact.” *Id.* ¶¶ 84–85.

Examples of services 230 include “the functionality necessary for monitoring an email folder . . . for sending or receiving email messages[, and] . . . for communicating with contacts or transferring information via any number of conventional methods, such as, for example instant messaging.”

Id. ¶ 86. Container 250 containing hosting items 200 may, in one embodiment, take the form of a sidebar along either a portion of display device 260 or the entire display device 260. *Id.* ¶ 95.

Interaction with items 200 in containers 250 “call[s] up actionable expanded information or contact windows” that Cadiz refers to as “enhanced tooltip windows.” *Id.* ¶ 105. These “tooltips are actionable in the sense that . . . if a user clicks on or otherwise selects particular information or elements within the tooltip, the tooltip will automatically link to more detailed information for the particular information or contact represented by the item 200.” *Id.* ¶ 106.

Cadiz discloses several examples of these tooltip windows. Figure 8B of Cadiz is reproduced below.

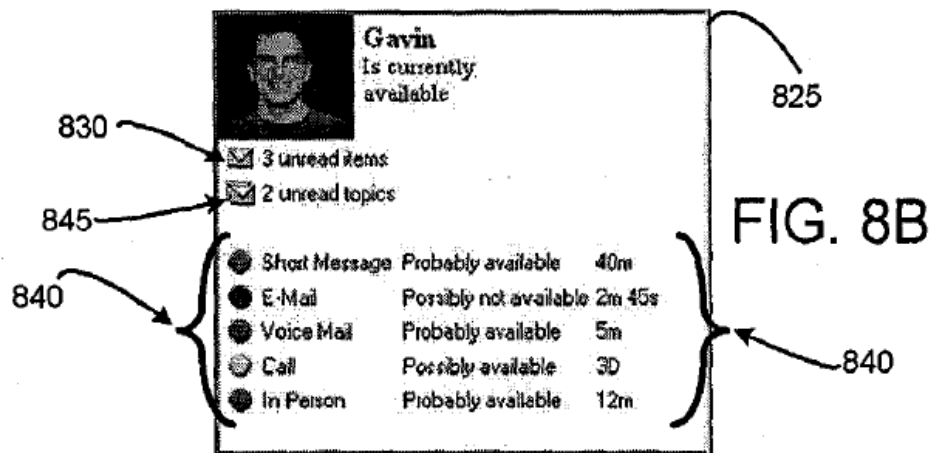


Figure 8B depicts enhanced tooltip window 825 activated by clicking on person item 815 in a sidebar. *Id.* ¶ 201. Window 825 provides a “short summary of new messages” and “availability via any of five individual communications channels.” *Id.* Window 825 also provides a time indicating when the person was last available. *Id.*¹⁴

Figure 10 of Cadiz is reproduced below.

¹⁴ The parties refer to the embodiment described with respect to Cadiz Figures 8A and 8B as the “person-centric interface.” *See, e.g.*, Pet. 14; PO Resp. 22; Reply 8.

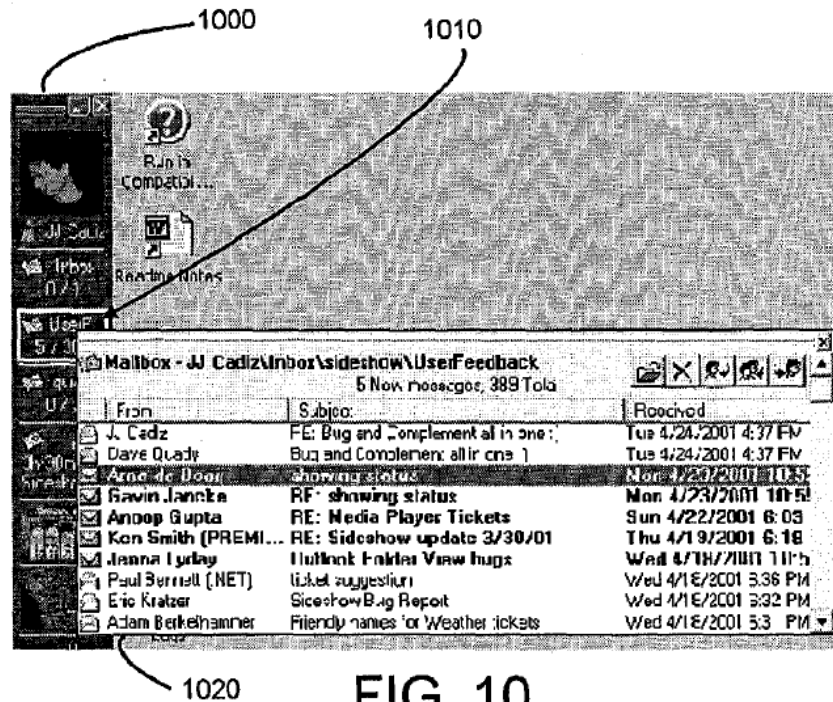


FIG. 10

Figure 10 depicts enhanced tooltip email window 1020 created by clicking on email type ticket/item 1010 in container/sidebar 1000. *Id.* ¶ 203.

Window 1020 “allows user interaction with received email as from within a typical email application.” *Id.*¹⁵

2. Claim 1

a. Limitation-by-Limitation Analysis

Claim 1 recites “[a] method for controlling an apparatus comprising a display.” Ex. 1001, 11:31–32. Petitioner contends that Cadiz discloses a computing device including a display. Pet. 12 (citing Ex. 1002 ¶¶ 38–42; Ex. 1005 ¶¶ 50, 54, 57, 74, 76, 90, 94, Figs. 4, 5, 6A, 6B, 8A, 8B, 10).

Patent Owner does not dispute that Cadiz discloses this limitation. We are

¹⁵ The parties refer to the embodiment described with respect to Cadiz Figure 10 as the “email-centric interface.” See, e.g., Pet. 14; PO Resp. 34; Reply 14.

persuaded by Petitioner’s showing and find that Cadiz discloses “[a] method for controlling an apparatus comprising a display.” *See, e.g.*, Ex. 1005 ¶¶ 50 (“apparatus”), 54 (“display”), Figs. 2 (“270 Display Device”), 8A–8C, 10.

Claim 1 recites “displaying a dynamic bar on the display” and “displaying dynamic preview information in the dynamic bar.” Ex. 1001, 11:33–35. Petitioner contends that Cadiz discloses display of a dynamic sidebar on a display that displays dynamic preview information in both the person-centric and email-centric interfaces. Pet. 13–18, 22–23. For instance, Cadiz describes a sidebar on a display that “host[s] one or more columns of items in a persistent interactive display strip along one edge of a conventional display device” and that provides “dynamic communication access and information awareness.” Ex. 1005 ¶¶ 16, 70. Petitioner points to several passages in Cadiz that describe displaying dynamic preview information in a dynamic bar as claimed (e.g., the “person-centric interface” illustrated in Figures 6B and 8A–C, and the “email-centric interface” illustrated in Figure 10). Pet. 14–18, 22–23 (citing multiple paragraphs and figures from Ex. 1005; Ex. 1002 ¶¶ 43–52, 59–60). Patent Owner does not dispute that Cadiz discloses this limitation or any of Petitioner’s related assertions.

Petitioner explains persuasively based on its evidence and argument, and we find, that Cadiz discloses “displaying a dynamic bar on the display” and “displaying dynamic preview information in the dynamic bar” in its person-centric and email-centric interfaces. *See* Pet. 13–18, 22–23. For instance, we find that Cadiz’s person-centric interface illustrated in Figures 6B and 8A shows a dynamic bar (“sidebar” that provides “peripheral awareness interface” 600/800) displaying dynamic preview information

(frontal close-up when person is available and profile when person is busy). Ex. 1005 ¶¶ 70, 197, 198, 201. With respect to the email-centric interface illustrated in Figure 10, Petitioner explains, and we find, that Cadiz shows a dynamic bar (“sidebar” 1000 that provides “email type ticket/item 1010”) displaying dynamic preview information (number of messages). Ex. 1005 ¶¶ 69, 72, 203. Accordingly, we are persuaded by Petitioner’s showing, which we adopt as our own, that Cadiz describes “displaying a dynamic bar on the display” and “displaying dynamic preview information in the dynamic bar.”

