

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SQUARE, INC.,
Petitioner,

v.

UNWIRED PLANET LLC,
Patent Owner.

Case IPR2014-01165
Patent 8,275,359 B2

Before MICHAEL W. KIM, JUSTIN T. ARBES, and JASON J. CHUNG,
Administrative Patent Judges.

KIM, *Administrative Patent Judge.*

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

I. INTRODUCTION

A. *Background*

Square, Inc., (“Petitioner”) filed a Petition (“Pet.”) requesting *inter partes* review of claims 8–12, 14, 15, 17, 25–29, 31, 32, 34, and 35 of U.S. Patent No. 8,275,359 B2 (“the ’359 patent”) (Ex. 1001) pursuant to 35 U.S.C. §§ 311–319. Paper 1. Unwired Planet LLC (“Patent Owner”) filed a Preliminary Response

(“Prelim. Resp.”). Paper 6. On January 14, 2015, we instituted an *inter partes* review of claims 8–12, 14, 15, 17, 25–29, 31, 32, 34, and 35 on certain grounds of unpatentability alleged in the Petition. Paper 7 (“Dec.”). After institution of trial, Patent Owner filed a Patent Owner Response (Paper 19; “PO Resp.”) and Petitioner filed a Reply (Paper 21; “Reply”). An oral hearing was held on September 14, 2015. Paper 31 (“Tr.”).

The Board has jurisdiction under 35 U.S.C. § 6(c). In this Final Written Decision, issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73, we determine that Petitioner has shown by a preponderance of the evidence that all claims for which trial is instituted, claims 8–12, 14, 15, 17, 25–29, 31, 32, 34, and 35, are unpatentable.

B. The '359 Patent

The '359 patent relates generally to notification systems for use in a wireless network that use network resources and infrastructure to provide location specific notifications. Ex. 1001, 1:19–21. According to the '359 patent, an exemplary wireless user notification system includes notifying entity 100, notification server 110, and mobile device 170. Ex. 1001, 4:28–33. Mobile device 170 initiates a location fix (i.e., determination of its geographic position) using a pre-programmed algorithm. Ex. 1001, 5:3–4. Mobile device 170 periodically performs a location fix such that notification server 110 maintains current information about an approximate location of mobile device 170. Ex. 1001, 5:4–7.

At some point in time, notifying entity 100 may send a notification request to notification server 110, for example, in response to an occurrence of an event of which users are to be notified, such as a fire, a chemical spill, or a hostage situation. Ex. 1001, 5:44–48. Notifying entity 100 also identifies an area in which users are to be notified. Ex. 1001, 5:48–50. The notification request also may

include a content of the notification and an urgency level. Ex. 1001, 5:55–57. Notification server 110 then identifies which mobile devices 170 are registered in the notification area. Ex. 1001, 5:66–6:1. Notification server 110 receives a list of mobile devices 170 that are currently registered in regions that overlap the notification area. Ex. 1001, 6:32–35. Notification server 110 then sends notification messages to mobile devices 170 in the notification area. Ex. 1001, 6:46–50.

C. Related Matters

Petitioner identifies the following related district court proceeding between Petitioner and Patent Owner that involves the '359 patent: *Unwired Planet LLC v. Square, Inc.*, Case No. 13-CV-00579 (D. Nev.). Pet. 2.

D. Illustrative Claim

Independent claim 8 is reproduced below:

8. A computer-implemented method for receiving a notification message of an event, the method comprising:
 - at a wireless device having one or more processors and memory:
 - using an application on the wireless device to determine its current location data and reporting the current location data of the wireless device to a notification server via a wireless communication network in accordance with a set of location update instructions provided by a remote server;
 - receiving a notification message from the notification server via the wireless communication network, the notification message including a piece of content associated with the event; and
 - displaying the piece of content associated with the event to a user of the wireless device.

E. Prior Art References Applied by Petitioner and Instituted Grounds of Unpatentability

The Board instituted a trial concerning the patentability of claims 8–12, 14, 15, 17, 25–29, 31, 32, 34, and 35 on the basis of the following items of prior art:

(“Goldberg”) US 5,742,509	Apr. 21, 1998	Ex. 1006
(“Manz”) US 7,764,185 B1	July 27, 2010	Ex. 1008 ¹
(“Othmer”) US 2010/0269059	Oct. 21, 2010	Ex. 1005

(continuation of application 10/916,960 filed Aug. 11, 2004)

Specifically, the Board instituted a trial on claims 8–12, 14, 15, 17, 25–29, 31, 32, 34, and 35 of the ’359 patent based on the following specific grounds of unpatentability (Dec. 23):

Reference(s)	Basis	Challenged Claims
Othmer and Goldberg	§ 103(a)	8–12, 14, 15, 17, 25–29, 31, 32, 34, and 35
Manz	§ 102(e)	8–12, 25–29, and 35

II. ANALYSIS

A. Claim Construction

In an *inter partes* review, a claim in an unexpired patent shall be given its broadest reasonable construction in light of the specification of the patent in which it appears. 37 C.F.R. § 42.100(b); *see also In re Cuozzo Speed Techs., LLC*, 793

¹ Manz was filed on July 19, 2006, and issued on July 27, 2010. Manz claims priority to Provisional App. No. 60/764,384, which was filed on January 26, 2006 (Ex. 1009; “Manz Provisional”). The ’359 patent was filed on June 15, 2007, and claims priority to Provisional App. No. 60/814,254 (“the ’254 application”), which was filed on June 16, 2006. In its Patent Owner Response, Patent Owner does not challenge that Manz is prior art to the ’359 patent.

