

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

UNIFIED PATENTS, LLC,
Petitioner,

v.

K.MIZRA LLC,
Patent Owner.

IPR2022-00166
Patent 7,394,423 B2

Before MITCHELL G. WEATHERLY, NATHAN A. ENGELS, and
JASON W. MELVIN, *Administrative Patent Judges*.

WEATHERLY, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining All Challenged Claims Unpatentable
35 U.S.C. § 318(a)

I. INTRODUCTION

A. Background

Unified Patents, LLC (“Petitioner”) filed a petition (Paper 2, “Pet.”) to institute an *inter partes* review of claims 1–34 (the “challenged claims”) of U.S. Patent No. 7,394,423 B2 (Ex. 1001, “the ’423 patent”). 35 U.S.C.

§ 311. K.Mizra LLC (“Patent Owner”) timely filed a Preliminary Response. Paper 6. On May 16, 2022, based on the record before us at the time, we instituted an *inter partes* review of all challenged claims on all grounds alleged as indicated in the table below. Paper 8 (“Institution Decision” or “Dec.”).

Claims Challenged	35 U.S.C. §	References
1–5, 8, 11–15, 23–28, 31, 34	103	McCalmont, ¹ Chang ²
6, 16, 29	103	McCalmont, Chang, Masumoto ³
7, 17–19, 22, 30	103	McCalmont, Chang, Zonoun ⁴
9, 10, 32, 33	103	McCalmont, Chang, Vanacore ⁵
20, 21	103	McCalmont, Chang, Zonoun, Vanacore
1–5, 8, 11–15, 23–28, 31, 34	103	Hanson, ⁶ McCalmont
6, 16, 29	103	Hanson, McCalmont, Masumoto
7, 17–19, 22, 30	103	Hanson, McCalmont, Zonoun
9, 10, 32, 33	103	Hanson, McCalmont, Vanacore
20, 21	103	Hanson, McCalmont, Zonoun, Vanacore

After we instituted this review, Patent Owner filed a Patent Owner Response in opposition to the Petition (Paper 10, “PO Resp.”). Petitioner

¹ U.S. Patent No. 6,771,742 B2 (Ex. 1004, “McCalmont”).

² U.S. Patent No. 7,286,648 B1 (Ex. 1006, “Chang”).

³ U.S. Patent No. 5,210,540 (Ex. 1007, “Masumoto”).

⁴ International Publication WO 2002/33897 A2 (Ex. 1008, “Zonoun”).

⁵ U.S. Patent No. 5,249,223 (Ex. 1009, “Vanacore”).

⁶ U.S. Patent No. 6,868,074 B1 (Ex. 1005, “Hanson”).

filed a Reply in support of the Petition (Paper 16, “Reply”). Patent Owner filed a Surreply responding to the Reply (Paper 20, “Surreply”). Patent Owner did not move to amend any claim of the ’423 patent.

We heard oral argument on February 16, 2023. A transcript of the argument has been entered in the record (Paper 26, “Tr.”).

We have jurisdiction under 35 U.S.C. § 6. The evidentiary standard is a preponderance of the evidence. *See* 35 U.S.C. § 316(e) (2018); 37 C.F.R. § 42.1(d) (2019). This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73.

For the reasons expressed below, we conclude that Petitioner has demonstrated by a preponderance of evidence that claims 1–34 are unpatentable.

B. Related Proceedings

The parties identify as a related proceeding the co-pending district court proceeding of *K.Mizra LLC v. General Motors LLC*, No. 2-21-cv-00244 (E.D. Tex.). Pet. 79; Paper 4, 2.

C. The ’423 Patent

The ’423 patent relates to systems and methods for “initiating and handling an emergency IP request using an IP enabled device having GPS capability.” Ex. 1001, code (57). One embodiment of the system is illustrated in Figure 1, reproduced below.

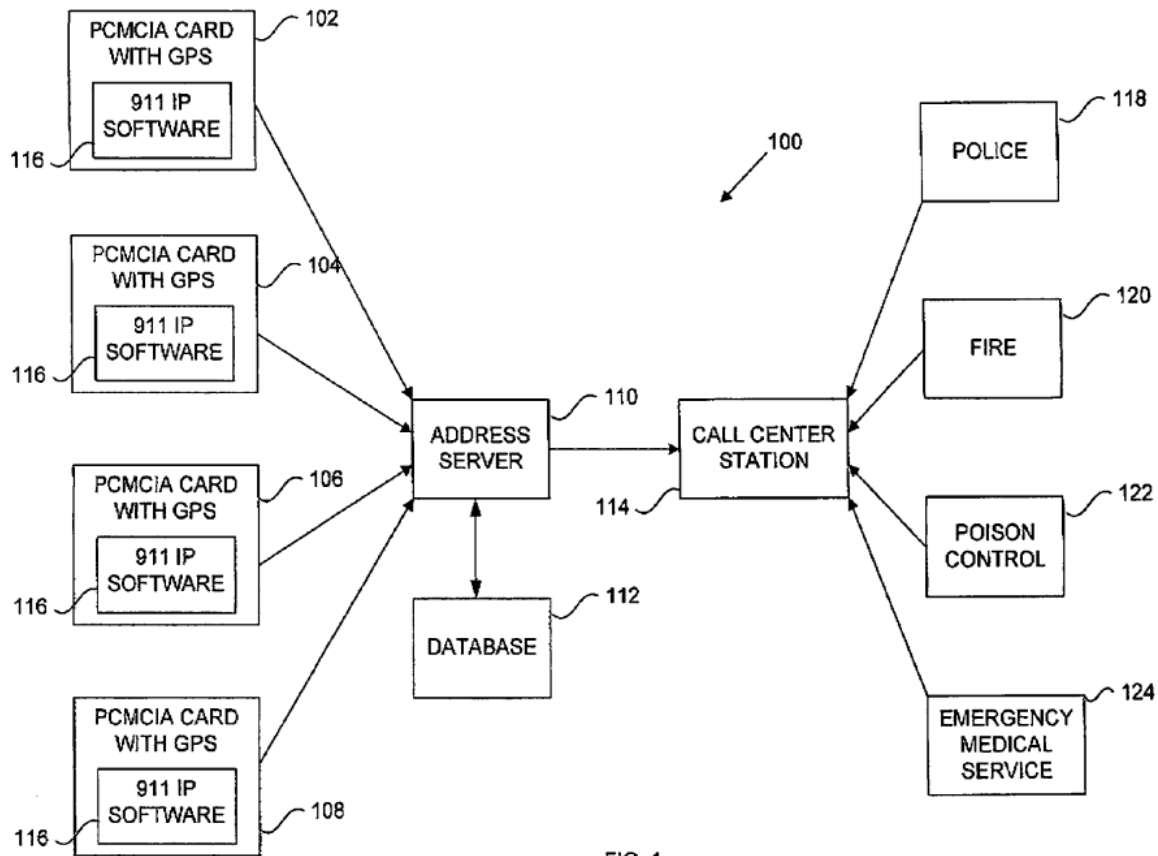


FIG. 1

Figure 1 schematically illustrates an IP-based 911 system 100.
Id. at 3:45–46.