Petitioner further contends that Cadiz discloses “the dynamic preview information being determined from information managed by a software application, the dynamic preview information being updated to reflect a change to the information managed by the software application” as recited in claim 1. Ex. 1001, 11:35–39. The Petition relies on the description in Cadiz, for example, that describes management of dynamic preview information through services 230 (Fig. 2) that include software applications. Pet. 18–22, 14–15 (citing multiple paragraphs and figures from Ex. 1005; Ex. 1002 ¶¶ 53–58, 61–63).

For instance, and with respect to the person-centric interface, Petitioner contends that the availability or status information in the sidebar of Fig. 8A is managed by service(s) 230. Pet. 20 (citing Ex. 1005 ¶ 84; Ex. 1002 ¶ 54). Each person item in, for example, Cadiz Fig. 8A (e.g., 810, 815, and 820), which Petitioner equates to the dynamic preview information in a

dynamic bar, includes a ticket.¹⁶ Pet. 19–20 (citing Ex. 1005 ¶ 21). The ticket includes instructions as to what information or communications contact is to be represented by the ticket as well as pointers to particular service(s) 230 that represent *any of a number* of conventional means for interacting with the information or communications contacts. *Id.* Thus, we find that the ticket can contain pointers to, or input from, a single service. *See, e.g.*, Ex. 1005, Fig. 2 (item 230 “SERVICE(S)”). The Petition further explains that Cadiz describes that the current information or status is automatically either retrieved or received, either by pulling or pushing such information from any one or more of a number of conventional sources 240 by using the functionality associated with one or more services 230 and that the availability or status information in the sidebar of Fig. 8A is thus managed by service(s) 230. Pet. 20 (citing Ex. 1005 ¶ 84; Ex. 1002 ¶ 54). Cadiz describes a software application, such as MSN Messenger, as an example of a service 230. Ex. 1005 ¶ 185. As further explained in the Petition, Cadiz describes that the dynamic preview information, e.g., the availability or status information in the sidebar of Fig. 8A, is updated to reflect a change to the information managed by the software application. Pet. 21–22 (citing Ex. 1005 ¶¶ 59, 201). We find that Cadiz’s person-centric interface discloses this limitation because it describes that the availability or status information in the sidebar of Fig. 8A may be determined from information managed by a single service 230, such as software application

¹⁶ Cadiz explains that a ticket when paired with a viewer provides peripheral awareness of information of interest to a user and that the combination of a ticket and a viewer is termed an “item.” Ex. 1005 ¶ 20, Fig. 2 (item 200).

MSN Messenger, and that such availability or status information is updated to reflect a change to the information managed by the software application.

For the email-centric interface, Petitioner contends that Cadiz’s services include functionality for monitoring email folders as well as sending and receiving emails, including email applications. Pet. 23–24 (citing in part Ex. 1005 ¶¶ 72, 203). Petitioner also contends that Cadiz describes automatic updating of preview information (such as status changes of availability in the person-centric example, and updating email tickets/items in the email-centric interface) by using functionalities associated with services 230. Pet. 22, 24. Patent Owner does not dispute that Cadiz’s email-centric interface discloses this limitation. We are persuaded by Petitioner’s showing, which we adopt as our own, and find that Cadiz describes the “dynamic preview information being determined from information managed by a software application [(e.g., services 230)], the dynamic preview information being updated to reflect a change to the information managed by the software application.”

Claim 1 further recites “expanding the dynamic bar to display an expanded dynamic bar in response to a first input from an input device, [and] displaying the expanded dynamic bar.” Ex. 1001, 11:40–43. Petitioner contends that Cadiz describes expanding the dynamic bar to display an expanded dynamic bar in response to a first input. Pet. 25–29 (citing multiple paragraphs and figures from Ex. 1005; Ex. 1002 ¶¶ 64–70). Patent Owner does not dispute that Cadiz discloses this limitation or any of Petitioner’s related assertions. We find, based on Petitioner’s argument and evidence, that Cadiz discloses this limitation in both the person-centric and email-centric interfaces. For example, Cadiz describes that interaction with

items in a sidebar “call[s] up actionable expanded information or contact windows, namely ‘enhanced tooltip windows,’ that provide further levels of detail beyond that provided by the iconized ticket thumbnail.” Ex. 1005

¶ 105. For the person-centric interface, illustrated in Fig. 8B, we find that Cadiz meets this limitation by explaining that “a dynamic person window or ‘enhanced tooltip person window 825 [is] accessed by selection of one of the person items 815 of FIG. 8A.” Ex. 1005 ¶ 201. For the email-centric interface, illustrated in Fig. 10, we find that Cadiz meets this limitation by explaining that “[u]ser selection of the email ticket/item 1000 serves to expand/open an enhanced tooltip email window 1020 which allows user interaction with received email as from within a typical email application.”

Id. ¶ 203. For all of these reasons, we are persuaded by Petitioner’s showing, which we adopt as our own, and find that Cadiz describes “expanding the dynamic bar to display an expanded dynamic bar in response to a first input from an input device, [and] displaying the expanded dynamic bar.”

Claim 1 further recites that “displaying the expanded dynamic bar” comprises

displaying additional dynamic preview information determined from the information managed by the software application, the additional dynamic preview information being different from the dynamic preview information displayed in the dynamic bar, and the additional dynamic preview information being updated to reflect the same or different change to the information managed by the software application.

Ex. 1001, 11:44–12:3. Petitioner contends that Cadiz discloses this limitation. Pet. 29–37 (citing multiple paragraphs and figures from Ex. 1005; Ex. 1002 ¶¶ 71–79). Aside from its ongoing argument that Cadiz’s

person-centric interface fails to disclose the claimed “software application,” which we address below, Patent Owner does not dispute that Cadiz discloses this limitation or any of Petitioner’s related assertions. Petitioner explains persuasively based on its evidence and argument, and we find, that Cadiz discloses this limitation. *See* Pet. 29–37.

Cadiz describes, for the “person-centric interface,” that person window 825 of Fig. 8B (expanded dynamic bar) includes “further information about the person or entity, as well as action buttons for initiating communication via any of a number of conventional communications channels.” Ex. 1005 ¶ 183. As another example, Cadiz describes, with respect to the “email-centric interface,” that “[u]ser selection of the email ticket/item 1000 serves to expand/open an enhanced tooltip email window 1020 which allows user interaction with received email as from within a typical email application.” *Id.* ¶ 203. Petitioner further contends, and we find, that the additional dynamic preview information is determined from the information managed by the software application. For the person-centric interface, we find, for example, that while a person item may dynamically display a frontal/profile of a person’s face to indicate a person’s availability via conventional communications channels such as MSN Messenger (Fig. 8A), a corresponding person window may dynamically display more detailed information regarding the person’s availability, such as availability and a time since last available (Fig. 8B) associated with the same application (messenger). *See* Pet. 32 (citing multiple paragraphs and figures from Ex. 1005; Ex. 1002 ¶ 74). For the email-centric interface, we find, for example, that although the information displayed in both the email item 1010 (Fig. 10) and the corresponding email window 1020 (Fig. 10) is different, it is

dynamically provided via the same services or applications. *See* Pet. 34–36 (citing multiple paragraphs and figures from Ex. 1005; Ex. 1002 ¶ 77–78). We further find that Cadiz discloses updating the additional dynamic preview information managed by the software application because “a change to the managed information results in dynamically updating both the information displayed in the sidebar and the further information displayed in the person window [for the person-centric interface]” or “the email window 1020 of FIG. 10 [for the email-centric interface].” *See* Pet. 33 (citing Ex. 1002 ¶ 75), 36 (citing Ex. 1002 ¶ 79). Notwithstanding Patent Owner’s arguments, which we address below, we are persuaded by Petitioner’s showing explained above, which we adopt as our own, that Cadiz discloses the “displaying additional dynamic preview information” step quoted above.