F.3d 1268, 1278–79 (Fed. Cir. 2015) (“We conclude that Congress implicitly approved the broadest reasonable interpretation standard in enacting the AIA.”). Under the broadest reasonable construction standard, claim terms are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). Any special definition for a claim term must be set forth in the specification with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). We must be careful not to read a particular embodiment appearing in the written description into the claim if the claim language is broader than the embodiment. *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993). We construe the terms below in accordance with these principles.

1. “*set of location update instructions*”

Each of independent claims 8, 25, and 35 recite using “an application on the wireless device to determine its current location data and reporting the current location data of the wireless device . . . in accordance with a set of location update instructions.” Petitioner proposes a claim construction for “location update instructions” as “instructions on the wireless device that control a location updating process.” Pet. 9–10 (citing Ex. 1001, 3:26–29). In the Preliminary Response, Patent Owner countered that Petitioner’s proposed construction is too narrow and uninformative, and that a proper construction of “set of location update instructions” is “multiple executable commands for updating a location.” Prelim. Resp. 14–21 (citing Ex. 1001, 3:16–19, 3:26–29, 9:3–6; Ex. 2001, 988, 1752; Ex. 2002, 627, 1077; Ex. 2003, 276; Ex. 2004, 245; Ex. 2005, 346). In the Decision on Institution, we adopted neither proposed interpretation, and instead preliminarily construed “set of location update instructions” as “multiple

instructions for updating a location of a wireless device.” In the Patent Owner Response, Patent Owner asserts the following in a footnote:

While Patent Owner maintains its position that the broadest reasonable construction of “set of location instructions” in light of the specification is “multiple executable commands for updating a location” for the reasons set forth in its Preliminary Response (Paper No. 6), for purposes of this proceeding, Patent Owner applies the Board’s construction.

PO Resp. 12 n.2. In other words, Patent Owner does not set forth further assertions for us to consider as to how the term should be interpreted. Petitioner also does not challenge the aforementioned preliminary construction. Accordingly, in the absence of such assertions, and after reconsidering anew the basis for our preliminary construction, we determine that construing “set of location update instructions” as “multiple instructions for updating a location of a wireless device,” is correct for the reasons set forth in the Decision on Institution (Dec. 5–10), and thus adopt it for the purposes of this proceeding.²

2. *whether the recited “set of location update instructions” must influence the recited “determine” operation*

In their assertions concerning claim construction, as well as application of the prior art, Patent Owner asserts that the recited “set of location update instructions” must influence the recited “determine” operation. PO Resp. 12, 38–40, 49–54 (citing Dec. 7). Petitioner disagrees, asserting that under a broadest reasonable construction, the recited “set of location update instructions” is only

² In a related district court proceeding, the district court construed “location update instructions.” Ex. 2007, 14–16. We have considered this construction in rendering our construction. Insofar as they may differ, we note respectfully that the parties have advanced different assertions in the two proceedings, as the claim construction standard applied by the district court differs from that applied by the Board.

required to influence the recited “reporting” operation, and not the recited “determine” operation. Reply 1–3. We agree with Patent Owner.

Beginning our analysis with the claim limitation of “using an application on the wireless device to determine its current location data and reporting the current location data of the wireless device . . . in accordance with a set of location update instructions,” the express language does not assist us definitively in deciding whether “set of location update instructions” must influence the recited “determine.” Although under a most natural reading, it appears that “set of location update instructions” is applicable to the entire claim limitation, which would include the “determine” operation, it is plausible that under a broadest reasonable construction, the recited “set of location update instructions” is only required to influence the immediately adjacent “reporting” operation.

When we consult the Specification, however, we conclude that the broadest reasonable construction, in view of the Specification, is that “set of location update instructions” must influence the recited “determine” operation. For example, the Specification in the “Brief Summary of the Invention” section discloses that “[l]ocation data for the wireless device is obtained in accordance with the set of instructions. The location data is provided to a notification server.” Ex. 1001, 3:28–30. As the second sentence corresponds to the recited “reporting” operation, the set of instructions in the first sentence would only apply to what would correspond to the recited “determining” operation. In another example, the Specification discloses that “[a]t step 320, the mobile device executes the algorithm to determine its location by a location determination method indicated in the algorithm and provides the corresponding location data to the notification server.” Ex. 1001, 9:3–6. In the Decision on Institution, we preliminarily determined that “set of location update instructions” is broader than, and thus

encompasses, algorithms, and after reconsidering anew the basis for our preliminary construction, we determine that our previous determination was correct. Dec. 7–9. Here, the exemplary algorithm clearly applies to the location determination method, with the “reporting” operation only performed subsequently. *See* Ex. 1001, 3:16–20; 5:1–10. Indeed, we are unable to identify any portion of the Specification where any set of instructions or algorithm is shown definitively as *not* influencing the “determine” operation. Accordingly, we interpret the claims to require that the “set of location update instructions” must influence the recited “determine” operation.