System 100 includes a plurality of IP-enabled devices 102, 104, 106, and 108, which also include Global Positioning System (“GPS”) location hardware. For example, device 102 obtains global positioning data, and sends an emergency IP request to server 110 if an emergency criterion is satisfied. *Id.* at 4:3–14. Server 110 obtains local emergency services data based on the global positioning data, dials the call center 114 (e.g., an emergency services operator) based on the local emergency services data and passes an emergency call to call center 114. *Id.* at 4:17–23.

Claims 1, 12, and 23 are the independent claims among the challenged claims, and claim 1, which is representative, recites:

1. [1P] A computer program for handling an emergency Internet Protocol request from an Internet Protocol enabled device having Global Positioning Systems capability, the computer program comprising:

[1A] a code segment for monitoring software on the Internet Protocol enabled device for at least one of: a collision, heat, smoke, and vital signs;

[1B] a code segment for receiving the emergency Internet Protocol request containing global positioning data for the Internet Protocol enabled device, wherein the receiving is based on the monitored software;

[1C] a code segment for obtaining local emergency services data based on the global positioning data;

[1D] a code segment for dialing a call center station based on the local emergency services data; and

[1E] a code segment for passing an emergency call from the Internet Protocol enabled device to the call center station.

Id. at 5:26–43 (we adopt Petitioner’s alphanumeric labels for specific limitations to ease discussion).

II. ANALYSIS

A. Claim Interpretation

For petitions such as this one that are filed after November 13, 2018, we interpret claims in the same manner used in a civil action under 35 U.S.C. § 282(b) “including construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.” 37 C.F.R. § 42.100(b) (2019). When applying that standard, we interpret the claim language as it would be understood by one of ordinary skill in the art in light of the specification. *Wasica Finance GmbH v. Continental*

Automotive Sys., Inc., 853 F.3d 1272, 1279–80 (Fed. Cir. 2017). Thus, we give claim terms their ordinary and customary meaning as understood by an ordinarily skilled artisan. See *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc). Only terms that are in controversy need to be construed, and then only to the extent necessary to resolve the controversy. *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017).

Petitioner argues that we should interpret “at least one of: a collision, heat, smoke, and vital signs” as recited in claim 1 such that “at least one of” applies to the entire list of four items that follows the phrase rather than each item in the list. Pet. 6–8. That is, Petitioner contends that the claimed “computer program” need only have a “code segment for monitoring” for any one of “a collision, heat, smoke, and vital signs” rather than at least one of each of the listed items. *Id.*

Claim 1 also recites a “computer program” comprising five “code segment[s] for” performing various functions. Ex. 1001, 5:26–43. Petitioner, with support from testimony by Mr. Anthony Wechselberger, argues that “code segment for” does not invoke interpretation under 35 U.S.C. § 112, ¶ 6 because “code” is commonly understood as referring to “written computer instructions (i.e. software)” and “‘code segment’ is the portion (i.e. segment) of the software performing the function.” Pet. 9; Ex. 1003 ¶ 35. Petitioner concludes that we should, therefore, interpret each “code segment for” as merely referring to “software for” performing the function recited in each of the five respective limitations. *Id.*

Solely for the purpose of deciding whether to institute *inter partes* review, we adopted Petitioner’s proposed interpretations of both phrases

discussed above. At trial, Patent Owner expressly stated that it “does not rebut the Petitioner’s interpretation” of the two terms discussed above. PO Resp. 4. We discern no reason to alter our interpretation of these claim terms and apply those interpretations in our analysis below.

B. The Parties’ Post-Institution Arguments

In our Institution Decision, we concluded that the argument and evidence adduced by Petitioner demonstrated a reasonable likelihood that at least claim 1 was unpatentable as obvious based on the combined teachings of McCalmont and Chang. Dec. 20. We also instituted *inter partes* review of all challenges to claims 1–34. *Id.* We must now determine whether Petitioner has established by a preponderance of the evidence that the specified claims are unpatentable over the cited prior art. 35 U.S.C. § 316(e) (2018). We previously instructed Patent Owner that “any arguments for patentability not raised in the [Patent Owner Response] may be deemed waived.” Paper 9, 8; *see also In re Nuvasive, Inc.*, 842 F.3d 1376, 1381 (Fed. Cir. 2016) (holding that patent owner’s failure to proffer argument at trial as instructed in scheduling order constitutes waiver). Additionally, the Board’s Trial Practice Guide states that the Patent Owner Response “should identify all the involved claims that are believed to be patentable and state the basis for that belief.” Patent Trial and Appeal Board Consolidated Trial Practice Guide (Nov. 2019) 66.⁷

Patent Owner does not contest that claims 1–17 and 23–34 are unpatentable and has submitted no evidence during the trial and proffered no argument in support of the patentability of these claims. Tr. 20:3–5,

⁷ See <https://www.uspto.gov/sites/default/files/documents/tpgnov.pdf>.

21:8–11. Accordingly, Petitioner’s arguments that claims 1–17 and 23–34 are unpatentable as obvious are unopposed, and Patent Owner has proffered no evidence that the claims are patentable.

C. Legal Standards

Petitioner challenges the patentability of claims 1–34 on the grounds that the claims are obvious. To prevail in its challenges to the patentability of the claims, Petitioner must establish unpatentability by a preponderance of the evidence. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d). “In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)). This burden never shifts to Patent Owner. *See Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (citing *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1326–27 (Fed. Cir. 2008)) (discussing the burden of proof in *inter partes* review).

The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398 (2007), reaffirmed the framework for determining obviousness as set forth in *Graham v. John Deere Co.*, 383 U.S. 1 (1966). The *KSR* Court summarized the four factual inquiries set forth in *Graham* that we apply in determining whether a claim is unpatentable as obvious under 35 U.S.C. § 103(a) as follows: (1) determining the scope and content of the prior art, (2) ascertaining the differences between the prior art and the claims at issue, (3) resolving the level of ordinary skill in the pertinent art, and (4) when in

evidence, considering objective evidence indicating obviousness or nonobviousness.⁸ *KSR*, 550 U.S. at 406 (citing *Graham*, 383 U.S. at 17–18).

Petitioner must explain how the proposed combinations of prior art would have rendered the challenged claims unpatentable. An obviousness analysis “need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR*, 550 U.S. at 418; *accord In re Translogic Tech., Inc.*, 504 F.3d 1249, 1259 (Fed. Cir. 2007). However, Petitioner cannot satisfy its burden of proving obviousness by employing “mere conclusory statements,” but “must instead articulate specific reasoning, based on evidence of record” to support an obviousness determination. *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380–81 (Fed. Cir. 2016). Petitioner also must articulate a reason why a person of ordinary skill in the art would have combined the prior art references. *NuVasive*, 842 F.3d at 1382.