Claim 1 recites “displaying a selectable link embedded in the additional dynamic preview information to invoke the software application; and activating the software application in response to a second input invoking the link.” Ex. 1001, 12:4–8. Petitioner contends that this limitation would have been obvious based on Cadiz for both the “person-centric interface” and the “email-centric interface.” Pet. 37–45 (citing multiple paragraphs and figures from Ex. 1005; Ex. 1002 ¶¶ 80–98). For instance, Petitioner directs attention to Cadiz’s description that action buttons in person-centric interface window 825 of Figure 8B are “for initiating communication via any of a number of conventional communications channels, i.e. email, voice mail, instant messaging (IM), . . . etc.” Pet. 37 (quoting Ex. 1005 ¶ 183). Petitioner further contends that because the action buttons are for initiating communication they are selectable. Pet. 38. Petitioner further contends that because the action

buttons are included in person window 825, which displays further information about the person or entity of interest (“additional dynamic preview information”), the action buttons are embedded in the additional dynamic preview information, consistent with the description of Fig. 4 in the ’384 patent. *Id.* at 37. Petitioner also argues, and we find, that the buttons correspond to the claimed “second input” for invoking the action button because, as Petitioner points out, the person window is displayed in response to a first input, followed by selecting the action button within the window. *See* Pet. 38.

Petitioner contends, however, that the action buttons are not selectable links. Pet. 40. Petitioner argues, directing to portions of Cadiz along with the testimony of Dr. Olsen, that links for invoking software applications were well known at the time of the invention. *Id.* (citing Ex. 1005 ¶¶ 77, 106, 108, and 186; Ex. 1002 ¶ 86). We agree, and find that using such links was well known. Ex. 1005 ¶¶ 77, 106, 108, and 186; Ex. 1002 ¶ 86. Petitioner further contends that it would have been obvious to modify Cadiz by including a selectable link embedded in the additional dynamic preview information to provide the same functionality as the action buttons. Pet. 40. Petitioner argues that such a modification would have been not only well known in the art, as described by Cadiz, but also desirable because doing so would have allowed for displayed information itself to be selected to invoke communications software application, rather than a separate actionable element, reducing visual clutter on the display, thereby resulting in a better user experience. Pet. 40–41 (citing Ex. 1002 ¶¶ 86–89). Notwithstanding Patent Owner’s arguments, which we address below, we are persuaded by Petitioner’s showing, which we adopt as our own, that record evidence

supports Petitioner's contentions that it would have been obvious to include a selectable link as claimed in Cadiz's person-centric interface. *See* Ex. 1002 ¶¶ 86–88 (describing motivation to modify Cadiz by adding selectable link to additional dynamic preview information).

For the email-centric interface, Petitioner directs attention to Cadiz's description that a user may interact with any message in window 1020 in the same manner as if the messages were being accessed or viewed within the user's email application, such that the user can read the message, forward, delete, or reply to the message or perform any other conventional messaging type action from within the email pop-up window. *Pet.* 41–42 (citing Ex. 1005 ¶ 72). Petitioner further contends that, according to Cadiz, functionality may be achieved by providing an email specific viewer having desired email functionality, or by providing a viewer that instantiates an instance of the user's email program for purposes of displaying the inbox folder. *Id.* at 42 (citing Ex. 1005 ¶ 72). Petitioner asserts that email window 1020 (Fig. 10) shows a highlighted email message entry indicating that it was selected ("selectable"), consistent with Cadiz's disclosure that a user can interact with messages. *Id.* (citing Ex. 1005 ¶ 72; Ex. 1002 ¶ 91). Petitioner also asserts, and we find, that "selecting an email message entry is a 'second input'" as claimed "because a first input was required to display the email window 1020." *Id.* (citing Ex. 1002 ¶ 91).

Missing from Cadiz, according to Petitioner, is that the message entry is or includes a "link which when activated, invokes the software application." *Pet.* 43. For reasons similar to those above with respect to the person-centric interface, Petitioner argues that it would have been obvious in view of Cadiz and the knowledge of a person having ordinary skill in the art,

to modify Cadiz’s email window 1020 such that the message entry is or includes a link, which when activated invokes the email software application that manages the information used to determine the information displayed by sidebar 1000 and email window 1020. *Id.* (citing Ex. 1002 ¶ 94). Petitioner contends, directing to portions of Cadiz along with the testimony of Dr. Olsen, that links for invoking software applications were well known at the time of the invention. *Id.* at 44 (citing Ex. 1005 ¶¶ 77, 97, 106, 108, 186; Ex. 1002 ¶ 95). We agree, and find that it was known at the time of the invention to include links for activating software applications using conventional web browser-based techniques. Ex. 1005 ¶¶ 77, 97, 106, 108, 186; Ex. 1002 ¶ 95. Lastly, Petitioner contends, and we agree, that it would have been obvious to include a link to invoke email software, since doing so would have resulted in a better user experience and provided additional functionalities, and would have yielded a predictable result. Pet. 44–45 (citing Ex. 1002 ¶¶ 95–97); Reply 15–16 (citing Ex. 1005 ¶ 72, Fig. 10; Ex. 1018, 176:23–182:8, 29:18–43:14). Notwithstanding Patent Owner’s arguments, which we address below, we are persuaded by Petitioner’s showing, which we adopt as our own, that record evidence supports Petitioner’s contentions that it would have been obvious to include a selectable link as claimed in Cadiz’s email-centric interface.

b. Patent Owner’s Contentions

Patent Owner makes three arguments with respect to claim 1: (1) Cadiz’s person-centric interface does not disclose or render obvious the claimed “software application;” (2) Cadiz’s person-centric interface does not disclose or render obvious “a selectable link embedded in the additional dynamic preview information;” and (3) Cadiz’s email-centric interface does

not disclose or render obvious a “selectable link” that “invokes the software application.” PO Resp. 23–38. We address each argument in the order presented by Patent Owner.

1. “*software application*”

Patent Owner argues that claim 1 refers to “the software application,” i.e., the same “software application” that is recited throughout each claim and that Petitioner fails to identify, with respect to Cadiz’s person-centric interface, a software application that meets all of the requirements in the independent claims. PO Resp. 23 (citing Ex. 2007 ¶ 57). Cadiz refers to a user named “Gavin” when describing the availability function. Ex. 1005, Fig. 8B. In particular, Patent Owner argues that a person having ordinary skill in the art at the time of the invention would have understood Gavin’s overall availability in Figure 8A is not provided by the same application that provides Gavin’s availability with respect to any of the communications channels in Figure 8B because Gavin’s availability with respect to the five communications channels in Figure 8B is provided by five different applications. PO Resp. at 26. Patent Owner contends, rather, that Gavin’s overall availability reflected in sidebar of Figure 8A (which accounts for Gavin’s availability via all communication channels) is provided by an application that aggregates Gavin’s availability, which is a different software application than any one of the five individual applications associated with the respective five communication channels in Figure 8B. *Id.* at 26–27 (citing Ex. 2007 ¶¶ 59–60). Lastly, Patent Owner argues that to the extent that it is argued that the application that provides the person item’s overall availability information in Figure 8A receives information from the applications that provide availability information regarding the

communications channels to determine overall availability, that argument fails. *Id.* at 28 (citing Ex. 2007 ¶ 62). The argument fails, Patent Owner asserts, because there is no disclosure in Cadiz regarding how a change in availability status provided by an application regarding one communications channel affects the overall availability information displayed in Figure 8A. *Id.* We are not persuaded by Patent Owner’s arguments.

Patent Owner’s arguments focus too narrowly on the exact embodiment shown and described in Cadiz Figs. 8A and 8B, without taking into consideration Petitioner’s showing, relying on Cadiz as a whole. While the Petition focuses on the “person-centric interface” illustrated in Cadiz Figures 8A and 8B to make its case, it is clear to us that Petitioner does not rely solely on the text of Cadiz that describes Figures 8A and 8B (*e.g.*, Ex. 1005 ¶ 201). Rather, the Petition, relies on multiple paragraphs from Cadiz that describe what is involved in the person-centric interface. *See* Pet. 14–22, 26–33, 37–41.