3. *whether setting a frequency at which a location is determined satisfies the limitation that the recited “set of location update instructions” influence the recited “determine” operation*

In their assertions concerning application of the prior art, Patent Owner asserts that setting a frequency at which a location is determined does not satisfy the recited “set of location update instructions” influencing the recited “determine” operation. PO Resp. 38–40, 49–54. Specifically, Patent Owner asserts that with respect to the prior art, the location is determined by off-the-shelf, self-contained devices with their own programming that are unaffected by what is asserted to correspond in those references to the recited “set of location update instructions,” and that updating sending times and frequencies alone is insufficient to be considered influencing those devices. *Id.* Petitioner disagrees. Reply 3–4, 8–12. We agree with Petitioner.

As an initial matter, we note that the claim limitation at issue does not specify the manner or degree in which the “set of location update instructions” needs to influence the “determine its current location data” limitation. The claims only require determining current location data “in accordance with” the set of

location update instructions. Accordingly, under a broadest reasonable construction, any influence on the “determine” operation would appear to suffice, including frequency. The Specification supports our conclusion. For example, the “Brief Summary of the Invention” section of the Specification discloses that “[a] location data determination algorithm is provided to a wireless device, where the algorithm determines a frequency at which the device interacts with network elements to determine its location.” Ex. 1001, 3:16–20. As set forth above in Parts II.A.2 and II.A.3, we determine that “set of location update instructions” is broader than, and thus encompasses, algorithms. Here, there is a clear and overt connection between “algorithm,” “frequency,” and “determine.” In another example, the Specification discloses that “[u]pon registration, the mobile device 170 performs a location fix and provides its location information to the notification server. The notification server 110 downloads an algorithm to the mobile device 170 to indicate how often the mobile device 170 is to perform subsequent location fixes.” Ex. 1001, 4:63–67. Again, while the words differ slightly, it is clear that the algorithm sets the frequency of location determination operations on the mobile device itself, in a manner separate from the reporting operations set forth in other parts of the same paragraph. To be sure, the Specification also discloses additional ways in which the “set of location update instructions” influences the “determine” operation, for example, “determining [the] method to execute in order to obtain or trigger the location fix.” Ex. 1001, 5:1–3; *see also* Ex. 1001, 9:3–6. Those embodiments, however, are exemplary, not recited in the claim, and thus do not preclude frequency from also corresponding to the “set of location update instructions.” *In re Van Geuns*, 988 F.2d at 1184.

4. *“displaying the piece of content associated with the event to a user of the wireless device”*

In their assertions concerning application of the prior art, Patent Owner asserts that “displaying the piece of content associated with the event to a user of the wireless device,” as recited in each of independent claims 8, 25, and 35, requires more than just anything that could be considered information. PO Resp. 41–49. Petitioner disagrees that the claims should be construed so narrowly. Reply 19–21. We agree with Patent Owner. The claims recite “displaying the piece of content.” The Specification discloses delivering content in the form of messages to be read or viewed, such as Short Messaging Service (“SMS”) messages, Amber Alerts, and Multimedia Message Services (“MMS”) messages. Ex. 1001, 1:44–48, 2:2–4, 2:10–13, 2:28–29, 3:41–43, 3:54–56, 4:30, 4:40–48, 6:53, 7:36–39, 8:25–36, 10:54–56, 12:16–22. Applying the broadest reasonable interpretation in light of the Specification, we construe “displaying the piece of content” as “displaying text or multimedia to be read or viewed.” At oral argument, Patent Owner agreed with this construction. Tr. 63:10–15.

Furthermore, independent claims 8, 25, and 35 each recite “receiving a notification message . . . including a piece of content associated with the event.” Thus, the content received by the user device is what must be displayed. Accordingly, we construe “displaying the piece of content associated with the event to a user of the wireless device,” in the context of the surrounding claim limitations, as “displaying text or multimedia to be read or viewed that is associated with the event received by a user of the wireless device.”

B. Claims 8–12, 14, 15, 17, 25–29, 31, 32, 34, and 35 as Obvious over Othmer and Goldberg

Petitioner asserts that claims 8–12, 14, 15, 17, 25–29, 31, 32, 34, and 35 would have been obvious over Othmer and Goldberg. In support of its assertion,

Petitioner presents analyses of Othmer and Goldberg, as well as a Declaration of James A. Proctor, Jr. Pet. 10–27 (citing Exs. 1005, 1006, 1011). Patent Owner disagrees with Petitioner’s assertions, and cites primarily a Declaration of Dr. Sandeep Chatterjee. PO Resp. 17–40 (citing Exs. 1006, 1011, 2013)³.

1. *Othmer (Ex. 1005) and Goldberg (Ex. 1006)*

Othmer relates to providing location-based, context-aware content and displaying such content, from location-based ticker server 300, within a ticker on a user device. Ex. 1005 ¶¶ 5, 52.

