

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

UNIFIED PATENTS, LLC,
Petitioner,

v.

SPEIR TECHNOLOGIES LTD.,
Patent Owner.

IPR2022-00987
Patent 7,321,777 B2

Before BARBARA A. PARVIS, SHEILA F. McSHANE, and
SCOTT RAEVSKY, *Administrative Patent Judges*.

RAEVSKY, *Administrative Patent Judge*.

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

Unified Patents, LLC (“Petitioner”) filed a Petition (Paper 1, “Pet.”) requesting *inter partes* review of claims 1–3 and 5–25 of U.S. Patent No. 7,321,777 B2 (Ex. 1001, “the ’777 patent”). Pet. 2. Speir Technologies Ltd. (“Patent Owner”) filed a Preliminary Response (Paper 6, “Prelim. Resp.”).

Under 35 U.S.C. § 314(a), an *inter partes* review may not be instituted unless it is determined that there is a reasonable likelihood that the petitioner would prevail with respect to at least one of the claims challenged in the petition. After considering the parties’ arguments and evidence, and for the reasons set forth below, Petitioner demonstrates a reasonable likelihood of prevailing with respect to at least one of the challenged claims of the ’777 patent. Accordingly, we institute an *inter partes* review with respect to all challenged claims and grounds asserted in the Petition. *See SAS Inst. Inc. v. Iancu*, 138 S. Ct. 1348, 1355 (2018).

Our factual findings and conclusions at this stage of the proceeding are based on the evidentiary record developed thus far. This is not a final decision as to patentability of the challenged claims.

II. BACKGROUND

A. Related Matters

The parties identify the following related matters: *Speir Technologies Ltd. v. Samsung Electronics Co.*, No. 2:21-cv-00474 (E.D. Tex. Dec. 30, 2021) (pending); *Speir Technologies Ltd. v. Apple Inc.*, No. 6:22-cv-00077 (W.D. Tex. Jan. 20, 2022) (dismissed due to settlement). Pet. 1; Paper 4, 2; Prelim. Resp 3, n.1.

B. The '777 patent

The '777 patent describes a wireless communication system for locating wireless devices. Ex. 1001, code (57) (Abstract). Figure 10, reproduced below, depicts an embodiment of this system:

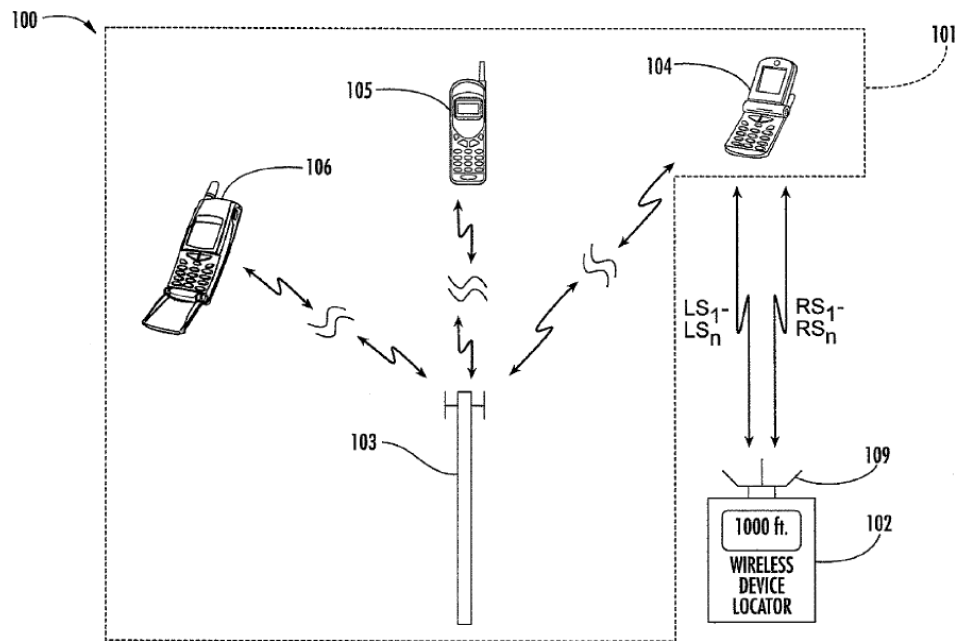


FIG. 10

Id. at 9:63–67. Figure 10 depicts wireless device locator 102 having antenna 109, which locates cellular devices 104–106 in cellular network 101. *Id.* Each device in the network has a unique identifier (UID). *Id.* at 5:49–53.