As explained in the Petition, each person item in, for example, Cadiz Fig. 8A (*e.g.*, 810, 815, 820), which Petitioner equates to the dynamic preview information in a dynamic bar, includes a ticket. Pet. 19–20 (citing Ex. 1005 ¶ 21). The ticket includes instructions as to what information or communications contact is to be represented by the ticket as well as pointers to particular service(s) 230 that represent any of a number of conventional means for interacting with the information or communications contacts. *Id.* Thus, the ticket can contain pointers to, or input from, a single service. *See, e.g.*, Ex. 1005, Fig. 2 (item 230 “SERVICE(S)"). The Petition further explains that Cadiz describes that the current information or status is automatically either retrieved or received, either by pulling or pushing such

information from any one or more of a number of conventional sources 240 by using the functionality associated with one or more services 230, and that the availability or status information in the sidebar of Fig. 8A is thus managed by service(s) 230. Pet. 20 (citing Ex. 1005 ¶ 84; Ex. 1002 ¶ 54). Cadiz describes a software application, such as MSN Messenger, as an example of a service 230. Ex. 1005 ¶ 185. As further explained, Cadiz describes that the dynamic preview information, e.g., the availability or status information in the sidebar of Fig. 8A, is updated to reflect a change to the information managed by the software application. Pet. 21–22 (citing in part Ex. 1005 ¶¶ 59, 201). We find that Cadiz describes that the availability or status information in the sidebar of Fig. 8A may be determined from information managed by a single service 230, such as software application MSN Messenger, and that such availability or status information is updated to reflect a change to the information managed by the software application.

The Petition also shows how Cadiz describes additional dynamic preview information that is determined from the information managed by the software application. Pet. 31–32. Cadiz describes that the information in enhanced tooltip window 825 of Fig. 8B, for example, displays “more detailed information for the particular information or contact represented by the *item*.”¹⁷ Ex. 1005 ¶¶ 105–106 (emphasis added). We agree with Petitioner, and find that Cadiz describes additional dynamic preview information that is determined from the information managed by the software application. In the example where the ticket is determined from

¹⁷ As explained earlier, an item includes a ticket, which includes the inputted information from a software application(s).

information managed by a single service, e.g., software application MSN Messenger, the additional dynamic preview information is also determined from the information managed by the software application, MSN Messenger. Indeed, Cadiz describes that a user may customize a ticket for a person item to track, receive, and display the person's availability *via a single communication channel* (e.g., software application, or service) such as MSN Messenger, which alone can provide the information for determining the dynamic preview information that is displayed in the person item (e.g., Fig. 8A) and in the tooltip window (Fig. 8B). Pet. 20–21, 31–32; Reply 11–12; Ex. 1005 ¶ 171.

Cadiz also describes that a user may customize a ticket for a person item to track, receive, and display the person's availability based on a determination of a best available communications channel. *Id.* This too would require the ticket to be determined from information managed by a software application representing the “best available” channel, e.g., MSN Messenger, that would also be displayed as one of the communication channels in Figure 8B, e.g., the additional dynamic preview information determined from information managed by the same software, e.g., MSN Messenger. Thus, we agree with Petitioner, and find that a person having ordinary skill in the art would have understood Cadiz to describe a customizable ticket for a person item to track, receive, and display the person's availability via a single communication channel (e.g., software

application, or service) such as MSN Messenger.¹⁸ In such an embodiment described in Cadiz, we find that there is a one-to-one correspondence between the person item window and the tooltip window insofar as the dynamic preview information shown in those windows would be determined from information managed by the same software, e.g., MSN Messenger. Patent Owner, however, only focuses on the exact embodiment shown in Figures 8A and 8B, where there are five communication channels shown in the tooltip window.

During Oral Argument, Patent Owner argued that Petitioner's argument that in Cadiz you can have a person item and a person window that is devoted to a single communications channel was first presented in the reply. Tr. 27:10–21. We disagree. The Petition provides an explanation of how the dynamic preview information is determined from information managed by a single software application, such as MSN Messenger. See, e.g., Pet. 20–22. Moreover, while Patent Owner was authorized and filed a sur-reply regarding dependent claim 4 (Paper 22), Patent Owner never asked to include in the sur-reply arguments addressing any allegedly new argument made in Petitioner's Reply with respect to independent claim 1, nor did Patent Owner represent to us that the arguments presented in Petitioner's Reply with respect to claim 1 were not responsive to arguments raised in

¹⁸ During oral argument, Patent Owner argued that having a person item and a person window for a single communications channel runs counter to Cadiz's stated purpose. Tr. 31:14–25. Nonetheless, Cadiz describes such an embodiment. Ex. 1005 ¶ 171 (claim 64 (claiming that the tooltip window includes *at least one* communication access point for the contact, meaning that only one communication access point, or channel may be included in the tooltip window)).

Patent Owner's Opposition. Tr. 27:19–21. We find that Petitioner's arguments are responsive to Patent Owner's arguments made in the Response, such as Patent Owner's argument that Cadiz must use some undisclosed, aggregate software to determine the status shown in Cadiz's Figure 8A. PO Resp. 26–28. For all of the above reasons, we are not persuaded by Patent Owner's argument that Petitioner fails to identify, with respect to Cadiz's person-centric interface, a software application that meets all of the “software application” requirements in the independent claims.

2. *“a selectable link embedded in the additional dynamic preview information”*

Next, Patent Owner argues that Cadiz's person-centric interface does not disclose or render obvious “a selectable link embedded in the additional dynamic preview information.” PO Resp. 30–34. Patent Owner argues that Cadiz's action buttons, for example, shown in Fig. 8B as round buttons on the left-hand side, do not include any dynamic information and thus are not selectable link(s) as claimed. *Id.* at 30–32. Patent Owner again relies on the alleged distinction it made during prosecution to “overcome” the rejections based on Aaltonen, Ögren, and Wagner in support of its argument similar to arguments we addressed above. *Id.* at 34–36. Lastly, Patent Owner argues that Dr. Olsen did not consider Aaltonen when rendering his opinions regarding the proper scope of the claims and further testified that a hypothetical did not satisfy the word embedded. *Id.* at 34.

As explained above in the claim interpretation section, Patent Owner has not shown that the claim phrase “a selectable link embedded in the additional dynamic preview information” requires the additional dynamic preview information to be preview information that is dynamic and requires the selectable link to include such dynamic preview information. Rather, as

explained above, “a selectable link embedded in the additional dynamic preview information” means that additional dynamic preview information includes dynamic information, but it can also include other types of information such that the embedded “selectable link” may or may not include dynamic information. We have considered all of Patent Owner’s arguments spanning pages 30 to 34 of its brief but do not find them persuasive, because they are based on Patent Owner’s narrow construction of the term “additional dynamic preview information comprising a selectable link.”

Moreover, all of Patent Owner’s arguments are based on Cadiz’s action buttons as the “selectable link.” But the Petition does not rely solely on the action buttons to meet the limitation. Rather, the Petition explains, with supporting evidence, that it would have been obvious to modify Cadiz’s system to include a selectable link in the additional dynamic preview information to provide the same functionalities as the action buttons. Pet. 40–41 (citing Ex. 1002 ¶¶ 86–89). Petitioner bases this obviousness argument on the idea that the dynamic text in the additional dynamic preview information can be the “selectable link,” and therefore Petitioner’s obviousness argument, which we agree with and adopt, applies even if we adopted Patent Owner’s construction. *Id.*; Reply 12–13. Patent Owner does not address this argument made in the Petition. As explained above, we determine that Petitioner has shown, by a preponderance of the evidence that including a selectable link in Cadiz’s additional dynamic preview information would have been obvious.