Goldberg relates to a base station including base station software (“BSS”) that can configure and control an “intelligent position locating and communicating device” called a “watson device” installed on a mobile unit. Ex. 1006, 3:19–24, 3:38–40. Goldberg discloses a BSS is able to communicate with the watson device, and as a result of the communication, is able to receive location data from the watson device. Ex. 1006, 12:60–64. The initial sending time and frequency of transmission can also be programmed externally by base station 28. Ex. 1006, 12:19–21. Alternatively, sending time may include transmitting position data when the mobile unit reaches a certain geographical boundary. Ex. 1006, 12:21–26. A BSS also has a capability to change a configuration of a controller inside the watson device, such as sending times and frequency of data transmission by the watson device. Ex. 1006, 13:2–8.

³ We note that Dr. Chatterjee’s testimony in support of Patent Owner’s assertions on this ground of unpatentability largely tracks the language of the Patent Owner Response. Ex. 2013 ¶¶ 63–89. Accordingly, our analysis below addresses together the assertions made in the Patent Owner Response and the corresponding portion of Dr. Chatterjee’s Declaration.

2. *Level of Ordinary Skill in the Art*

“Section 103(a) forbids issuance of a patent when ‘the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.’” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 405 (2007). The parties agree that a person of ordinary skill in the art would have had “a Bachelor of Science degree in Electrical/Computer Engineering or Computer Science (or related subjects) plus relevant academic or professional experience.” *See* PO Resp. 11 (citing Ex. 2013 ¶ 22; Ex. 2011, 24:17–25:15). Based on the record presented, including our review of the ’359 patent and the types of problems and solutions described in the ’359 patent and cited prior art, we concur with the parties’ assessment of the level of ordinary skill in the art and apply it for purposes of this Decision.

3. *Analysis*

After considering the Petition, Patent Owner Response, Reply, and all supporting evidence, we are persuaded that Petitioner has shown, by a preponderance of the evidence, that claims 8–12, 14, 15, 17, 25–29, 31, 32, 34, and 35 are unpatentable as obvious over a combination of Othmer and Goldberg. Petitioner sets forth how each and every claim limitation is disclosed or suggested by a combination of Othmer and Goldberg, in essence, combining location-based ticker server 300 of Othmer and base station 28 of Goldberg into a single system, such that base station 28 of Goldberg can change a configuration of the user device of Othmer. Pet. 10–27. Additionally, Petitioner provides the following rationale for combining Othmer and Goldberg.

A person of ordinary skill in the art would have been motivated to combine Othmer with Goldberg to result in an improved mobile communications device that reports its location according to

configuration provided by a remote server. (Ex. 1011, ¶ 156–157, 158–159). Each reference is directed to a system for determining, communicating, and storing the locations of mobile communications devices in a network of devices, so the references are in the same field of endeavor and the problems encountered by designers of such devices would overlap. (Ex. 1011, ¶ 160). Goldberg discusses a device and protocol for communicating the information necessary to track mobile devices in the network, while Othmer focuses on an application that is achievable with such a configuration (displaying location-based content in a “ticker” on the mobile device). (Ex. 1011, ¶ 161–164). Both disclosures teach tracking the location of mobile devices, so the incorporation of Goldberg’s infrastructure techniques (including its discussion of altering the reporting frequency of the mobile devices) into Othmer’s practical application (mobile location-aware tickers) would predictably result in an improved wireless device, with each reference contributing its known properties and advantages. (Ex. 1011, ¶ 165). Othmer contains an express teaching that “positioning techniques known in the art,” including the techniques described in Goldberg, can be used in its system. (Ex. 1005, ¶ 51, Ex. 1011, ¶ 166). Moreover, Goldberg expressly discloses that its “watson” device can use a location determination in the form of GPS system and a communication means in the form of a cellular telephone (Ex. 1006, 3:53-56, 4:8-11), which are precisely the examples given in Othmer as the hardware to implement its ticker system. (Ex. 1005, ¶ 33, 30, Ex. 1011, ¶ 167). Accordingly, the hardware building blocks of the two systems are the same, further evidencing that Othmer’s system could be readily be adapted to incorporate Goldberg’s hardware considerations without substantial modification. (Ex. 1011, ¶ 168, 170). A person of ordinary skill could have used Goldberg’s location transmission techniques in Othmer’s ticker system to provide an enhanced alert distribution system, with an expectation of success. (Ex. 1011, ¶ 169, 171). Accordingly, the combination of Othmer and Goldberg is proper.

Pet. 13–14.

Patent Owner asserts the following: “[d]espite his conclusion (which is incorrect), Mr. Proctor articulates no credible motivation why one of ordinary skill would combine Othmer with Goldberg. In fact, the word ‘motivation’ appears

nowhere within his declaration.” PO Resp. 25. To the extent Patent Owner is looking for the explicit word “motivation,” application of any such rigid, formulaic test for obviousness was foreclosed by the Supreme Court’s decision in *KSR*, 550 U.S. 398. To that end, the aforementioned portion of the Petition cites to several paragraphs of Mr. Proctor’s Declaration, the content of which readily can be characterized as providing a “motivation to combine.”