At this final stage, we determine whether a preponderance of the evidence of record shows that the challenged claims would have been rendered obvious in view of the asserted prior art. We analyze the asserted grounds of unpatentability in accordance with these principles.

D. Level of Ordinary Skill

We review the grounds of unpatentability in view of the understanding of a person of ordinary skill in the art at the time of the invention. *Graham*, 383 U.S. at 17. Petitioner submits that the ordinarily skilled artisan would have a “Bachelor of Science degree in computer or

⁸ Neither party has made any objective evidence indicating non-obviousness of record.

electrical engineering, computer science, or the equivalent; and at least two years of experience in telecommunications. Additional education could substitute for professional experience, and significant work experience could substitute for formal education.” Pet. 9–10 (citing Ex. 1003 ¶ 38) (internal citation omitted). Patent Owner took no position on the appropriate level of ordinary skill in the art. *See generally* PO Resp. We adopt and apply Petitioner’s undisputed proposed level of ordinary skill in our analysis.

E. Claims 1–5, 8, 11–15, 23–28, 31, and 34:

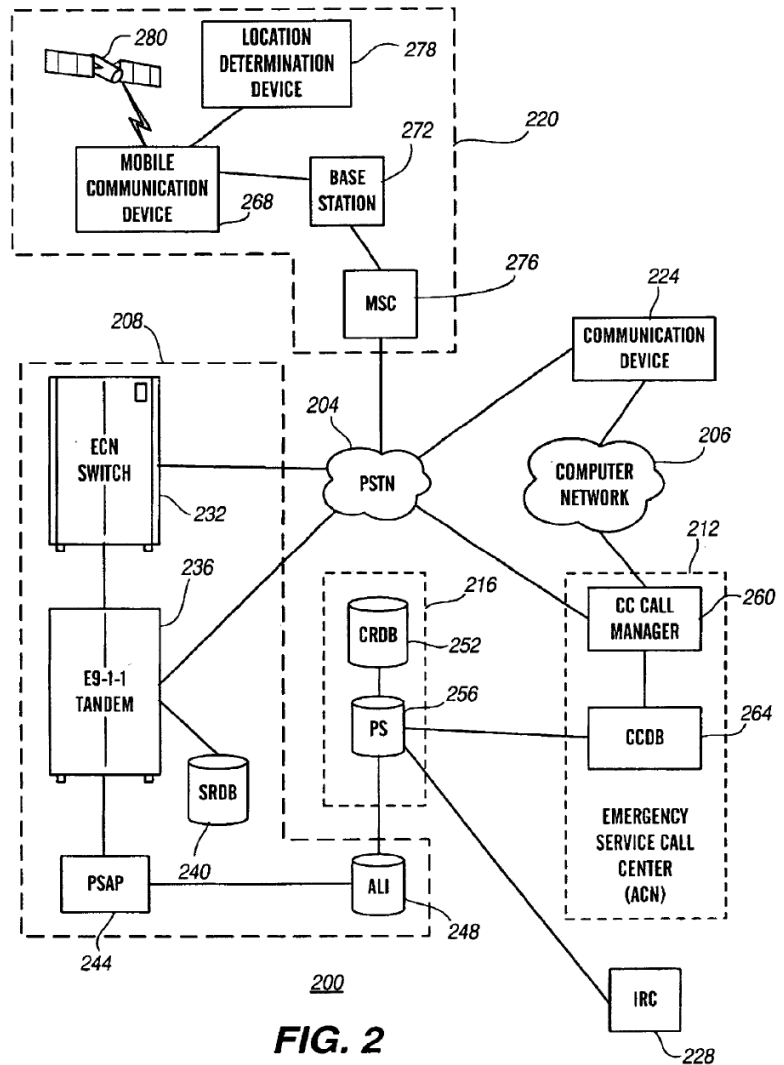
Obviousness in View of McCalmont and Chang

Petitioner argues that the combined teachings of McCalmont and Chang render claims 1–5, 8, 11–15, 23–28, 31, and 34 unpatentable as obvious. Pet. 10–43. Patent Owner has not disputed any aspect of Petitioner’s showing on Petitioner’s challenge set forth in this ground. *See* PO Resp. 4–11 (contesting only Petitioner’s showing regarding the patentability of dependent claims 18–22).

1. Overview of the Combination

a. McCalmont

Petitioner contends that McCalmont is prior art under 35 U.S.C. § 102(e). Pet. 1. McCalmont “relates to the routing of emergency services calls from call centers to public safety answering points, and to the provision of data in connection with such calls.” Ex. 1004, 1:15–19. McCalmont’s network, illustrated in Figure 2 (reproduced at right), includes mobile device 268 and communication device 224, either of which can



communicate with emergency service call center 212. The “emergency service communication device 224 may include a premises alarm, a personal alarm, a VoIP telephone, or another communication device capable of initiating or conveying a request for emergency services to an emergency service call center 212.” *Id.* at 7:8–12. Mobile communication device 268 includes a GPS receiver capable of receiving signals from GPS satellites 280. *Id.* at 11:8–10.

The operation of McCalmont's network is illustrated in its Figure 3 (reproduced at right), which is a flow chart depicting in overview the delivery of an emergency services call and data to a public safety answering point ("PSAP"). *Id.* at 6:54–56. An emergency services request 300 is initiated by, for example, communication device 224 to call manager 260 which, at step 304, provides call information (including location) to emergency services complex 216. *Id.* at 12:16–18, 12:40–42. At step 308, emergency services complex 216 returns a routing number and an identifier for accessing stored information to the call center. *Id.* at 13:15–24. At steps 312, 316, and 320, the call is routed to a PSAP, using the routing number as the called number. *Id.* at 13:25–55.