Figure 11 below, depicts a method for locating a wireless communication device:

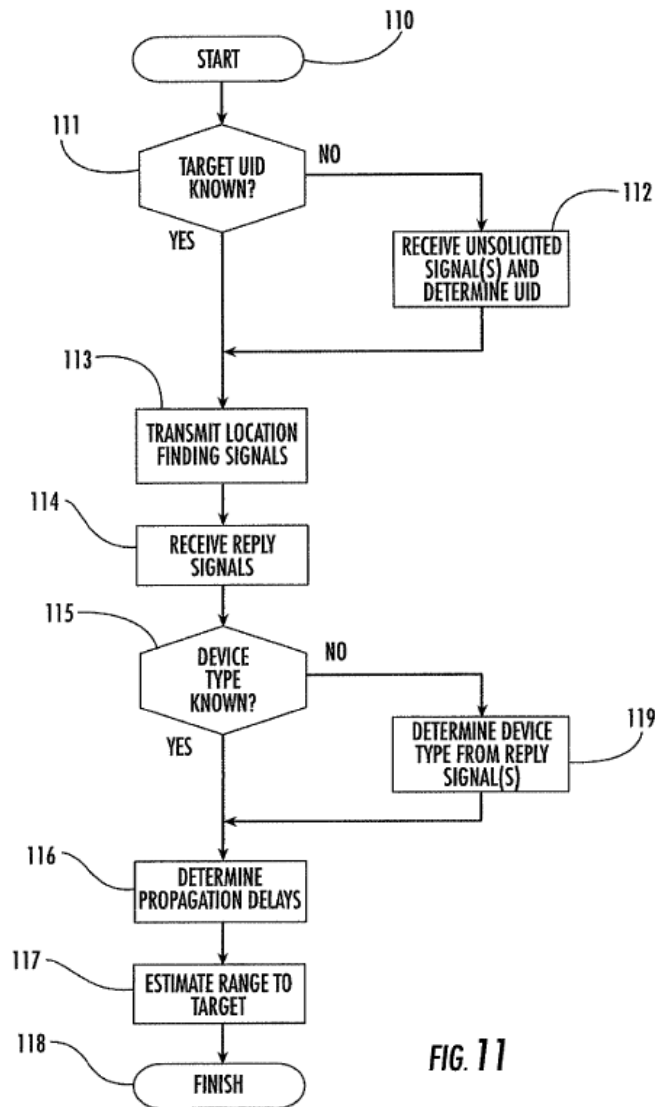


FIG. 11

Id. at 10:9–12. The method of Figure 11, depicted above, in pertinent part, determines a target device's UID from signals transmitted by the target device at block 112. *Id.* at 10:12–15. Once the UID is known, location finding signals are transmitted to the target device at block 113. *Id.* at 10:19–21. Respective reply signals for each of the location finding signals are received from the target device at block 114. *Id.* at 10:22–23. If the device type, and thus the device latency, are known, then the propagation delay associated with the transmitted and reply signals is determined, based

also on the known device latency, at blocks 115 and 116. *Id.* at 10:23–29. In block 117, range to the target device is then estimated based upon the plurality of determined propagation delays. *Id.* at 10:29–31.

C. Challenged Claims

Claim 1 is illustrative of the challenged claims:

1. A wireless communications system comprising:

a plurality of wireless communications devices each having a device type associated therewith from among a plurality of different device types, and each device type having a known device latency associated therewith; and

a wireless device locator comprising

at least one antenna and a transceiver connected thereto, and
a controller for cooperating with said transceiver for transmitting a plurality of location finding signals to a target wireless communications device from among said plurality of wireless communications devices;

said target wireless communications device transmitting a respective reply signal for each of said location finding signals;

said controller of said wireless device locator also for

cooperating with said transceiver for receiving the reply signals,
determining a propagation delay associated with the transmission of each location finding signal and the respective reply signal therefor based upon the known device latency of said target wireless communications device, and

estimating a range to said target wireless communications device based upon a plurality of determined propagation delays.

Ex. 1001, 10:51–11:11.

D. Asserted Grounds of Unpatentability

Petitioner asserts the following grounds of unpatentability (Pet. 3–4), supported by the declaration of Dr. Michael Braasch (Ex. 1002):¹

Claim(s) Challenged	35 U.S.C. §²	Reference(s)/Basis
1, 6–9, 12, 16–20, 23–25	102	McCorkle ³
1, 3, 5–9, 12, 14–20, 22–25	103(a)	McCorkle
1–3, 5–25	103(a)	McCorkle, Leeper ⁴
3, 5, 14, 15, 22	103(a)	McCorkle, Tajima ⁵
3, 5, 11, 14, 15, 22	103(a)	McCorkle, Leeper, Tajima

III. ANALYSIS

A. Real Parties in Interest

Petitioner identifies itself as the sole real party-in-interest (“RPI”).
Pet. 1. Patent Owner identifies Speir Technologies Ltd. as the sole RPI.
Paper 4, 2.