Patent Owner asserts further that Petitioner’s proffered combination is improper because Goldberg is non-analogous art to the ’359 patent. Specifically, Patent Owner asserts that the claimed invention is directed to providing notifications to a wireless device, while Goldberg is a communication link that merely transmits location data. We disagree with Patent Owner. A reference is analogous art to the claimed invention if: (1) the reference is from the same field of endeavor as the claimed invention (even if it addresses a different problem); or (2) the reference is reasonably pertinent to the problem faced by the inventor (even if it is not in the same field of endeavor as the claimed invention). *See In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004). To that end, the preambles of independent claims 1 and 8 recite that they are directed to notifying wireless devices of an event. Furthermore, contrary to Patent Owner’s assertion that Goldberg is a communication link that merely transmits location data, Goldberg expressly discloses transmitting commands from a base station to a Watson device. Ex. 1006, 4:34–40, 13:26–35. We are persuaded that Goldberg is analogous art to the claimed invention under either prong. Moreover, as discussed at oral hearing, location determination is unquestionably a major part of the claimed invention, for example, by express recitations in the independent claims of “current location data” and “location update instructions.” Patent Owner agrees that Goldberg is directed to location determination. *See Tr. 50:11–52:14*. At a minimum, we

determine that this satisfies the second prong of the analogous arts analysis, namely, that both the claimed invention and Goldberg are directed to problems associated with location determination.

Patent Owner asserts additionally that one of ordinary skill would not have modified Othmer to include the location-reporting infrastructure of Goldberg, because Othmer already has location-reporting capability, and so such a modification would be redundant. PO Resp. 30–32. Patent Owner’s assertions are misplaced, for we do not understand Petitioner as advocating a wholesale replacement or duplication of the location-reporting infrastructure of Othmer, but only that the location-reporting infrastructure of Othmer could have been updated, because Goldberg discloses that updating location-reporting infrastructure was known generally. *See, e.g.*, Ex. 1011 ¶ 170 (“Using Goldberg’s teachings regarding configuring and altering reporting frequency for location reporting would *primarily* affect the frequency with which the mobile communication device 101 of Othmer reports its location to the location tracker 312. . . . The remainder of Othmer’s system would remain largely (if not entirely) *unchanged*. Specifically, the determination of which mobile communication devices 101 are in an appropriate location for receipt of ticker content would *not change* even if the mobile communication devices 101 report their locations at different (or even changing) frequencies”) (emphasis added).

Furthermore, we are unpersuaded that a wholesale replacement or duplication of the location-reporting infrastructure of Othmer with that of Goldberg would have been required in order to realize that updating capability, as the software for the location-reporting infrastructure of Othmer was uploaded into the system originally in some manner, and we are unpersuaded that such a manner could not also have been used for updates. *See, e.g.*, Ex. 1005 ¶ 10 (“[w]hile the

invention is applicable to immobile or ‘wired’ communication devices including computer systems, landline telephones, televisions, and set top boxes, its application is particularly well-suited to mobile wireless communication devices (referred to hereinafter as ‘mobile communication device(s)’ or ‘mobile device(s)’ such as laptop and notebook computers, cellular telephones, PDAs, and any other mobile communication device having a display device and enabled to wirelessly receive data”).

Patent Owner asserts also that Mr. Proctor’s proffered rationale for modification of “conserving network resources” is inadequate, because modifying Othmer to include the location-reporting infrastructure of Goldberg would involve many technical challenges, the result of which would be anything but “conserving network resources.” PO Resp. 27–31. Patent Owner’s assertions are misplaced for the same reasons as set forth in our previous paragraphs.

Patent Owner asserts generally that there would have been many technical challenges to implementing the proffered combination of Othmer and Goldberg, and that those technical challenges would have weighed heavily against making Petitioner’s proffered modifications. *Id.* at 32–34. Patent Owner’s assertions are unpersuasive. “A person of ordinary skill is also a person of ordinary creativity, not an automaton.” *KSR*, 550 U.S. at 421 (2007). Accordingly, the fact that there may be technical challenges to implementing a proffered combination of two references is unavailing if the technical challenges would have been able to have been solved by one of ordinary skill. To that end, we are persuaded that one of ordinary skill, as defined above, would have been able to overcome those technical challenges, for the same reasons as set forth in our analysis of replacement/duplication. *See* Ex. 1011 ¶¶ 5, 156–71.

Insofar as Patent Owner may be arguing as to any technical challenges associated specifically with modifying Othmer in view of Goldberg, we note that the obviousness inquiry does not ask “whether the references could be physically combined but whether the claimed inventions are rendered obvious by the teachings of the prior art as a whole.” *In re Etter*, 756 F.2d 852 (Fed. Cir. 1985) (en banc); *see also In re Keller*, 642 F.2d 413 (CCPA 1981) (stating “[t]he test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference”). To that end, our determination is the same as that set forth above. Indeed, we note that at a high level, Petitioner asserts, with support from Mr. Proctor’s Declaration, that Othmer and Goldberg each disclose roughly analogous hardware for sending information wirelessly based on location, i.e., a sending structure that transmits information wirelessly to a receiving structure based on the receiving structure’s location. Pet. 13–14 (citing Ex. 1011 ¶¶ 156–71). Given this baseline, we are unpersuaded that the references create so many technical challenges, that making the proffered modifications would have been beyond the abilities of one of ordinary skill.