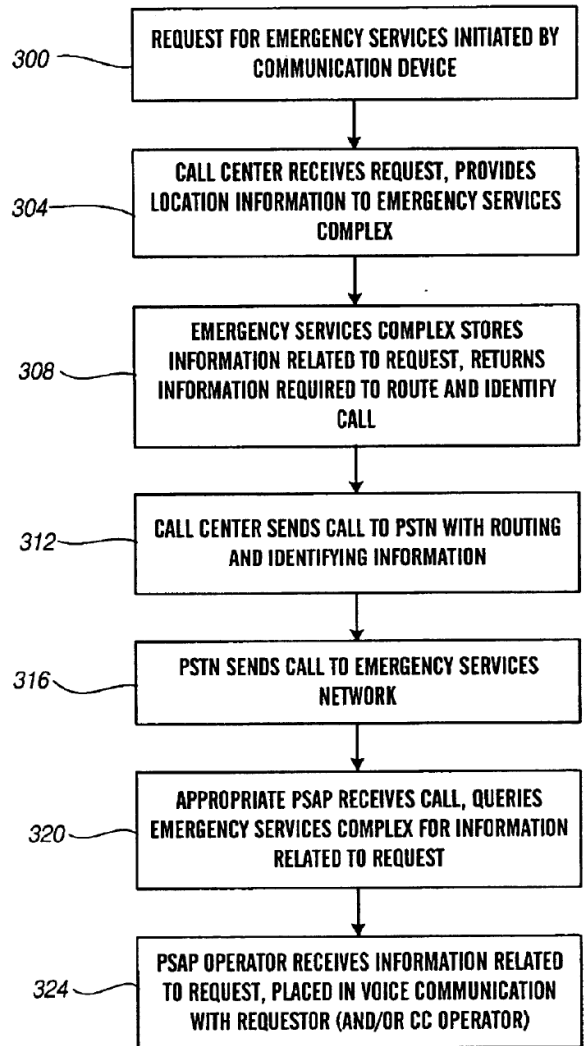


FIG. 3

b. Chang

Petitioner contends that Chang is prior art under 35 U.S.C. § 102(e). Pet. 1. Users of Chang's system "who are in danger can activate a device, which can trigger a notification to the appropriate emergency service for that area, as well as to the telephone numbers, pager numbers, email addresses, etc., of a predefined list of emergency contacts." Ex. 1006, 1:54–58. Chang's Figure 2 (reproduced at right) is a block diagram of the system. *Id.* at 2:17–18. The system includes base station 210 coupled to remote device 200. *Id.* at 4:60–63. In operation, when remote device 200 "detects the occurrence of a triggering event," it "transmits a location signal to the base station." *Id.* at 7:3–20.

c. Motive to Combine

Petitioner recognizes that, although McCalmont describes its mobile communication device 268 as being GPS-enabled, McCalmont provides fewer details about the "architecture" of its communications device 224, which may be a VoIP telephone among other types of devices. Pet. 13. We

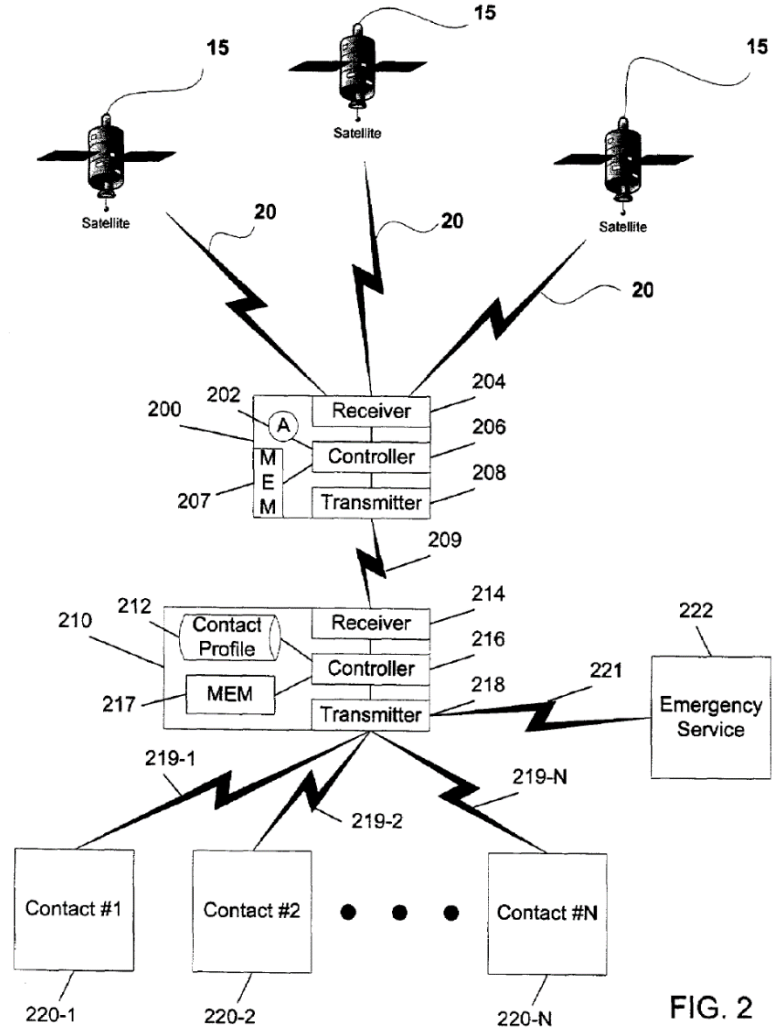


FIG. 2

note that McCalmont does not appear to expressly describe its communication device as being GPS-enabled. *See* Ex. 1004, Fig. 2 (illustrating GPS only with mobile communication device 268). However, Petitioner argues that an ordinarily skilled artisan would have been motivated to seek information from references in the same field as McCalmont, like Chang, for such details. Pet. 13–14 (citing Ex. 1003 ¶ 55).

Petitioner argues that an ordinarily skilled artisan would have been motivated to include Chang’s GPS receiver 204 in McCalmont’s communication device 224. *Id.* (citing Ex. 1003 ¶¶ 56–58). McCalmont describes using GPS-based locator services in connection with its mobile communication device 268, Ex. 1004, 11:8–10, and Petitioner notes that McCalmont suggests that “[f]or a VoIP connection, the **location of the caller is critical** for determining the appropriate PSAP for getting help to the caller,” Pet. 14 (quoting Ex. 1004, 4:31–33) (alteration in original). Petitioner also notes that an ordinarily skilled artisan would have been aware of the FCC’s mandate in 1996 requiring that mobile callers could be located within a specified accuracy, which could be provided via the GPS. Pet. 14 (citing Ex. 1003 ¶ 57; Ex. 1013, 1). Petitioner contends that an ordinarily skilled artisan would have been motivated to incorporate similar GPS-based location features in IP-enabled communication devices. *Id.* (citing Ex. 1003 ¶ 58; Ex. 1005, 1:22–26; Ex. 1014, 46).

Petitioner also argues that an ordinarily skilled artisan would have been motivated to use Chang’s activation device/event trigger and remote device controller in McCalmont’s communication device 224. *Id.* (citing Ex. 1003 ¶ 59). McCalmont indicates that its communication devices are capable of monitoring for emergency events like a collision, Ex. 1004,

12:20–36, or the activation of a premises alarm, *id.* at 12:26–35. Petitioner contends that an ordinarily skilled artisan would have understood that a sensor (e.g., collision sensor, smoke and/or heat sensor, vital signs sensor) would have been used to detect such events. Pet. 15 (citing Ex. 1003 ¶ 59 (citing Ex. 1017, 6:2–22; Ex. 1018, code (57); Ex. 1019, 3:1–24)).

Petitioner argues that an ordinarily skilled artisan would have incorporated Chang’s activation device/event trigger into McCalmont’s device 224 “to achieve a fully operational emergency monitoring device.” *Id.* (citing Ex. 1003 ¶ 59; Ex. 1006, 5:28–32).