¹ Patent Owner has not submitted declaration testimony at this stage.

² The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284, 285–88 (2011), revised 35 U.S.C. §§ 102, 103 effective March 16, 2013. The ’777 patent was filed prior to March 16, 2013. Ex. 1001, code (63). We therefore apply the pre-AIA versions of §§ 102, 103.

³ U.S. Publication No. 2003/0174048 A1 to McCorkle, published Sept. 18, 2003 (Ex. 1003).

⁴ U.S. Patent No. 7,203,500 B2 to Leeper, issued Apr. 10, 2007 (Ex. 1004).

⁵ U.S. Patent No. 5,381,444 to Tajima, issued Jan. 10, 1995 (Ex. 1006).

Petitioner certifies that “no other party exercised control or could exercise control over Unified’s participation in this proceeding, the filing of this petition, or the conduct of any ensuing trial.” Pet. 1. Petitioner submits voluntary discovery in support of this certification. *Id.* (citing Ex. 1009).

Patent Owner contends that Petitioner did not identify all the RPIs, and thus its Petition should be denied under 35 U.S.C. § 312(a)(2). Prelim. Resp. 1–7. Patent Owner asserts that “Petitioner’s membership-based business model is analogous to that of RPX, the petitioner in *AIT* [*Applications in Internet Time, LLC v. RPX Corp.*, 897 F.3d 1336 (Fed. Cir. 2018)], and that the parties in district court litigation involving the ’777 Patent benefit from the Petition and thus should be named as real-parties-in-interest in this proceeding.” *Id.* at 2–3. Patent Owner identifies Apple Inc. and Samsung Electronics Co., Ltd. as potential omitted RPIs. *Id.* at 3 & n.1. As noted above, Patent Owner’s district court suit is pending against Apple, and its previous suit against Samsung has been dismissed due to settlement. *Id.* Although the Samsung case has been dismissed, Patent Owner contends that Samsung should be named a real party in interest because “the ’777 patent is relevant to Samsung’s commercial interests.” *Id.* at 7. Patent Owner concludes that “Petitioner must either show that Apple and Samsung are not real parties-in-interest or institution should be denied.” *Id.*

Section 312(a)(2) requires that the “petition identif[y] all real parties in interest.” 35 U.S.C. § 312. This provision serves important notice functions to patent owners, to identify whether the petitioner is barred from bringing an IPR due to an RPI that is time-barred or otherwise estopped, and to the Board, to identify conflicts of interests that are not readily apparent from the identity of the petitioner. *NOF Corp. v. Nektar Therapeutics*,

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IPR2019-01397, Paper 30 at 6 (PTAB Feb. 10, 2020) (citing, e.g., Consolidated Trial Practice Guide, at 12–13 (Nov. 2019), available at <https://www.uspto.gov/TrialPracticeGuideConsolidated>)). Accordingly, petitioners must comply with these requirements in good faith. *See* 37 C.F.R. § 42.11(a) (duty of candor and good faith in proceedings). Whether a non-party is an RPI is a “highly fact-dependent question” and must be considered on a case-by-case basis. *Ventex Co. v. Columbia Sportswear N. Am., Inc.*, IPR2017-00651, Paper 148 at 6 (PTAB Jan. 24, 2019) (Paper 148) (precedential) (citing Office Trial Practice Guide, 77 Fed. Reg. 48756, 48759 (Aug. 14, 2012)).

This inquiry, however, is not always necessary at the institution stage. As the Board has explained, the failure to name an RPI is not jurisdictional; that is, such a failure would not result in a lack of jurisdiction preventing institution. *Lumentum Holdings, Inc. v. Capella Photonics, Inc.*, IPR2015-00739, Paper 38 at 6 (PTAB March 4, 2016) (precedential). Additionally, we need not address whether a party is an unnamed RPI at the institution stage unless the time bar or estoppel provisions under 35 U.S.C. § 315 would be implicated, or the omission is otherwise material to the case at the institution stage. *SharkNinja Operating LLC v. iRobot Corp.*, IPR2020-00734, Paper 11 at 18 (PTAB Oct. 6, 2020) (precedential). In *SharkNinja*, there was “no allegation that Petitioner’s failure to name [the third party] as an RPI should result in termination of the proceeding or denial of institution of review other than” for an alleged procedural violation of 35 U.S.C. § 312(a)(2), nor was there any “allegation or evidence that [the third party was] barred or estopped from the proceeding, or that Petitioner purposefully

omitted [the third party] to gain some advantage.” *Id.* at 18–19 (footnote omitted).