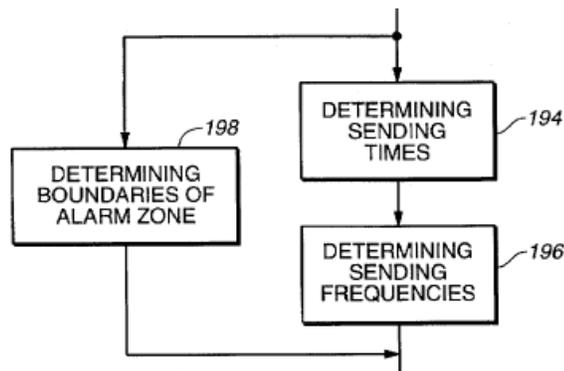
Patent Owner asserts further that Mr. Proctor’s testimony concerning modifying Othmer in view of Goldberg is not credible, because it is based on improper hindsight. PO Resp. 34–37. We disagree. Mr. Proctor’s testimony concerning the proposed modification is at paragraphs 158 to 171 of his Declaration, and Mr. Proctor’s testimony has factual underpinnings in Othmer and Goldberg themselves, as indicated by the numerous citations to those references. Patent Owner points us to testimony from Mr. Proctor’s deposition that allegedly shows his admission of using improper hindsight reasoning. *Id.* at 34–35 (citing Ex. 2011, 132:14–133:11). We agree with Petitioner that the cited testimony is taken out of context and, in any case, is vastly outweighed by Mr. Proctor’s other

testimony concerning the proposed modification of Othmer in view of Goldberg, which is adequately supported by the references, and we determine is credible and persuasive. *See* Reply 18–19.

Patent Owner asserts further that the long time period between the public availability date of Goldberg and Othmer, and subsequently the long time period between the public availability date of both references and claimed invention, indicates that the proffered combination is improper hindsight, and thus that the claimed invention is non-obvious. PO Resp. 36–37. We are unpersuaded. Patent Owner cites to *W.L. Gore & Assoc. v. Garlock, Inc.*, 721 F.2d 1540, 1553 (Fed. Cir. 1983) in support of their position, however, that case can be distinguished because there, “no prior art reference or references of record convey[ed] or suggest[ed] that knowledge” (emphasis added). By contrast, we determine that Petitioner’s proffered modification has an adequate basis in each of Goldberg and Othmer. Patent Owner does not cite, and we are unaware of, any authority that indicates that the time periods between public availability dates of references and the claimed invention are factors to be weighed in an obviousness analysis. Moreover, even if it were a factor, we determine that it would be entitled to little weight because determinations of obviousness are exercises in knowledge, and we are unpersuaded that time diminishes knowledge. *See Custom Accessories, Inc. v. Jeffrey–Allan Indus., Inc.*, 807 F.2d 955, 962 (Fed. Cir. 1986) (“The person of ordinary skill is a hypothetical person who is presumed to be aware of all the pertinent prior art”). Furthermore, in the instant proceeding, we determine that any such time factors are outweighed substantially by Mr. Proctor’s Declaration, factual underpinnings for which are supported adequately by explicit citations to Othmer and Goldberg.

Patent Owner asserts additionally that Goldberg does not disclose or suggest “using an application on the wireless device to determine its current location and reporting the current location data . . . in accordance with a set of location update instructions,” as recited independent claim 8, because Goldberg discloses using devices that are unaffected by what is asserted to correspond in Goldberg to the recited “set of location update instructions,” and that updating sending times and frequencies alone are insufficient. PO Resp. 38–40. Independent claims 25 and 35 recite similar claim limitations. As set forth above in our claim construction analysis discussed *supra* in Part II.A, we are unpersuaded that updating sending times and frequency of operations cannot correspond properly to the aforementioned claim limitation.

Patent Owner asserts also that even if we disagree with Patent Owner’s claim construction, that dependent claims 11 and 28 are still not obvious, because they recite “wherein the set of location update instructions identifies a location determination method for the wireless device to determine its current location data,” and sending times and frequencies is only one method. PO Resp. 22. Although we agree with Patent Owner that sending times and frequencies is only one method, we disagree that the proffered combination of Othmer and Goldberg does not account for the aforementioned claim limitation. Specifically, a portion of Figure 5C of Goldberg is shown below:



The corresponding text portion of Goldberg discloses the following concerning the above illustrated portion of Figure 5C: “[t]he watson controller can also determine the sending times (step 194), the sending frequencies (step 196), and the boundaries of the alarm zone (step 198).” Ex. 1006, 14:35–37. Earlier in column 14, Goldberg discloses the following:

The user commands and data may include the commands for the particular mobile unit to send its telephone number, *or* to send its vehicle ID number, *or* to start sending its position data at certain sending times and at certain sending frequencies, *or* to send the position data at certain times when the particular watson device reaches the boundaries of a certain geographical area.