Petitioner argues that combining teachings from McCalmont and Chang as it suggests merely combines known elements using known methods to yield predictable results. *Id.* (citing Ex. 1003 ¶ 60). Petitioner also contends that an ordinarily skilled artisan would have expected success in combining the teachings of McCalmont and Chang because Chang’s remote device controller could have been executed on a processor in McCalmont’s device 224 and existing portable devices integrated GPS receivers and event sensors/triggers. *Id.* (citing Ex. 1003 ¶ 60 (citing Ex. 1017, 6:2–22; Ex. 1018, code (57); Ex. 1019, 3:1–24)).

Based on our review of the complete record, we find that Petitioner has demonstrated by a preponderance of evidence that an ordinarily skilled artisan would have been motivated to combine teachings of McCalmont and Chang as described above.

2. Independent Claim 1

a. Preamble 1P

The preamble of claim 1 recites: “[a] computer program for handling an emergency Internet Protocol request from an Internet Protocol enabled

device having Global Positioning Systems capability.” Ex. 1001, 5:26–29. Petitioner contends that McCalmont as modified by Chang teaches the limitations recited in the preamble of claim 1. Pet. 16–19. Petitioner contends that McCalmont’s communication device 224 constitutes the claimed Internet Protocol enabled device. *Id.* at 16–17 (citing Ex. 1004, 7:8–13, 11:49–52, Fig. 2; Ex. 1003 ¶¶ 64, 67). Petitioner contends that Chang describes a communication device with GPS capability in the form of device 200 with its GPS receiver 204. *Id.* at 17–18 (citing Ex. 1006, 1:59–64, 4:60–67, Fig. 2). Petitioner also contends that McCalmont at least suggests and Chang expressly describes a “computer program for handling an emergency . . . request.” *Id.* at 18–19 (citing Ex. 1006, 5:28–32, 5:52–55; Ex. 1003 ¶¶ 69, 70).

Patent Owner has not disputed any aspect of Petitioner’s showing on this claim element. *See* PO Resp. 4–11 (contesting only Petitioner’s showing regarding the patentability of dependent claims 18–22); Tr. 20:3–5, 21:8–11.

Based on our review of Petitioner’s undisputed argument and evidence, we determine that Petitioner has proven by a preponderance of evidence that an ordinarily skilled artisan would have incorporated Chang’s GPS capability into McCalmont’s IP-based communication device 224 to meet the limitations recited in the preamble.

b. Limitation 1A

Limitation 1A recites: “a code segment for monitoring software on the Internet Protocol enabled device for at least one of: a collision, heat, smoke, and vital signs.” Ex. 1001, 5:30–32. Petitioner contends that McCalmont as modified by Chang teaches limitation 1A. Pet. 19–22. More specifically,

Petitioner contends that both McCalmont and Chang describe detecting a collision using their respective communication devices. *Id.* at 19 (citing Ex. 1004, 12:16–39; Ex. 1006, 5:12–15, 5:20–21, 7:3–9). Petitioner also contends that its proposed combination of McCalmont and Chang includes a code segment for monitoring software on an IP-enabled device as recited in limitation 1A. *Id.* at 19–20 (citing Ex. 1003 ¶¶ 72–75).

Patent Owner has not disputed any aspect of Petitioner’s showing on this claim element. *See* PO Resp. 4–11 (contesting only Petitioner’s showing regarding the patentability of dependent claims 18–22) Tr. 20:3–5, 21:8–11.

Based on our review of Petitioner’s undisputed argument, which we adopt as our own, and the evidence cited in the Petition, we determine that Petitioner has proven by a preponderance of evidence that an ordinarily skilled artisan would have considered it obvious to combine teachings of McCalmont and Chang to meet limitation 1A.

c. Limitation 1B

Limitation 1B recites: “a code segment for receiving the emergency Internet Protocol request containing global positioning data for the Internet Protocol enabled device, wherein the receiving is based on the monitored software.” Ex. 1001, 5:33–36. Petitioner contends that McCalmont as modified by Chang teaches limitation 1B. Pet. 22–26. Petitioner contends that the McCalmont device 224 sends an emergency request using the Internet Protocol. *Id.* at 23 (citing Ex. 1004, 9:63–10:3, 11:49–52, 12:16–19, Figs. 2, 3; Ex. 1003 ¶¶ 86–88). Petitioner also contends that McCalmont suggests sending GPS data via McCalmont’s device 224 because McCalmont recognizes that for a “VOIP connection, the location of

the caller is critical” and McCalmont’s GPS-enabled mobile communication device 268 sends such GPS data with its emergency requests. *Id.* at 24 (citing Ex. 1004, 4:31–33, 10:21–26, 14:45–48; Ex. 1003 ¶ 89). Petitioner alternatively argues that McCalmont’s device 224 as modified to include Chang’s GPS receiver sends global positioning data as part of this emergency request. *Id.* at 24–25 (citing Ex. 1006, 7:28–32; Ex. 1003 ¶¶ 89–92).

Patent Owner has not disputed any aspect of Petitioner’s showing on this claim element. *See* PO Resp. 4–11 (contesting only Petitioner’s showing regarding the patentability of dependent claims 18–22); Tr. 20:3–5, 21:8–11.

Based on our review of Petitioner’s undisputed argument, which we adopt as our own, and the evidence cited in the Petition, we determine that an ordinarily skilled artisan would have considered it obvious to combine teachings of McCalmont and Chang to meet limitation 1B.

d. Limitation 1C

Limitation 1C recites: “a code segment for obtaining local emergency services data based on the global positioning data.” Ex. 1001, 5:37–38. Petitioner contends that McCalmont as modified by Chang teaches limitation 1C. Pet. 27–28. Petitioner contends that McCalmont expressly describes a call manager (or call center) that uses received location information (GPS-based for mobile device 268) to find the correct emergency service provider (i.e., “local emergency services data”). *Id.* (citing Ex. 1004, 12:40–60, 14:15–20, 15:15–19, Fig. 3; Ex. 1003 ¶¶ 95–98). Petitioner also contends that it would have been obvious to an ordinarily skilled artisan to implement this functionality in software running in a call

center. *Id.* at 28 (cross-referencing Petitioner’s showing relating to preamble based on teachings of McCalmont and Chang, and citing Ex. 1003 ¶ 98).

Patent Owner has not disputed any aspect of Petitioner’s showing on this claim element. *See* PO Resp. 4–11 (contesting only Petitioner’s showing regarding the patentability of dependent claims 18–22); Tr. 20:3–5, 21:8–11.

Based on our review of Petitioner’s undisputed argument, which we adopt as our own, and the evidence cited in the Petition, we determine that an ordinarily skilled artisan would have considered it obvious to combine teachings of McCalmont and Chang to meet limitation 1C.

e. Limitation 1D

Limitation 1D recites: “a code segment for dialing a call center station based on the local emergency services data.” Ex. 1001, 5:39–40. Petitioner contends that McCalmont describes limitation 1D. Pet. 28–29. Petitioner contends that McCalmont expressly describes dialing a call center (i.e., a PSAP) based upon “local emergency services data” (i.e., an emergency services routing number (“ESRN”)). *Id.* (citing Ex. 1004, 13:27–32, 15:45–49; Ex. 1003 ¶¶ 99–101).