Patent Owner does not dispute that *SharkNinja* is applicable here. To the contrary, Patent Owner concedes that “the Petition would not be time-barred under § 315(b).” Prelim. Resp. 7. Indeed, the only pending parallel litigation, *Speir Technologies Ltd. v. Apple Inc.*, No. 6:22-cv-00077 (W.D. Tex.), was filed January 20, 2022, and presumably served near the same time. Pet. 1; Paper 4, 2. As the Petition was filed on May 27, 2022, no § 315(b) time bar applies. Further, Patent Owner does not assert that Apple or Samsung are otherwise barred or estopped from this proceeding, or that Petitioner purposefully omitted Apple or Samsung to gain some advantage. *See SharkNinja*, Paper 11 at 18–19.

As such, consistent with *SharkNinja*, we decline to decide, at this stage, whether the additional parties identified by Patent Owner should have been named as real parties-in-interest in the Petition.

B. Discretion under 35 U.S.C. § 314(a)

Patent Owner argues that we should exercise discretion under § 314(a) to deny institution in light of parallel district court litigation. Prelim. Resp. 7–16. We consider several factors when determining whether to deny institution under § 314(a) based on a parallel district court proceeding. *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 at 5–6 (PTAB Mar. 20, 2020) (precedential) (“*Fintiv*”). In addition, the Director of the United States Patent and Trademark Office has issued an Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District

Court Litigation (“Interim Procedure”)⁶ to clarify “the [Board’s] current application of *Fintiv* to discretionary institutions where there is parallel litigation” and to “confirm[] that the precedential import of *Fintiv* is limited to the facts of that case.” Interim Procedure 2. The Interim Procedure states, “where the PTAB determines that the information presented at the institution stage presents a compelling unpatentability challenge, that determination alone demonstrates that the PTAB should not discretionarily deny institution under *Fintiv*.” *Id.* at 4–5. “Compelling, meritorious challenges are those in which the evidence, if unrebutted in trial, would plainly lead to a conclusion that one or more claims are unpatentable by a preponderance of the evidence.” *Id.* at 4.

At this stage, Patent Owner does not dispute the merits of the Petition. *See generally* Prelim. Resp. Indeed we find, on the current record, that the evidence, if unrebutted in trial, demonstrates that “it is highly likely that the [P]etitioner would prevail with respect to at least one challenged claim.” *See OpenSky Industries, LLC v. VLSI Technology LLC*, IPR2021-01064, Paper 102 at 49–50 (PTAB Oct. 4, 2022) (“A challenge can only ‘plainly lead to a conclusion that one or more claims are unpatentable’ ([Interim Procedure 4]) if it is highly likely that the petitioner would prevail with respect to at least one challenged claim.”). As such, we decline to exercise our discretion under § 314(a) to deny the Petition.

⁶ Available at https://www.uspto.gov/sites/default/files/documents/interim_proc_discretionary_denials_aia_parallel_district_court_litigation_memo_20220621_.pdf.

C. Principles of Law

Petitioner bears the burden to demonstrate unpatentability, and that burden never shifts to Patent Owner. *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015).

A claim is unpatentable as obvious if “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, 406 (2007) (quoting 35 U.S.C. § 103(a)). We resolve the question of obviousness based on underlying factual determinations, including: (1) the scope and content of the prior art; (2) any differences between the prior art and the claims; (3) the level of skill in the art; and (4) when in evidence, objective indicia of nonobviousness. *See Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17–18 (1966).

We apply these principles to the Petition's challenges.

D. Level of Ordinary Skill in the Art

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 13, 17. Petitioner asserts that

[a] person of ordinary skill in the art . . . (“POSITA”) would have had a bachelor's degree in electrical engineering, computer science, computer engineering, physics, or a related subject, and two to three years of work experience in wireless location determination. A lack of experience can be remedied with additional education (e.g., a Master's degree), and likewise, a lack of education can be remedied with additional work experience (e.g., 5–6 years).

Pet. 8 (citing Ex. 1002 ¶¶ 28–31).

Patent Owner does not dispute Petitioner’s proposed level of skill in the art at this stage. We are persuaded, on the present record, that Petitioner’s proposal is consistent with the problems and solutions in the ’777 patent and prior art of record. We adopt Petitioner’s definition of the level of skill for the purposes of this Decision.

E. Claim Construction

In *inter partes* review, we construe claims using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. § 282(b), including construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent. 37 C.F.R. § 42.100(b) (2021).