3. Email-centric interface invoking a software application

We next address Patent Owner's arguments that Cadiz's email-centric interface does not disclose or render obvious a selectable link that invokes the software application. PO Resp. 34–38. As explained above, we determine that Petitioner has shown with sufficient evidence that it was known at the time of the invention to include links for activating software applications using conventional web browser-based techniques. Pet. 43–44 (citing Ex. 1005 ¶¶ 77, 97, 106, 108, 186; Ex. 1002 ¶ 95). Patent Owner does not dispute that it was known at the time of the invention to include links for activating software applications. Rather, Patent Owner argues that Petitioner's reasons to modify Cadiz's email-centric interface to include "a selectable link" that "invokes the software application" are insufficient. PO Resp. 35–38. In particular, Patent Owner disagrees with Petitioner's reasoning that "if a user desired to use features that are not available in email window 1020, rather than needing to activate the email software application by selecting, for example, a separately displayed icon, the user could select the embedded link from directly within the displayed email window 1020" and that doing so "would have provided a better user experience." PO. Resp. 35 (quoting Pet. 44).

Patent Owner first argues that it is unclear how selecting a message entry could both allow a user to read the selected message (as described in Cadiz) within the email window 1020 and activate the fully-functioning email software application to provide the user with additional email functionality (as proposed by Petitioner). PO. Resp. 35–36. In support of its argument, Patent Owner directs us to Dr. Olsen's testimony that Cadiz's email viewer with the "desired email functionality" provides the user with

the capability to read a selected message either in the same window or in another window. *Id.* (citing Ex. 2009, 174:25–176:2, 176:21–177:3).

Patent Owner’s arguments are premised on a misreading of the Petition. Petitioner does not propose maintaining all of the functionality of Cadiz’s email-centric embodiment. Rather, Petitioner proposes including a link in a message entry, for example, of Fig. 10, that when selected would invoke the software application, which would include full functionality of the user’s email as opposed to Cadiz’s limited functionality. Pet. 43. Petitioner contends, and we agree, that a person having ordinary skill in the art would have been motivated to include such full functionality of the email software application for a better user experience. *Id.* at 44–45; Reply 15–17. Dr. Olsen’s testimony that Patent Owner directs us to does not undermine that conclusion, because the testimony is directed to what is described in Cadiz, and not Petitioner’s proposed modification. Ex. 2009, 174:25–176:2, 176:21–177:3

Patent Owner argues that if a person having ordinary skill in the art would have wanted full functionality of an email software application, they would not have done as Petitioner suggests, but rather “would have implemented Cadiz’s second option so that when a user clicks on the email item in the sidebar, the user’s email application is invoked.” PO Resp. 36 (citing Ex. 2007 ¶¶ 75–76). We agree with Petitioner, however, that Cadiz’s second option is not invoking or instantiating full capabilities of the email software application. Ex. 1005 ¶ 72. The disputed paragraph from Cadiz is reproduced below.

For example, assuming an email ticket for watching an email inbox folder, a summary of the number of messages received in the folder is preferably displayed in the thumbnail, i.e., the item

which is being hosted by the container. Further, clicking on, or hovering a pointing device over the email item serves to bring up an email pop-up window including the contents of the email inbox folder being tracked/watched in accordance with the email ticket instructions. *As described in further detail below, the user may interact with any message in this window in the same manner as if the messages with being accessed or viewed within the users' email application. In other words, given this example, the user can read the message, forward, delete, or reply to the message, or perform any other conventional messaging type action on the message from directly within the email pop-up window. This functionality is achieved either by providing an email specific viewer having the desired email functionality, or by providing a viewer that instantiates an instance of the users email program for purposes of displaying the tracked/watched inbox folder.*

Ex. 1005 ¶ 72 (emphasis added).

We agree with Petitioner that both implementations described above, provides only a subset of possible email functionalities. Pet. 44–45; Reply 15–16. For example, while Cadiz describes several “desired” functionalities for interacting with received messages, other functionalities one would expect in full, desktop email application are not described in Cadiz or shown in window 1020. *Id.*; Ex. 1005 ¶ 72; Ex. 1018 176:23–182:8 (deposition of Patent Owner’s expert acknowledging that email window 1020 does not appear to include functionality for composing a new email message, accessing a deleted folder, or creating a new folder), 29:18–43:15 (acknowledging functionalities in desktop version of email application). Accordingly, we are not persuaded by Patent Owner’s argument because it is based on a misreading of Cadiz.

Based on the foregoing, after consideration of all of the *Graham* factors¹⁹ and the full record before us, we are persuaded that Petitioner has established, by a preponderance of evidence, that claim 1 would have been obvious over Cadiz’s person-centric interface or Cadiz’s email-centric interface.

3. Claim 4

Claim 4 depends from claim 1 and recites: “wherein the apparatus comprises a cellular telephone.” Ex. 1001, 12:13–14. Petitioner asserts that Cadiz discloses a general-purpose computing device for its system, and “that such a device can be a cell phone.” Pet. 45–46 (citing Ex. 1002 ¶ 99; Ex. 1005 ¶¶ 15, 28, 50, 51, 55, 59, 63, 104, 176, 183). Patent Owner contends that Petitioner relies on person-centric and email-centric interfaces that are only carried out on a desktop operating system, and that Cadiz’s “generic statements” earlier in its specification regarding cell phones do not apply to these later embodiments. PO Resp. 38. According to Patent Owner, the person-centric and email-centric interfaces could not have been implemented on a cell phone in the same way as on a desktop interface. *Id.* at 39–40. Patent Owner also contends that Petitioner’s expert, Dr. Olsen, acknowledged that the difference in sizes between desktop systems and cell phones involved different design factors, but that he failed to consider those factors when rendering his opinion that one of ordinary skill in the art could and would have implemented Cadiz’s interfaces on a cell phone. *Id.* at 40–42.

¹⁹ Neither party has offered argument or evidence regarding objective indicia of nonobviousness.

In Reply, Petitioner argues that it never contended that Cadiz's interfaces would have been implemented in exactly the same way on a cell phone as Patent Owner contends. Reply 17. According to Petitioner, the figures describing those interfaces are merely exemplary, and numerous other portions of Cadiz support the conclusion that the interfaces could be implemented on a cell phone. *Id.* at 18–21. Petitioner contends that the later figures directed to the person-centric and email-centric interfaces “are merely ‘exemplary screen images’ of ‘working example[s]’” of the earlier, general concepts described in earlier figures that Cadiz expressly discloses as applicable to cell phones. *Id.* at 22 (citing Ex. 1005 ¶¶ 34–47, 57, 196). Petitioner also contends that Cadiz discloses use of its sidebar on an entire screen when the size of the device requires doing so on handheld devices. *Id.* at 23 (citing Ex. 1005 ¶ 91). Patent Owner sought permission to file a Sur-Reply to respond to allegedly new arguments and evidence in Petitioner's Reply. Paper 27. In the Sur-Reply, Patent Owner contends that Petitioner's arguments in Reply regarding claim 4 are “new and should not be considered.” *Id.* at 1. Patent Owner also contends that the “general concepts” Petitioner relies upon in Cadiz fail to establish that “all aspects of Cadiz's alleged invention would, or even could, have been implemented on all disclosed devices in the same way.” *Id.* at 2–3.

As an initial matter, we disagree with Patent Owner's argument that we should not consider Petitioner's Reply regarding claim 4 because it contains evidence and argument that go beyond the Petition. Sur-Reply 1. We view the additional evidence and argument as responsive to Patent Owner's argument in its Response, that Cadiz's disclosure of a “cell phone” did not apply to the specific embodiments relied on by Petitioner. *See* PO

Resp. 38–43. We also note that Patent Owner filed, and we considered, a Sur-Reply that addresses Petitioner’s Reply arguments with respect to claim 4.

We are also persuaded by Petitioner’s argument and evidence that Cadiz discloses use of the person-centric and email-centric interfaces on a cell phone. Cadiz repeatedly references the use of the invention, generally, on cell phones. Ex. 1005 ¶¶ 50, 51, 55, 59, 63, 104, 176, 183, 185, 194. Cadiz also discloses use of an embodiment on a handheld device. *Id.* at Fig. 6C. While Cadiz does not expressly disclose employing the person-centric and email-centric interfaces on cell phones, we agree with Petitioner that a fair reading of Cadiz is that those later embodiments build on the earlier general concepts, and that one of ordinary skill in the art would understand that the later embodiments could also be implemented on a cell phone. Reply 18. Cadiz even describes ways to accommodate the embodiments on smaller screens by stressing that viewers 220 are “resizable,” “containers 250 can either be ‘a portion of the display device 260’ or ‘the entire display device,’” and a “conventional ‘auto-hide’ function” can be implemented to keep containers 250 off of the main screen when desired. *Id.* at 20 (quoting Ex. 1005 ¶¶ 91, 95). Based on the foregoing, we agree with Petitioner’s argument and evidence, adopt it as our own, and find that Cadiz discloses the limitations of claim 4. Accordingly, Petitioner has shown by a preponderance of evidence that claim 4 would have been obvious over Cadiz.