Patent Owner has not disputed any aspect of Petitioner’s showing on this claim element. *See* PO Resp. 4–11 (contesting only Petitioner’s showing regarding the patentability of dependent claims 18–22); Tr. 20:3–5, 21:8–11.

Based on our review of Petitioner’s undisputed argument, which we adopt as our own, and the evidence cited in the Petition, we determine that McCalmont describes limitation 1D.

f. Limitation 1E

Limitation 1E recites: “a code segment for passing an emergency call from the Internet Protocol enabled device to the call center station.”

Ex. 1001, 5:41–43. Petitioner contends that McCalmont as modified by Chang teaches limitation 1E. Pet. 29–30. Petitioner contends that McCalmont expressly describes calling the PSAP (i.e., the “call center station”) using the ESRN. Petitioner also contends that it would have been obvious to an ordinarily skilled artisan to implement this functionality in software running in a call center. *Id.* at 30 (cross-referencing Petitioner’s showing relating to preamble based on teachings of McCalmont and Chang, and citing Ex. 1003 ¶ 103).

Patent Owner has not disputed any aspect of Petitioner’s showing on this claim element. *See* PO Resp. 4–11 (contesting only Petitioner’s showing regarding the patentability of dependent claims 18–22); Tr. 20:3–5, 21:8–11.

Based on our review of Petitioner’s undisputed argument, which we adopt as our own, and the evidence cited in the Petition, we determine that an ordinarily skilled artisan would have considered it obvious to combine teachings of McCalmont and Chang to meet limitation 1E.

g. Conclusion

For all the reasons expressed above, we conclude that Petitioner has proven by a preponderance of evidence that the combined teachings of McCalmont and Chang render claim 1 unpatentable as obvious.

3. Dependent Claims 2–5, 8, and 11

Claims 2–5, 8, and 11 ultimately depend from claim 1. Petitioner argues that the combined teachings of McCalmont and Chang render

dependent claims 2–5, 8, and 11 unpatentable as obvious and cites probative evidence in support of its arguments. Pet. 39–43. Patent Owner has not disputed any aspect of Petitioner’s showing on these dependent claims. *See* PO Resp. 4–11 (contesting only Petitioner’s showing regarding the patentability of dependent claims 18–22); Tr. 20:3–5, 21:8–11.

Based on our review of Petitioner’s undisputed argument, which we adopt as our own, and the evidence cited in the Petition, we determine that Petitioner has demonstrated by a preponderance of evidence that the combined teachings of McCalmont and Chang render claims 2–5, 8, and 11 unpatentable as obvious.

4. Independent Claim 12

Petitioner argues that the combined teachings of McCalmont and Chang render claim 12 unpatentable as obvious and cites probative evidence in support of its arguments. Pet. 30–33. Patent Owner has not disputed any aspect of Petitioner’s showing on this claim element. *See* PO Resp. 4–11 (contesting only Petitioner’s showing regarding the patentability of dependent claims 18–22); Tr. 20:3–5, 21:8–11.

Based on our review of Petitioner’s undisputed argument, which we adopt as our own, and the evidence cited in the Petition, we determine that Petitioner has demonstrated by a preponderance of evidence that the combined teachings of McCalmont and Chang render claim 12 unpatentable as obvious.

5. Dependent Claims 13–15

Claims 13–15 ultimately depend from claim 12. Petitioner argues that the combined teachings of McCalmont and Chang render dependent claims 13–15 unpatentable as obvious and cites probative evidence in support of its

arguments. Pet. 39–42. Patent Owner has not disputed any aspect of Petitioner’s showing on these dependent claims. *See* PO Resp. 4–11 (contesting only Petitioner’s showing regarding the patentability of dependent claims 18–22); Tr. 20:3–5, 21:8–11.

Based on our review of Petitioner’s undisputed argument, which we adopt as our own, and the evidence cited in the Petition, we determine that Petitioner has demonstrated by a preponderance of evidence that the combined teachings of McCalmont and Chang render claims 13–15 unpatentable as obvious.

6. Independent Claim 23

Petitioner argues that the combined teachings of McCalmont and Chang render claim 23 unpatentable as obvious and cites probative evidence in support of its arguments. Pet. 33–38. Patent Owner has not disputed any aspect of Petitioner’s showing on this claim element. *See* PO Resp. 4–11 (contesting only Petitioner’s showing regarding the patentability of dependent claims 18–22); Tr. 20:3–5, 21:8–11.

Based on our review of Petitioner’s undisputed argument, which we adopt as our own, and the evidence cited in the Petition, we determine that Petitioner has demonstrated by a preponderance of evidence that the combined teachings of McCalmont and Chang render claim 23 unpatentable as obvious.

7. Dependent Claims 24–28, 31, and 34

Claims 24–28, 31, and 34 ultimately depend from claim 23. Petitioner argues that the combined teachings of McCalmont and Chang render dependent claims 24–28, 31, and 34 unpatentable as obvious and cites probative evidence in support of its arguments. Pet. 38–43. Patent Owner

has not disputed any aspect of Petitioner's showing on these dependent claims. *See* PO Resp. 4–11 (contesting only Petitioner's showing regarding the patentability of dependent claims 18–22); Tr. 20:3–5, 21:8–11.

Based on our review of Petitioner's undisputed argument, which we adopt as our own, and the evidence cited in the Petition, we determine that Petitioner has demonstrated by a preponderance of evidence that the combined teachings of McCalmont and Chang render claims 24–28, 31, and 34 unpatentable as obvious.

F. Claims 6, 16, and 29:

Obviousness in View of McCalmont, Chang, and Masumoto

Claims 6, 16, and 29 ultimately depend from independent claims 1, 12, and 23 respectively. Petitioner argues that the combined teachings of McCalmont, Chang, and Masumoto render dependent claims 6, 16, and 29 unpatentable as obvious and cites probative evidence in support of its arguments. Pet. 43–44. Patent Owner has not disputed any aspect of Petitioner's showing on these dependent claims. *See* PO Resp. 4–11 (contesting only Petitioner's showing regarding the patentability of dependent claims 18–22); Tr. 20:3–5, 21:8–11.

Based on our review of Petitioner's undisputed argument, which we adopt as our own, and the evidence cited in the Petition, we determine that Petitioner has demonstrated by a preponderance of evidence that the combined teachings of McCalmont, Chang, and Masumoto render claims 6, 16, and 29 unpatentable as obvious.