Neither party proposes any claim constructions at this time. Pet. 10; *see generally* Prelim. Resp. Based on our review of the preliminary record, we determine that no terms require construction at this stage. *See Realtime Data, LLC v. Iancu*, 912 F.3d 1368 (Fed. Cir. 2019) (“The Board is required to construe ‘only those terms . . . that are in controversy, and only to the extent necessary to resolve the controversy.’” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

F. Asserted Obviousness over McCorkle and Leeper (Ground 3)

Petitioner contends that claims 1–3 and 5–25 would have been obvious over McCorkle and Leeper. Pet. 10–70.⁷ We analyze this ground,

⁷ Petitioner argues all grounds together. Pet. 10–70. Petitioner also italicizes reference names. *Id.* at 10, n.2. When quoting Petitioner, we de-italicize reference names throughout, without noting that emphasis has been omitted.

as it is dispositive of whether to institute all the challenged claims. As we noted above, Patent Owner does not challenge the merits of Petitioner’s arguments at this stage. For the reasons set forth below, we determine that Petitioner’s arguments present not only a reasonable likelihood of unpatentability, but also a compelling unpatentability challenge.

1. *Overview of McCorkle*

McCorkle describes radio frequency (RF) communication devices employing ultra wide bandwidth (UWB) transmissions to track the distance of remote devices with respect to a central device. Ex. 1003 ¶ 2. Figure 4, reproduced below, depicts a wireless network:

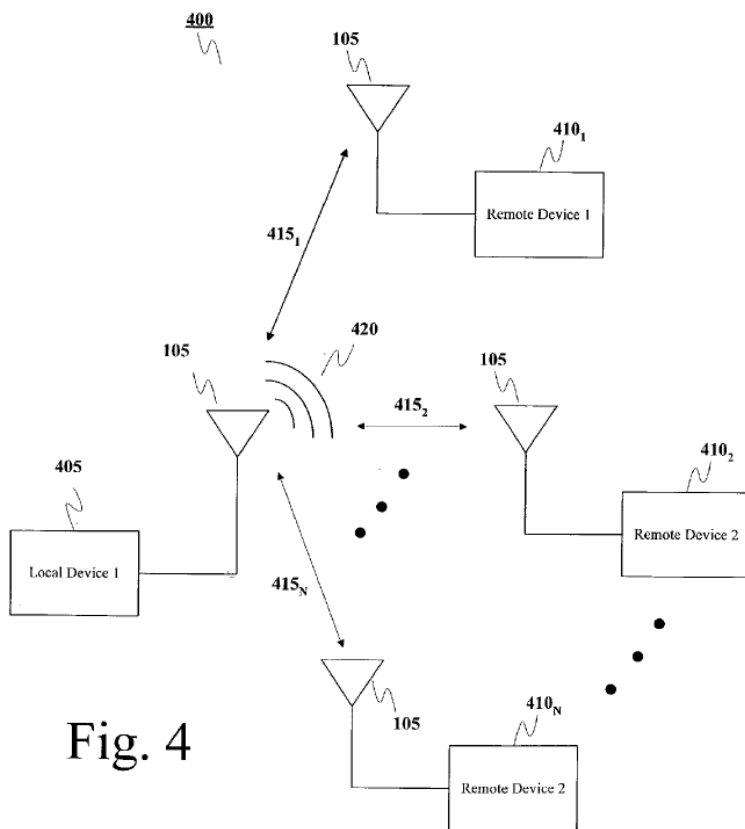
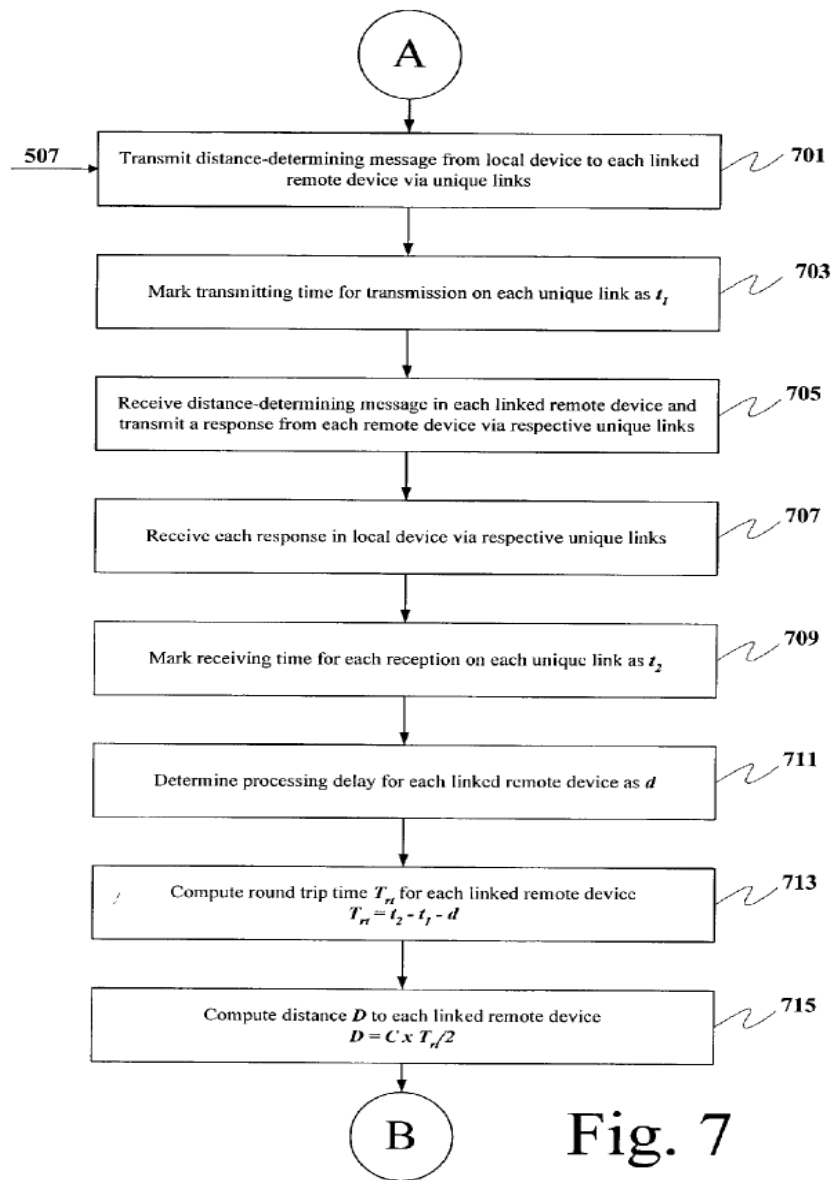