4. Claim 7

Claim 7 depends from claim 6, which in turn depends from claim 1. Claim 7 recites, “in response to a user input invoking the icon, the software

application is activated.” Ex. 1001, 12:21–22. Petitioner asserts that “[w]hile Cadiz does not expressly disclose activating the software application in response to a user input invoking the icon, a POSA would have understood that the icons disclosed by Cadiz were capable of being selected (e.g., double-clicked) to activate an application.” Pet. 49 (citing Ex. 1002 ¶ 104). Petitioner further contends that it would have been obvious for the application portion to include icons associated with the applications Petitioner relies on in the context of claim 1, “such that invoking the icons activates the respective application.” *Id.* (citing Ex. 1002 ¶ 105). Patent Owner contends that the Petition lacks clarity regarding which “applications” discussed with respect to claim 1 Petitioner relies upon. PO Resp. 43–44. Patent Owner also argues that Petitioner’s expert, Dr. Olsen, admitted at deposition that he was referring to Microsoft Word as the application in question, which lacks support because Petitioner did not rely on Microsoft Word as the claimed “software application” in the context of claim 1. *Id.* at 44 (citing Ex. 2009, 146:19–148:12, 196:24–197:6). Patent Owner acknowledges that Dr. Olsen later clarified his testimony on redirect, asserting that the application he referred to in the context of claim 7 referred to email and messaging applications. *Id.* at 44–45 (citing Ex. 2009, 197:8–201:3). Patent Owner contends that Dr. Olsen’s “inability” to testify on this topic “undercuts the probative value of his testimony” and without his testimony Petitioner is left with insufficient attorney argument. *Id.* at 45–46. In its Reply, Petitioner argues that both the Petition and the expert declaration clearly identify the software applications in question, and Dr. Olsen’s “confusion during deposition” was later clarified. Reply 24 (citing Ex. 2009, 197:21–204:20).

In our view, the Petition and accompanying expert declaration adequately identify the software application referred to in claim 7 as the same applications at issue with respect to Petitioner’s contentions regarding claim 1. Pet. 49–50 (Petition referring to the applications described or discussed “above for claim 1” on three separate occasions); Ex. 1002 ¶ 105 (expert declaration referring to “applications that I discussed above for claim 1 regarding person- and email-centric interfaces”). Patent Owner asserts that Dr. Olsen’s inconsistent deposition testimony fatally undermines the Petition and declaration statements, but we disagree. Although Dr. Olsen may have been momentarily confused, given the adequacy of the Petition and Dr. Olsen’s declaration, and the later clarification on redirect examination, we do not find Dr. Olsen’s testimony so lacking that we discount his declaration statements and related statements in the Petition altogether. *See* Ex. 2009, 197:21–204:20 (expert clarifying that he was referring to email and text messaging software applications when referring to the applications referred to in the context of claim 1). Aside from the confusion regarding which “application” the Petition and expert referred to, Patent Owner does not take issue with Petitioner’s obviousness analysis—that activating a software application in response to invoking an icon would have been obvious—and we agree that the limitation is obvious based on Petitioner’s arguments and evidence, which we adopt as our own.

5. Claims 5, 6, and 10–13

Claims 5, 6, and 10–12 depend from claim 1, and claim 13 depends from claim 12. Ex. 1001, 12:15–20, 29–46. Petitioner argues that these claims would have been obvious over Cadiz. Pet. 46–48, 51–62. Patent Owner does not address Petitioner’s assertions regarding these claims or

argue that any of the claims would not have been obvious over Cadiz in the event that we conclude that claim 1 would have been obvious over Cadiz.

Claim 5 recites “following activation of the software application, displaying a user interface for the software application.” Petitioner acknowledges that Cadiz does not expressly disclose displaying a user interface for the software application following activation of that application. Pet. 46. Petitioner argues, however, that “it would have been obvious to implement such features in Cadiz’s system and processes in order to improve user experience.” *Id.* (citing Ex. 1002 ¶¶ 100-101). Petitioner also contends that Cadiz describes user interfaces for email messages and “identifies an instant messaging application that was known to have a user interface.” *Id.* (citing Ex. 1002 ¶ 101; Ex. 1005 ¶¶ 72, 185, 203). Petitioner argues that, given this teaching, modifying Cadiz would have been straightforward and would have yielded predictable results. *Id.* at 46–47. We are persuaded by Petitioner’s showing, which we adopt, that claim 5 would have been obvious in view of Cadiz.

Claim 6 recites “displaying an application portion on the display, the application portion comprising at least one icon.” Petitioner argues that Cadiz discloses an application portion that contains two icons in Figure 10. Pet. 47 (citing Ex. 1002 ¶¶ 102–103; Ex. 1005, Fig. 10). Petitioner also contends that one of ordinary skill in the art would have understood that “it would have been obvious to display a similar application portion with respect to the person-centric interface” shown in Figure 8A. *Id.* at 48 (citing Ex. 1002 ¶ 103). Petitioner relies in part on Cadiz’s disclosure of Microsoft Windows, which includes an application portion in the form of a desktop graphical user interface, and argues that one of ordinary skill in the art

“would have known that the icons are associated with a software application (e.g., Microsoft Word).” *Id.* (citing Ex. 1002 ¶ 103; Ex. 1005 ¶ 176, Figs. 6A, 9, 10, 12). We are persuaded by Petitioner’s showing, which we adopt, that claim 6 would have been obvious in view of Cadiz.

Claim 10 recites:

wherein the software application is a communications application, wherein the dynamic preview information is determined from information about one or more communications managed by the communications application, and wherein the additional dynamic preview information is also determined from the information about the one or more communications managed by the communications application.

Petitioner argues that Cadiz’s person-centric interface discloses an instant messaging software application that manages information that is displayed in Figure 8A (“dynamic preview information”) and person window 825 of Figure 8B (“additional dynamic preview information”). Pet. 51–52 (incorporating related discussion with respect to claim 1 at Pet. 13–37; citing Ex. 1002 ¶ 109; Ex. 1005 ¶¶ 19, 61–63, 170–172, 182–187, 196–201). Petitioner further contends that it would have been obvious “to display availability/status information in the sidebar of FIG. 8A and the person window 825 of FIG. 8B that is determined from communications messages exchanged with the people of interest to the user.” *Id.* at 52 (citing Ex. 1002 ¶ 110). Petitioner also argues that one of ordinary skill in the art would have been motivated to implement such functionalities because Cadiz discloses similar ways of tracking or receiving availability and status information, and explains the usefulness of such information. *Id.* at 52–53 (citing Ex. 1002 ¶ 110, Ex. 1005 ¶¶ 172–175, 185). With respect to the email-centric interface, Petitioner argues that Cadiz discloses an email application

(“communications application”) that displays information in sidebar 100 of Figure 10 (“dynamic preview information”) and email window 1020 of Figure 10 (“additional dynamic preview information”), where the information displayed is determined from information managed by the email application. *Id.* at 53 (incorporating related discussion with respect to claim 1 at Pet. 13–37; citing Ex. 1002 ¶ 111). Petitioner also contends that Cadiz discloses that the managed information, displayed in sidebar 1000 and email window 1020, is about one or more email communications. *Id.* at 53–54 (citing Ex. 1002 ¶ 112 and numerous paragraphs from Ex. 1005). We are persuaded by Petitioner’s showing, which we adopt, that claim 10 would have been obvious in view of Cadiz.