G. Claims 7, 17–19, 22, and 30:

Obviousness in View of McCalmont, Chang, and Zonoun

1. Claims 7, 17, and 30

Claims 7, 17, and 30 ultimately depend from independent claims 1, 12, and 23 respectively. Petitioner argues that the combined teachings of McCalmont, Chang, and Zonoun render dependent claims 7, 17, and 30 unpatentable as obvious and cites probative evidence in support of its arguments. Pet. 44–46. Patent Owner has not disputed any aspect of Petitioner’s showing on these dependent claims. *See* PO Resp. 4–11 (contesting only Petitioner’s showing regarding the patentability of dependent claims 18–22); Tr. 20:3–5, 21:8–11.

Based on our review of Petitioner’s undisputed argument, which we adopt as our own, and the evidence cited in the Petition, we determine that Petitioner has demonstrated by a preponderance of evidence that the combined teachings of McCalmont, Chang, and Zonoun render claims 7, 17, and 30 unpatentable as obvious.

2. Claims 18, 19, and 22

Claims 18 depends from claim 17, which depends from claim 12. Claims 19 and 22 depend from claim 18. Thus, claims 18, 19, and 22 ultimately depend from independent claim 12. We have already found that Petitioner has proven by a preponderance of evidence that claims 12 and 17 are unpatentable as obvious. *See* Part II.E.4 above (claim 12), Part II.G.1 above (claim 17).

Claim 18 depends upon claim 17 and further recites:

[A] wherein the Session Initiation Protocol request is sent to an address server that

[B] obtains local emergency services data based on the global positioning data,

[C] dials a call center station based on the local emergency services data and

[D] passes an emergency call from the Internet Protocol enabled device to the call center station.

Ex. 1001, 6:41–46 (with labels added to ease discussion).

Petitioner contends that the ’423 patent does not expressly define “address server” but rather that the address server: “‘monitor[s] the Internet for these specific sessions’, ‘accepts the SIP from the originating hardware’ and ‘passes the voice call and the available direct dial numbers to a call center.’” Pet. 46 (citing Ex. 1001, 1:44–54) (alteration in original).

Petitioner contends that McCalmont’s call center 212 operates in the same manner as the “address server” recited in element 18A because it receives an emergency IP request, accesses a database for PSAP routing data, and passes the request to a PSAP. *Id.* at 46–47 (citing Ex. 1003 ¶ 148). Additionally, Petitioner contends that the combined teachings of McCalmont, Chang, and Zonoun describe the subject matter recited in elements 18B–18D for the same reasons that the combined teachings of McCalmont and Chang describe the subject matter recited in elements 1C–1E. *Id.* at 47 (cross-referencing showing for elements 1C–1E of claim 1 and citing Ex. 1003 ¶ 149).

Patent Owner argues that:

McCalmont (Ex. 1004) specifically cannot disclose the address server since in McCalmont the device [260] which first receives the incoming information from electronics device 224 is the same device which sends the call to public switched telephone network 204, whereas in the ’423 Patent (Ex. 1001), the address

server 110 handles all of the analysis before a call center is ever notified of the call.

PO Resp. 8. Patent Owner cites no evidence in support of its argument. *Id.*

Patent Owner's unsupported argument rests upon an implied interpretation of claim 18 as requiring an order of operations, i.e., the address server handling "all of the analysis before a call center is ever notified of the call." *Id.* Petitioner persuades us that claim 18 recites no such limitation. Instead, claim 18 merely requires that the claimed address server "obtains local emergency services data," "dials a call center station based" on this data, and "passes an emergency call from the Internet Protocol enabled device to the call center station." Reply 9–10; Ex. 1001, 6:43–46. Given that Patent Owner's argument is premised upon an improperly narrow interpretation of claim 18, we find it unavailing. Additionally, we find Petitioner's showing that the combined teachings of McCalmont, Chang, and Zonoun render claims 18, 19, and 22 unpatentable to be persuasive by a preponderance of evidence for the reasons set forth in the Petition, which we adopt as our own, and based on the evidence adduced in the Petition.

Patent Owner largely based its new arguments in its Surreply relating to the patentability of claim 18 upon implied interpretations of various other claim language. Under Rule 42.23(b) a "Surreply may only respond to arguments raised in the corresponding reply and may not be accompanied by new evidence other than deposition transcripts of the cross-examination of any reply witness." 37 C.F.R. § 42.23(b). We find that Patent Owner's arguments in its Surreply materially differ from those set forth in its Patent Owner Response and rest upon implied claim interpretation that could have been advanced in the Patent Owner Response. We consider Patent Owner's

arguments set forth in its Surreply to be outside the proper scope of argument permitted under Rule 42.23(b) and therefore determine that we need not consider them. On that basis, we discern no reason to alter our conclusion that Petitioner has proven by a preponderance of evidence that the combined teachings of McCalmont, Chang, and Zonoun render claims 18, 19, and 22 unpatentable.

Nevertheless, even if we were to consider Patent Owner's Surreply arguments, which we address below, we would still conclude that Petitioner has shown claims 18, 19, and 22 to be unpatentable as obvious.

First, Patent Owner argues that McCalmont does not “obtain local emergency services data” as recited in element 18B, which Patent Owner defines as referring to “one or more direct dial numbers,” which are “numbers for the emergency services 118–124” (i.e., police, fire, poison control, and emergency medical services among others). Surreply 1–2 (citing Ex. 1001, 3:66–4:2, 4:27–29, 4:62–63). Patent Owner argues that “[i]n contrast, McCalmont discloses ‘determin[ing] an emergency services routing number (ESRN) and emergency services query key (ESQK) which are provided to the call center 212’” that is “used by the public switched telephone network (PSTN) to route the call to . . . the appropriate PSAP.” *Id.* at 2 (second alteration in original). According to Patent Owner, the ESRN and ESQK are not “direct dial numbers for the appropriate local emergency services” and thus not the “local emergency services data” recited in element 18B. *Id.* at 3.

Patent Owner's argument rests upon an interpretation of “local emergency services data” as referring to “one or more direct dial numbers” for emergency services, which is overly narrow and unsupported by the

plain language of the claims. Claim 20, which depends from claim 18, recites “wherein the address server further provides a telephone number for one or more local emergency service providers to the call center station based on the local emergency services data.” Ex. 1001, 6:49–52. Thus, claim 20 expressly as a distinct requirement of providing “a telephone number for one or more local emergency service providers” that Patent Owner argues to be the “local emergency services data” recited in element 18B. Based on our review of the plain language of element 18B and claim 20, “local emergency services data” recited in element 18B refers to different information than a “telephone number for one or more local emergency service providers” recited in claim 20. When asked to address why our conclusion that element 18B could not refer to the telephone numbers referenced in claim 20 was incorrect, Patent Owner could provide no argument. Tr. 26:6–21. We thus interpret “local emergency services data” to refer to data associated with local emergency services, which can include information used to access the particular PSAP that handles emergency calls for the locality from which a call for emergency services originates (i.e., the appropriate local PSAP).