Fig. 4

Id. ¶ 98. Figure 4 above discloses wireless network 400, in which a plurality of wireless devices may exchange information. *Id.* Wireless network 400

includes local device 405 and remote devices 410. Local device 405 is linked to remote devices 405 via UWB links 415. *Id.* ¶ 99. Each of local device 405 and remote devices 405 may be, for example, a mobile phone. *Id.* ¶ 100.

Figure 7, reproduced below, depicts a process of determining distance to each linked remote device:



Id. ¶ 118. In step 701 of Figure 7 above, a distance-determining message is generated and transmitted to each remote device 405 (*see* Figure 4 above) via communication links 415. *Id.* For each distance determining message, in step 703, local device 405 marks a time t_1 as the transmitting time that the message was sent out for the particular communications link. *Id.* ¶ 120. In step 705, remote devices 410 receive the distance-determining message via a respective unique link and transmit a response to local device 405. *Id.* ¶ 121. In step 707, local device 405 receives these responses from the remote devices and marks a receive time t_2 for each response. *Id.* ¶ 122.

Before computing a distance to each linked remote device, local device 405 first determines a processing delay d for each remote device, in step 711. *Id.* ¶ 123. The processing delay d is the time delay between the remote device receiving the distance determining message and transmitting a response and includes at least the amount of time necessary for the remote device to process the distance determining message and form a response. *Id.* Local device 405 can determine the processing delay d by referring to a lookup table (LUT) stored in memory. *Id.* ¶ 124.

In step 713, local device 405 calculates the round-trip time T_{rt} for each remote device 410 using the formula,

$$T_{rt} = t_2 - t_1 - d$$

Id. ¶ 126. A processor of local device 405 retrieves values for T_{rt} and computes the distance D to each remote device using the formula,

$$D = c \cdot \frac{T_{rt}}{2}$$

where c is the speed of light (i.e., the speed at which an RF signal travels through the wireless medium). *Id.* ¶¶ 127–28.

2. *Overview of Leeper*

Leeper describes an apparatus and method to provide precision ranging measurements in UWB wireless communication systems. Ex. 1004, code (57) (Abstract). A ranging agent computes an estimate of the proximal distance between two or more devices in UWB communication. *Id.* The ranging agent determines the distance, in part, by exchanging messages with one or more remote receivers, recording local strobe times of transmission and reception of the exchanged messages, and calculating signal propagation time. *Id.* at 2:23–33. The process of exchanging messages between the devices may be repeated a number (N) of times and averaged to reduce errors. *Id.* at 5:35–38.

3. *Independent claim 1*

a. A wireless communications system comprising:

Petitioner asserts that McCorkle discloses a wireless network 400 in which wireless devices (e.g., local devices 405 and remote devices 410 of Figure 4) may exchange information. Pet. 21 (citing Ex. 1003 ¶ 98). On this record, Petitioner has made a sufficient showing that McCorkle discloses this limitation, whether or not it is limiting.

b. a plurality of wireless communications devices each having a device type associated therewith from among a plurality of different device types, and each device type having a known device latency associated therewith; and

Petitioner contends that McCorkle discloses, or at least renders obvious, this limitation. Pet. 22–25. First, Petitioner contends that McCorkle discloses a plurality of remote devices 410, which may be mobile telephones, laptops, or PDAs. *Id.* at 22–23 (citing Ex. 1003 ¶¶ 98, 100).