Ex. 1006, 14:2–8 (emphasis added); *see also id.* at 13:30–33 (command transmitted to the Watson device can be “a command to set certain frequency of transmission of the position data” or “a command to set a sending time when the mobile unit reaches a certain position or a boundary of a certain area (alarm zone)”). Petitioner relies on the aforementioned portions of Goldberg for the following concerning dependent claims 11 and 28: “in addition to allowing for the provision of location update instructions to change the frequency with which location data is reported, Goldberg discloses that the location update instructions can change the method (e.g., between periodic sending and sending based on a device’s geographic position).” Pet. 24–25 (citing Exs. 1006, 12:11–31, 14:2–8; 1011 ¶¶ 106–107). We agree with Petitioner that the branching of the flow chart in Figure 5C, and the use of the word “or” with respect to user commands in column 14, would have indicated to one of ordinary skill that the location update commands of Goldberg could have been changed from periodic sending to sending based on a device’s geographic position, and vice versa.

3. Conclusion

For the foregoing reasons, after considering the Petition, Patent Owner Response, Reply, and all supporting evidence, we are persuaded that Petitioner has shown, by a preponderance of the evidence, that claims 8–12, 14, 15, 17, 25–29, 31, 32, 34, and 35 are unpatentable as obvious over a combination of Othmer and Goldberg.

C. Claims 8–12, 25–29, and 35 as Anticipated by Manz

Petitioner asserts that claims 8–12, 25–29, and 35 are anticipated by Manz. In support of its assertion, Petitioner presents analysis of Manz, as well as the Declaration of Mr. Proctor. Pet. 40–48 (citing Exs. 1008, 1009, 1011). Patent Owner disagrees with Petitioner’s assertions. PO Resp. 40–54.

1. Manz (Ex. 1008) and Manz Provisional (Ex. 1009)⁴

Manz relates to a distributed system for real-time event warning and notification to numerous individual entities across dispersed locations. Ex. 1008, 1:26–34; Ex. 1009 ¶ 9. Manz discloses a pager-like device that uses a local geo-location capability via GPS to determine its position relative to the event location, and transmits this position information, together with its own unique identifier, to other devices on a network. Ex. 1008, 14:1–14; Ex. 1009 ¶ 30. This is performed based on a defined update interval and/or defined distance change from its last reported location. Ex. 1008, 15:26–29, 43–53; Ex. 1009 ¶ 30. The frequency of this transmission is indicated in a configuration file. Ex. 1008, 15:47–48; Ex. 1009 ¶ 48. The configuration file may also permit retransmission in appropriate circumstances. Ex. 1008, 21:57–61; Ex. 1009 ¶ 58. The configuration file is

⁴ Procedurally, Manz is the reference relied upon for anticipation. As the Manz provisional provides the underlying basis as to why Petitioner asserts Manz to be prior art to the claimed invention, however, we provide citations to both references.

updated using a physical or secure wireless connection from a trusted source.
Ex. 1008, 17:21–24; Ex. 1009 ¶ 34.

2. *Analysis*

After considering the Petition, Patent Owner Response, Reply, and all supporting evidence, we are unpersuaded that Petitioner has shown, by a preponderance of the evidence, that claims 8–12, 25–29, and 35 are anticipated by Manz. Patent Owner asserts that Manz does not disclose “displaying the piece of content associated with the event to a user of the wireless device,” as recited in each of independent claims 8, 25, and 35, because Manz does not disclose any structure for displaying content. PO Resp. 41–49. We agree. As set forth above in Part II.A.4, we construed “displaying the piece of content associated with the event to a user of the wireless device” as “displaying text or multimedia to be read or viewed that is associated with the event received by a user of the wireless device.”

Petitioner cites to several portions of Manz as corresponding to the aforementioned claim limitation. Pet. 41, 45–46 (citing Exs. 1008, 1009, 1011); Reply 19–21 (citing Exs. 1001, 1008, 1009). Petitioner cites a “pager-like device” in Manz that includes visual stimulation. Manz, however, only discloses that “the user is warned/notified via sensory mean(s),” and the “sensory indicia can include auditory, visual, and/or physical stimulation of an individual’s bodily senses.” Ex. 1008, 19:29–34. Manz then provides an example where the device “vibrates and sounds an audible alarm notifying the affected soldier to change his protective posture prior to impact of the enemy artillery round.” *Id.* at 19:34–38, Fig. 2 (depicting only a “Vibrator” and “Beeper”). Vibration and audible alarms are not content that can be displayed. To the extent Petitioner relies on Manz’s isolated mention of “visual . . . stimulation,” Manz does not elaborate on what that visual

stimulation is or how it works. Further, Petitioner has not shown that Manz discloses that what is received by the device is the same as what is displayed. Claim 1, for example, recites “receiving a notification message . . . including a piece of content,” and “displaying *the* piece of content.”

Petitioner also relies on the Manz provisional application, which discloses a flashing light. Ex. 1008, 8:20–22. Even assuming (without deciding) that it is proper to do so, we are unpersuaded that the actual content received by the user device is a flashing light. Instead, the content received by the device in Manz is simply data used by the device to trigger the flashing light. *See* Tr. 29:14–30:12. As the aforementioned construction of “content,” however, requires that the received content itself must be displayed, this disclosure of the Manz provisional application also is insufficient to meet the aforementioned claim limitation. The disclosed device does not *receive* flashing lights.

Petitioner counters that the light in Manz does not just flash, however, but instead also increases in intensity (Ex. 1009, 8:22–25), conveying information beyond just the flashing itself, and that information could correspond properly to “content.” Reply 21–22. While we agree with Petitioner that such intensity is more informative than just the flashing light itself, it is not “text or multimedia to be read or viewed that is associated with the event received by a user of the wireless device.”