Claim 11 recites “wherein the dynamic bar further comprises an icon representing the software application, and the dynamic preview information is displayed in association with the icon.” Petitioner argues that Cadiz’s person-centric interface discloses person items 810, 815, and 820 in Figure 8A that includes “images or pictures of faces to represent the people embodied by the ticket.” Pet. 54 (quoting Ex. 1005 ¶ 182; citing Ex. 1005 ¶¶ 183, 197, 201, Figs. 6B, 8A). Petitioner also relies on Cadiz’s disclosure of “pictures, images, icons, avatars, etc.” to represent particular communications contacts. *Id.* at 55 (quoting Ex. 1005 ¶ 61; citing Ex. 1005 ¶¶ 19, 198). According to Petitioner, such “pictures, images, icons, avatars, etc.” constitute the claimed icons and “visually represent the communications availability or status of a contact (‘dynamic preview information’) via a communications channel (‘software application’), such as an instant messaging software application.” *Id.* (citing Ex. 1002 ¶ 115; Ex. 1005 ¶¶ 19, 61, 182, 196, 197, Figs. 6B, 8A; referring back to the

discussion of services in context of claim 1 at Pet. 17–25, 29–45). With respect to the email-centric interface, Petitioner argues that Cadiz’s email item 1010 in Figure 10 discloses an “envelope icon representing the email application described” with respect to claim 1. *Id.* at 55–56 (citing Ex. 1002 ¶ 116; Ex. 1005, Fig. 10). Petitioner further contends that the “icon is also displayed in association with the number of messages received (‘dynamic preview information’), similar to the icons associated with the counts of new events shown in FIGS. 5 and 6 of the ’384 patent.” *Id.* at 56 (citing Ex. 1001, 7:46–49, FIGS. 5–6; Ex. 1002 ¶ 116). We are persuaded by Petitioner’s showing, which we adopt, that claim 11 would have been obvious in view of Cadiz.

Claim 12 recites “wherein the expanded dynamic bar further comprises an icon representing the software application, and the additional dynamic preview information is displayed in association with the icon.” Petitioner argues that Cadiz’s person-centric interface discloses action buttons in person window 825 of Figure 8B that “are icons representing the software application because such buttons are graphical interface components that are selectable to activate the communications software application.” Pet. 57 (citing Ex. 1002 ¶¶ 119–120; Ex. 1005 ¶¶ 183, 194, 201, Fig. 8B). Petitioner also contends that Cadiz discloses envelope icons representing messages, that “the communication channels and the message communication information each have a corresponding icon, such that the icon represents the software application,” and that the icons are associated with the additional dynamic preview information in window 825. *Id.* at 58 (citing Ex. 1002 ¶¶ 121–122; Ex. 1005 ¶ 201, Fig. 8B). With respect to the email-centric interface, Petitioner argues that Cadiz’s email window 1020 of

Figure 10 discloses envelope icons positioned in association with additional dynamic preview information. *Id.* at 58–59 (citing Ex. 1002 ¶ 123). We are persuaded by Petitioner’s showing, which we adopt, that claim 12 would have been obvious in view of Cadiz.

Claim 13 recites “wherein the second input comprises selecting the icon.” Petitioner argues that its argument and evidence with respect to the person-centric interface in relation to claims 1 and 12 are equally applicable to claim 13, and that the action buttons in person window 825 can be invoked to activate the communications software application described with respect to claim 1. Pet. 60 (citing Ex. 1002 ¶ 127; incorporating arguments at Pet. 37–45, 57–60). With respect to the email-centric interface, Petitioner again relies on its previous arguments in the context of claims 1 and 12 and argues that “it would have been obvious to modify Cadiz’s email window 1020 such that the message entry is or includes an embedded link that, when selected via a second input, activates the email software application.” *Id.* at 61 (citing Ex. 1002 ¶ 128; incorporating arguments at Pet. 37–45, 57–60). Petitioner further contends that “[w]hile *Cadiz* does not expressly disclose that the second input comprises selecting the icon, it would have been obvious to implement such features in view of the disclosure of *Cadiz* and the knowledge” of one of ordinary skill in the art, in part because the envelope icons are already displayed, and using icons to activate software was well-known, as confirmed by Cadiz. *Id.* at 61–62 (citing Ex. 1002 ¶¶ 128–129; Ex. 1005 ¶¶ 77, 106, 108, 186). We are persuaded by Petitioner’s showing, which we adopt, that claim 13 would have been obvious in view of Cadiz.

6. *Summary*

Based on the foregoing, Petitioner has established by a preponderance of the evidence that claims 1, 4–7, and 10–13 are unpatentable as obvious over Cadiz under 35 U.S.C. § 103(a).

E. Obviousness Based On Cadiz and Ng

Petitioner alleges that claims 2 and 3 are unpatentable as obvious over Cadiz and Ng under 35 U.S.C. § 103(a). Pet. 62–65. In support of its showing, Petitioner relies upon the declaration of Dr. Olsen. *Id.* (citing Ex. 1002 ¶¶ 34, 130–137). Claim 2 depends from claim 1 and further recites “displaying a status portion on the display.” Ex. 1001, 12:9–10. Claim 3 depends from claim 2 and further recites “wherein displaying the status portion comprises displaying signal strength.” *Id.* at 12:11–12.

Ng describes “graphically providing alerts and notices on the display of [an] electronic device” such as a “cellular telephone.” Ex. 1006 ¶ 13. Petitioner relies on a status portion of Ng’s display. Pet. 62–63. Petitioner’s annotated Ng Figure 1 is reproduced below.

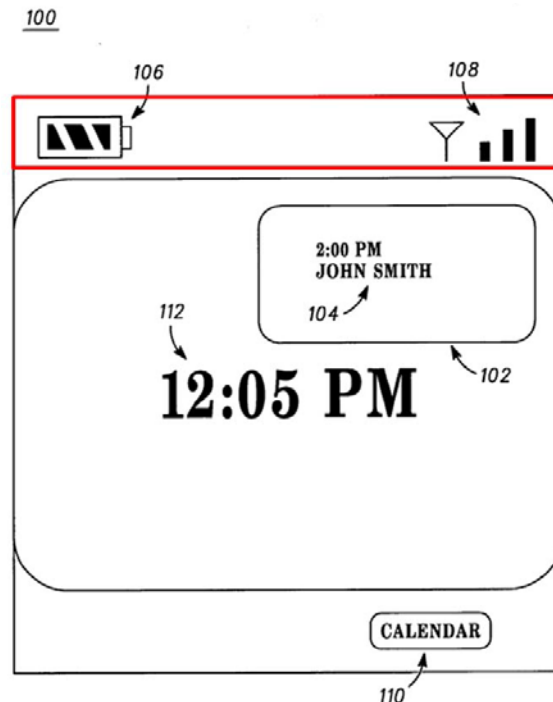


FIG. 1

Petitioner's annotated Figure 1 shows battery status indicator 106 and received signal strength indicator 108 at the top of exemplary screen saver display 100. Ex. 1006 ¶ 14, Fig. 1.

Petitioner argues that Ng discloses the limitations of claims 2 and 3. Pet. 62–65 (citing Ex. 1002 ¶¶ 34, 130–137; Ex. 1006 ¶¶ 13–14). More specifically, Petitioner contends that Ng discloses providing alerts, notices, and a status portion on a display, including a signal strength indicator. *Id.* at 62–63, 65. Petitioner also contends that it would have been obvious to modify Cadiz's person-centric and email-centric interfaces to display a status portion similar to Ng's status portion, "to display additional and conventional status notification features to improve overall usability of the device." Pet. 63–64 (citing Ex. 1002 ¶ 135). Petitioner further argues that such status information would have been particularly useful for the cell

phones disclosed in Cadiz and Ng, and that the implementation would have involved “a combination of known elements using known methods to achieve a predictable result (e.g., using known visual indicators to display battery or signal strength for a mobile device).” *Id.* at 64 (citing Ex. 1002 ¶¶ 135–136; Ex. 1005 ¶¶ 50–51, 55; Ex. 1006 ¶ 13).

Patent Owner does not raise any specific arguments relating to claims 2 and 3. We are persuaded by Petitioner’s showing, which we adopt as our own, that Cadiz in combination with Ng would have suggested the limitations of claims 2 and 3, and that the combination would have been obvious for the reasons provided by Petitioner.