These remote devices may have a plurality of different radio types, such as CDMA (code division multiple access), and TDMA (time division multiple access)/GSM (global system for mobiles), according to Petitioner. *Id.* at 23 (citing, e.g., Ex. 1003 ¶¶ 103–104; Ex. 1002 ¶ 42). Petitioner further asserts that radio types for laptops and PDAs would have included WiFi (IEEE Standard 802.11b). *Id.* (citing Ex. 1002 ¶ 42). Thus, Petitioner contends, “a POSITA would have understood, or at least found obvious, that the claimed associated *device type* is taught by McCorkle’s remote device[s] . . . each having an associated radio type (e.g., CDMA devices, TDMA/GSM devices, and/or WiFi devices). *Id.* (citing Ex. 1002 ¶ 42). Petitioner further asserts that McCorkle discloses a predefined processing delay, or known device latency, for each device type in a LUT. *Id.* at 24 (citing Ex. 1003 ¶¶ 123–124). On this record, Petitioner has made a sufficient showing that McCorkle discloses or suggests this limitation.

c. a wireless device locator comprising at least one antenna and a transceiver connected thereto, and

Petitioner contends that McCorkle discloses, or at least renders obvious, this limitation. Pet. 25–26. According to Petitioner, McCorkle discloses local device 405 that determines a distance to remote devices 410. *Id.* at 25 (citing Ex. 1003 ¶¶ 98–105, 113–128). Petitioner also contends that McCorkle discloses that the local device includes a UWB transceiver and associated antenna. *Id.* at 25–26 (citing, e.g., Ex. 1003 ¶ 101, Fig. 4).

On this record, Petitioner has made a sufficient showing that McCorkle discloses or suggests this limitation.

d. a controller for cooperating with said transceiver for transmitting a plurality of location finding signals to a target wireless communications device from among said plurality of wireless communications devices;

Petitioner contends that McCorkle discloses, or at least renders obvious, this limitation. Pet. 26–29. For example, Petitioner contends that McCorkle’s local device includes a processor (a controller), which generates a distance-determining message and sends it to remote devices. *Id.* at 26–27 (citing, e.g., Ex. 1003 ¶¶ 120). Petitioner further contends that its system continually updates the location of each remote device. *Id.* at 28 (citing Ex. 1003 ¶¶ 140, 145, 152). In Petitioner’s view, “a POSITA would have understood, or at least found obvious, that multiple distance-determining messages are sent to each remote device at least so that the location of the remote device can be continually updated.” *Id.* at 29 (citing, e.g., Ex. 1002 ¶¶ 44–45).

On this record, Petitioner has made a sufficient showing that McCorkle discloses or suggests this limitation.

e. said target wireless communications device transmitting a respective reply signal for each of said location finding signals;

Petitioner again relies on McCorkle for this limitation. Pet. 29–32. Petitioner contends that McCorkle’s remote device receives a distance determining message from the local device and transmits a response to the local device. *Id.* at 29–30 (citing Ex. 1003 ¶ 121). According to Petitioner, “[a] POSITA would have understood, or at least would have found obvious, that this occurs for each distance determining message that is received.” *Id.* at 30 (citing Ex. 1003 ¶¶ 145, 152; Ex. 1002 ¶¶ 44–45).

On this record, Petitioner has made a sufficient showing that McCorkle discloses or suggests this limitation.

f. said controller of said wireless device locator also for cooperating with said transceiver for receiving the reply signals,

For this limitation, Petitioner again relies on McCorkle. Pet. 32–34. Petitioner asserts that McCorkle’s processor receives the responses, mentioned above with respect to the previous limitation, using the UWB transceiver of local devices. *Id.* at 32 (citing Ex. 1003 ¶¶ 101, 122–125). And Petitioner asserts that McCorkle uses these received responses to determine the distance to the remote device. *Id.* (citing Ex. 1003 ¶¶ 79–80, 118–28).

On this record, Petitioner has made a sufficient showing that McCorkle discloses or suggests this limitation.

g. determining a propagation delay associated with the transmission of each location finding signal and the respective reply signal therefor based upon the known device latency of said target wireless communications device, and

In Petitioner’s view, McCorkle teaches or renders obvious this limitation. Pet. 34–42. The local device receives information indicating the type of remote device, Petitioner argues, and then refers to the LUT of known processing delays to determine the processing delay for remote device. *Id.* at 36 (citing Ex. 1003 ¶ 124, Fig. 7). Petitioner contends that the local device uses this processing delay, along with determined transmit time and receive time, to determine the round-trip time of the signals to remote device. *Id.* at 38 (citing Ex. 1003 ¶ 126).