Petitioner maps the “local emergency services data” to the ESRN and EQPK that McCalmont’s call manager fetches from positioning server 256 via call center database 264. Pet. 27–28 (citing Ex. 1004, 12:40–60, 14:59–15:19, 15:25–26; Ex. 1003 ¶¶ 95–97). Petitioner persuades us that the ESRN and EQPK, which McCalmont’s call manager 260 uses to route a call to the appropriate PSAP constitutes the claimed “local emergency services data” recited in element 18B.

Second, Patent Owner argues that McCalmont fails to describe an address server that “dials a call center station” as recited in element 18C. Surreply 3–5. Patent Owner contends that McCalmont’s PSAP is “not comparable to the call center station of the ’423 patent because the PSAP of McCalmont is the only destination” called by McCalmont’s call manager 260, “whereas the ’423 patent has a call center station” that is “staffed by an operator who chooses which emergency service to directly dial after speaking with the person who has the emergency.” *Id.* at 4–5 (emphasis omitted).

We conclude that Patent Owner’s argument that “call center station” as recited in element 18C refers to a call center at which a human answers the call and “chooses which emergency service to directly dial” is too narrow as unsupported by the plain language and inconsistent with the Specification. The Specification states:

The call center station 114 (FIG. 1) then determines how to handle the emergency call and may route the call to the police 118 (FIG. 1), fire 120 (FIG. 1), poison control 122 (FIG. 1), emergency medical service 124 (FIG. 1) or other appropriate entity (e.g., coast guard, military, federal agency, rescue unit, etc.). *This method can be implemented as a computer program embedded in a computer readable medium wherein the steps are performed by one or more code segments.*

Ex. 1001, 5:11–19 (emphasis added). When asked why this passage from the Specification did not foreclose the argument that “call center station” was limited to a station at which a human must answer emergency calls, Patent Owner’s counsel conceded “I don’t think a human being needs to be involved.” Tr. 29:13–30:8.

Petitioner persuasively demonstrates that McCalmont describes an address server that “dials a call center station based on the local emergency

services data” when McCalmont’s call manager 260 calls the appropriate local PSAP based upon the ESRN an EQPK that call manager fetches from positioning server 256. Pet. 28–29, 47. Based on our review of Petitioner’s argument, which we adopt as our own, and the evidence cited in the Petition, we determine that Petitioner has demonstrated by a preponderance of evidence that the combined teachings of McCalmont, Chang, and Zonoun render claims 18, 19, and 22 unpatentable as obvious.

H. Claims 9, 10, 32, and 33:

Obviousness in View of McCalmont, Chang, and Vanacore

Claims 9, 10, 32, and 33 ultimately depend from either independent claim 1 or independent claim 23. Petitioner argues that the combined teachings of McCalmont, Chang, and Vanacore render dependent claims 9, 10, 32, and 33 unpatentable as obvious and cites probative evidence in support of its arguments. Pet. 47–50. Patent Owner has not disputed any aspect of Petitioner’s showing on these dependent claims. *See* PO Resp. 4–11 (contesting only Petitioner’s showing regarding the patentability of dependent claims 18–22); Tr. 20:3–5, 21:8–11.

Based on our review of Petitioner’s undisputed argument, which we adopt as our own, and the evidence cited in the Petition, we determine that Petitioner has demonstrated by a preponderance of evidence that the combined teachings of McCalmont, Chang, and Vanacore render claims 9, 10, 32, and 33 unpatentable as obvious.

I. Claims 20 and 21:

Obviousness in View of McCalmont, Chang, Zonoun, and Vanacore

Dependent claim 21 depends from claim 20, which depends from claim 18, which depends from claim 17, which depends from claim 12. Petitioner argues that the combined teachings of McCalmont, Chang,

Zonoun, and Vanacore render dependent claims 20 and 21 unpatentable as obvious and cites probative evidence in support of its arguments. Pet. 51. Patent Owner has not disputed any aspect of Petitioner's showing on these dependent claims that turns on the limitations introduced in these claims, but, instead, argues for the patentability of intervening claim 18. *See* PO Resp. 4–11 (contesting only Petitioner's showing regarding the patentability of dependent claims 18–22); Tr. 20:3–5, 21:8–11. We have found that Petitioner has proven by a preponderance of evidence that the combined teachings of McCalmont, Chang, and Zonoun render intervening claims 17 and 18 unpatentable as obvious. Part II.G above.

Based on our review of Petitioner's undisputed argument, which we adopt as our own, and the evidence cited in the Petition, we determine that Petitioner has demonstrated by a preponderance of evidence that the combined teachings of McCalmont, Chang, Zonoun, and Vanacore render claims 20 and 21 unpatentable as obvious.

J. Obviousness Challenges Based in Part on Hanson

Petitioner contends that claims 1–34 are unpatentable as obvious in view of the combined teachings of Hanson and McCalmont and in further view of one or more of Masumoto, Zonoun, and Vanacore (the “Hanson Grounds”). Pet. 51–78. Given that we have concluded that Petitioner has proven by a preponderance of evidence that claims 1–34 are unpatentable as obvious on other grounds, we need not and do not reach the merits of the Hanson Grounds.

III. CONCLUSION⁹

For all the reasons stated above, we determine that Petitioner has demonstrated by a preponderance of evidence that claims 1–34 are unpatentable as obvious. Our determinations are summarized in the table below:

Claims	35 U.S.C. §¹⁰	References	Claims Shown Unpatentable	Claims Not Shown Unpatentable
1–5, 8, 11–15, 23–28, 31, 34	103	McCalmont, Chang	1–5, 8, 11–15, 23–28, 31, 34	
6, 16, 29	103	McCalmont, Chang, Masumoto	6, 16, 29	
7, 17–19, 22, 30	103	McCalmont, Chang, Zonoun	7, 17–19, 22, 30	
9, 10, 32, 33	103	McCalmont, Chang, Vanacore	9, 10, 32, 33	
20, 21	103	McCalmont, Chang, Zonoun, Vanacore	20, 21	

⁹ Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this decision, we draw Patent Owner’s attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding*. See 84 Fed. Reg. 16,654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. See 37 C.F.R. §§ 42.8(a)(3), (b)(2).

¹⁰ We did not reach the merits of the Hanson Grounds because all challenged claims are found unpatentable for other reasons.

Claims	35 U.S.C. §¹⁰	References	Claims Shown Unpatentable	Claims Not Shown Unpatentable
1–5, 8, 11–15, 23–28, 31, 34	103	Hanson, McCalmont		
6, 16, 29	103	Hanson, McCalmont, Masumoto		
7, 17–19, 22, 30	103	Hanson, McCalmont, Zonoun		
9, 10, 32, 33	103	Hanson, McCalmont, Vanacore		
20, 21	103	Hanson, McCalmont, Zonoun, Vanacore		
Overall Outcome			1–34	

IV. ORDER

For the reasons given, it is:

ORDERED, based on a preponderance of evidence, that claims 1–34 of U.S. Patent 7,394,423 B2 are *unpatentable* as obvious under 35 U.S.C. § 103 as summarized above; and

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

IPR2022-00166
Patent 7,394,423 B2

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