F. Obviousness Based On Cadiz and Matthews

Petitioner alleges that claim 8 is unpatentable as obvious over Cadiz and Matthews under 35 U.S.C. § 103(a). Pet. 65–68. In support of its showing, Petitioner relies upon the declaration of Dr. Olsen. *Id.* (citing Ex. 1002 ¶¶ 138–144). Claim 8 depends from claim 1 and further recites “wherein the software application is an email application, and wherein the dynamic preview information comprises a preview of a content of an email.” Ex. 1001, 12:23–25.

Matthews describes a system for controlling a sidebar having tiles within a computing system. Ex. 1008, Abstract, ¶ 49. Figure 3 of Matthews discloses email notification tile 312 in a sidebar that contains a listing of emails 314. *Id.* ¶ 58, Fig. 3.

Petitioner notes that Cadiz “does not expressly disclose that the dynamic preview information comprises a preview of a content of an email,” but argues that it would have been obvious to implement those features in view of Matthews. Pet. 65. More specifically, Petitioner contends that

Matthews discloses “an email notification tile 312 in the sidebar that contains a listing of emails 314,” and “the listing includes a preview of . . . each email.” *Id.* at 65–67 (citing Ex. 1002 ¶¶ 140–141; Ex. 1008, Abstract, ¶¶ 49, 57, 58, Fig. 3). We agree, and find that Figure 3 of Matthews discloses previews of emails within the sidebar. Ex. 1008, ¶¶ 49, 57, 58, Fig. 3; *see also* Ex. 1002 ¶¶ 140–141. Petitioner further contends that it would have been obvious to modify Cadiz’s sidebar 1000 of Figure 10 to include email previews as disclosed by Matthews so that “a user could preview the content of an email without having to activate the email window 1020 or open the email software application.” Pet. 67 (citing Ex. 1002 ¶¶ 142–143).

Patent Owner does not raise any specific arguments relating to claim 8. We are persuaded by Petitioner’s showing, which we adopt as our own, that Cadiz in combination with Matthews would have suggested the limitations of claim 8, and that the combination would have been obvious for the reasons provided by Petitioner.

G. Obviousness Based On Cadiz and Smith

Petitioner alleges that claim 9 is unpatentable as obvious over Cadiz and Smith under 35 U.S.C. § 103(a). Pet. 68–71. In support of its showing, Petitioner relies upon the declaration of Dr. Olsen. *Id.* (citing Ex. 1002 ¶¶ 145–150). Claim 9 depends from claim 1 and further recites “wherein the software application is a telephone application, and wherein the dynamic preview information comprises an identity of a calling party.” Ex. 1001, 12:26–28.

Smith describes a system that operates to “inform a user of incoming and pending messages, such as fax mail, e-mail, voice mail, etc.” Ex. 1009,

3:53–54. Figure 7A of Smith discloses a mobile device displaying information regarding a received telephone call that identifies the calling party. *Id.* at Fig. 7A (“Steve Edmonds”).

Petitioner argues that Cadiz discloses that its device 100 can be a telephone, and argues that it would have been obvious to modify Cadiz to include a telephone application in its person-centric interface “so that a user could take advantage of telephone functionalities related to the information displayed in the person-centric interface (e.g., make calls, view missed calls, listen to voicemails).” Pet. 68–69 (citing Ex. 1002 ¶¶ 145–147); Ex. 1005 ¶¶ 84, 183, Figs. 8B, 8C). Petitioner notes that Cadiz does not expressly disclose that the dynamic preview information includes the identity of a calling party as required by claim 9, but argues that it would have been obvious to add that feature given the teachings of Smith. *Id.* at 69–70 (citing Ex. 1002 ¶ 148). Petitioner contends that Smith “shows how the mobile device can display information regarding received telephone calls that identifies a calling party.” *Id.* at 70 (citing Ex. 1009, Fig. 7A). Petitioner further contends that it would have been obvious to add Smith’s caller identification functionality to Cadiz because one of ordinary skill in the art would have recognized the added functionality as a natural extension of Cadiz’s functionality and would have promoted the goal of providing an interactive display that minimizes distraction by tracking information of interest to a user. *Id.* at 70–71 (citing Ex. 1002 ¶ 149, Ex. 1005, Abstract).

Patent Owner argues that neither the Petition nor Petitioner’s expert Dr. Olsen explains adequately how Smith’s Figure 7A could be combined with person items 810, 815, and 820 in the sidebar shown in Cadiz’s Figure 8A. PO Resp. 47 (citing Ex. 2007 ¶ 92). According to Patent Owner, the

person items already represent availability or status of a contact, and the Petition does not explain how the person items can simultaneously represent availability of each contact and provide the identity of a calling party, who may not be the same party depicted in the person items of Cadiz's Figure 8A. *Id.* at 47–48. Patent Owner also argues that Petitioner's reliance on Cadiz's Figure 10 does not provide sufficient guidance because it is not analogous to Cadiz's sidebar in Figure 8A. *Id.* at 48 (citing Ex. 2009, 135:5–137:10, 139:5–17; Ex. 2007 ¶¶ 93–94). In its Reply, Petitioner argues that Patent Owner concedes that the proposed combination discloses the requirements of claim 9, and contends that Patent Owner fails to address Petitioner's rationale for combining Cadiz and Smith. Reply 24–25.

According to Petitioner, the fact that a person item already identifies a contact does not undermine the reason for adding Smith's identification of an incoming call, because without the modification Cadiz's system would not identify an incoming call from a contact. *Id.* at 25 (citing Pet. 69–70). Petitioner also argues that it adequately explained “that the feature identifying a calling party would have been implemented as part of ‘the dynamic preview information displayed in the person items’” and that one of ordinary skill would have been motivated to do so. *Id.* (citing Pet. 69–71).

We are persuaded by Petitioner's showing, which we adopt as our own, that Cadiz in combination with Smith reasonably would have suggested the limitations of claim 9, and that the combination would have been obvious for the reasons provided by Petitioner. As Petitioner points out, Patent Owner's argument that Cadiz's person items already contain availability information does not undermine the motivation to add information regarding the identity of a caller that is a contact. See Reply 24–

25. Without the proposed modification suggested by Smith, Cadiz’s existing system would lack the caller ID functionality. We are also persuaded, and find, that the proposed modification “would have been a mere combination of known prior art technologies according to known methods to achieve predictable results (e.g., enabling the mobile device to provide telephone functionalities).” Pet. 69; Ex. 1002 ¶¶ 147–149. While the Petition does not go into detail regarding how to combine the references, it does specify where the added functionality taught by Smith would appear in Cadiz—within the “dynamic preview information displayed in the sidebar of FIG. 8A”—and we find the related expert testimony that such a modification involved known methods known to one of ordinary skill in the art credible. *See* Ex. 1002 ¶¶ 147, 149; *see also id.* ¶¶ 146–149.²⁰ We are therefore persuaded that Petitioner has established by a preponderance of the evidence that claim 9 would have been obvious over Cadiz and Smith.

III. CONCLUSION

For all of the above reasons, we determine that Petitioner has shown by a preponderance of the evidence that claims 1–13 of the ’384 patent are unpatentable.

²⁰ We also find the testimony of Patent Owner’s expert on this subject unconvincing because it focuses on the lack of a motivation to add the desired functionality, and does not explain adequately how adding the functionality to Cadiz’s sidebar in Figure 8A would be beyond the knowledge and skill of one of ordinary skill in the art. *See* Ex. 2007 ¶¶ 92–93.

IV. ORDER

It is

ORDERED that claims 1–13 of the '384 patent have been shown to be unpatentable; 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:

Naveen Modi
Joseph E. Palys
Phillip W. Citroën
Arvind Jairam
PAUL HASTINGS LLP
naveenmodi@paulhastings.com
josephpalys@paulhastings.com
phillipcitroen@paulhastings.com
arvindjairam@paulhastings.com

For PATENT OWNER:

Ching-Lee Fukuda
Samuel A. Dillon
SIDLEY AUSTIN LLP
clfukuda@sidley.com
samuel.dillon@sidley.com