On this record, Petitioner has made a sufficient showing that McCorkle discloses or suggests this limitation.

h. estimating a range to said target wireless communications device based upon a plurality of determined propagation delays.

Petitioner argues that McCorkle alone, or the combination of McCorkle and Leeper, discloses or renders obvious this limitation. Pet. 43–49. Petitioner first asserts that McCorkle uses the determined propagation delays to calculate distances to remote device 410 from local device 405. *Id.* at 43 (citing Ex. 1003 ¶ 127). Petitioner next contends that “[t]o the extent [Patent Owner] argues that the claimed *estimating* requires that a single range be determined based on multiple calculated propagation delay[s], this would have been rendered obvious over McCorkle as modified by Leeper.” *Id.* at 45.

Petitioner argues that like McCorkle, Leeper discloses determining a distance or range between two wireless communication devices by sending and receiving signals between the devices and determining a propagation delay of the signals. *Id.* (citing Ex. 1004, 2:15–3:9, 4:22–64, 6:66–7:7, 7:35–59, Fig. 1). And according to Petitioner, “Leeper also discloses that ‘the process of exchanging messages between the devices may be repeated a number (N) of times and averaged’ to reduce errors.” *Id.* (citing Ex. 1004, 5:34–52).

Petitioner contends that a POSITA would have been motivated to combine the teachings of McCorkle and Leeper with a reasonable expectation of success. *Id.* at 45–49 (citing, e.g., Ex. 1002 ¶¶ 46–52). For example, among other reasons, Petitioner asserts that a POSITA would have understood that Leeper’s averaging of multiple calculated propagation

delays would have beneficially reduced errors that may occur in McCorkle's distance calculation. *Id.* at 46 (citing Ex. 1002 ¶ 48). For purposes of institution, Petitioner supplies a sufficiently articulated rationale to combine, supported by rational underpinning.

Accordingly, on this record, Petitioner has made a sufficient showing that the combination of McCorkle and Leeper discloses or suggests this limitation.

i. Summary as to Claim 1

Based on the preliminary record before us, Petitioner has shown a reasonable likelihood that the combination of McCorkle and Leeper would have rendered claim 1 obvious. We further determine that on the current record, that the evidence, if unrebutted in trial, demonstrates that “it is highly likely that the [P]etitioner would prevail with respect to” at least claim 1. *See OpenSky Industries*, Paper 102 at 49–50.

4. Independent Claims 10, 12, 20

Petitioner raises similar arguments for independent claims 10, 12, and 20 as for claim 1, which Patent Owner does not contest at this preliminary stage. *See Pet.* 61–65, 67–68. For similar reasons as discussed above, Petitioner has shown a reasonable likelihood that the combination of McCorkle and Leeper would have rendered claims 10, 12, and 20 obvious. We further determine that if unrebutted at trial, Petitioner's challenge over McCorkle and Leeper would plainly lead to a conclusion that claims 10, 12, and 20 are unpatentable by a preponderance of the evidence. *See Interim Procedure*, 4.

5. Dependent Claims 2, 3, 5–9, 11, 13–19, and 21–25

Petitioner contends that dependent claim 2, 3, 5–9, 11, 13–19, and 21–25 would have been obvious over the combination of McCorkle and Leeper. Pet. 49–61, 63–70. Petitioner provides a detailed analysis explaining where the combination of McCorkle and Leeper discloses or suggests the limitations in these dependent claims, which Patent Owner does not contest at this preliminary stage. Based on the current record, which we have reviewed, we determine that Petitioner has demonstrated a reasonable likelihood that the combination of McCorkle and Leeper would have rendered obvious claims 2, 3, 5–9, 11, 13–19, and 21–25.

G. Remaining Grounds

Petitioner also contends that the challenged claims would have been anticipated or obvious over other grounds, which are set forth above. Pet. 3, 4, 10–70. Patent Owner also does not dispute these grounds at this stage. We leave for trial the issue of whether these additional grounds would have rendered the challenged claims unpatentable.

IV. CONCLUSION

At this stage of the proceeding, we determine that Petitioner has demonstrated a reasonable likelihood of prevailing on its challenge over at least the ground of McCorkle and Leeper as to all challenged claims. At this preliminary stage, we have not made a final determination as to the patentability of the challenged claims or any underlying factual and legal issues.

V. ORDER

It is, therefore,

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review of all challenged claims of the '777 patent is instituted with respect to all grounds of unpatentability set forth in the Petition; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial commencing on the entry date of this Decision.

PETITIONER:

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