Alternatively, Petitioner asserted at the oral hearing that various disclosures of Manz, when considered collectively, show that Manz inherently discloses the aforementioned claim limitation. Tr. 81:13–82:9. Even considering Petitioner’s argument, not raised in its papers, we are not persuaded. We note that a showing of inherency has a high bar. The cited disclosures include (1) “the present invention is a discrete (similar in size and function to a pager) or integrated

(embedded within a system/platform) device that is carried by individual entities, such as dismantled soldiers, or on vehicles” (Ex. 1009, 8:6–8), (2) that Manz discloses non-major components, such as circuit boards and displays (Ex. 1009, Fig. 2, 6:9–10, 12:1–2, 13:1–2), and (3) that Manz discloses conveying information that “range from day-to-day events, such as a street-side performance at a large amusement park, imminent collapse of a building within a disaster area, etc.” (Ex. 1009, 16:29–31), and that such information could not be conveyed without displays more advanced than flashing lights. We disagree with Petitioner’s assertion of inherency. For (1) and (3), Petitioner has not set forth sufficient information to show persuasively that pagers and vehicle mounted systems must *necessarily* include displays more advanced than flashing lights in order to convey the aforementioned information, and that such displays must *necessarily* be the same as what the device receives. Specifically, we are unclear as to why, as asserted by Patent Owner, the Manz system cannot convey the aforementioned information using merely the auditory, visual, and/or physical stimulation disclosed expressly in the Manz provisional application, such as synthetic voice messages, sounds, vibrations, and/or flashing lights. Petitioner asserts, and we acknowledge, that the disclosure in the ’359 patent concerning displays is similarly sparse, but determine that the screen of cell phones 205, 210, 215 illustrated in Figure 2 provide more evidence of a display capable of showing text or multimedia than the cited disclosures of Manz. For (2), Petitioner’s position is undercut because Manz expressly discloses circuit boards, but not displays.

3. Conclusion

For the foregoing reasons, after considering the Petition, Patent Owner Response, Reply, and all supporting evidence, we are unpersuaded that Petitioner

has shown, by a preponderance of the evidence, that claims 8–12, 25–29, and 35 are anticipated by Manz.

D. Constitutionality of Inter Partes Review Proceedings

Patent Owner asserts this *inter partes* review is unconstitutional, because it violates “Separation of Powers principles and patentees’ Seventh Amendment rights,” and thus that this proceeding should be dismissed. PO Resp. 54–57. In essence, while Patent Owner acknowledges that the Federal Circuit, in *Patlex Corp. v. Mossinghoff*, 758 F.2d 594 (Fed. Cir. 1985), upheld the Commissioner’s statutory power to administratively revoke or cancel a patent in an *ex parte* reexamination, Patent Owner asserts that this decision is incorrect in view of *McCormick Harvesting Mach. Co. v. C. Aultman Co.*, 169 U.S. 606, 608–09 (1898). The Federal Circuit expressly considered *McCormick* in rendering its decision in *Patlex*. We are in no position to reconsider it. *See* 28 U.S.C. § 1295(a)(4)(A); 35 U.S.C. § 319.

Patent Owner asserts further that *inter partes* reviews are adjudicatory trials of private rights that are adversarial in nature and constitute litigation, and violate patentees’ Seventh Amendment right to a trial by a jury on the issue of validity. We decline to consider Petitioner’s constitutional challenge as, generally, “administrative agencies do not have jurisdiction to decide the constitutionality of congressional enactments.” *See Riggan v. Office of Senate Fair Employment Practices*, 61 F.3d 1563, 1569 (Fed. Cir. 1995); *see also Harjo v. Pro-Football, Inc.*, 50 U.S.P.Q.2d 1705, 1999 WL 375907, at *4 (TTAB Apr. 2, 1999) (“[T]he Board has no authority . . . to declare provisions of the Trademark Act unconstitutional.”); *Blackhorse v. Pro-Football, Inc.*, 111 U.S.P.Q.2d 1080, 2014 WL 2757516, at *1 n.1 (TTAB June 18, 2014). *But see American Express Co. v. Lunenfeld*, Case CBM2014-00050, slip. op. at 9–10 (PTAB May 22, 2015) (Paper

51) (“for the reasons articulated in *Patlex*, we conclude that covered business method patent reviews, like reexamination proceedings, comply with the Seventh Amendment”).

III. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that claims 8–12, 14, 15, 17, 25–29, 31, 32, 34, and 35 of the ’359 patent are held 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.

IPR2014-01165
Patent 8,275,359

For PETITIONER:

Jason A. Engel
Benjamin E. Weed
Viren S. Soni
K&L Gates LLP
jason.engel.ptab@klgates.com
benjamin.weed.ptab@klgates.com
viren.soni.ptab@klgates.com

For PATENT OWNER:

Jennifer A. Albert
Eleanor M. Yost
Brett M. Schuman
Goodwin Procter LLP
jalbert@goodwinprocter.com
eyost@goodwonprocter.com
bschuman@goodwinprocter.com