

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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MOTOROLA MOBILITY LLC,  
Petitioner,

v.

MAXELL, LTD,  
Patent Owner.

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IPR2023-00110  
Patent 7,072,673 B2

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Before KEVIN C. TROCK, KARAL. SZPONDOWSKI,  
and JASON W. MELVIN, *Administrative Patent Judges*.

Opinion for the Board filed by SZPONDOWSKI, *Administrative Patent Judge*.

Opinion Dissenting filed by MELVIN, *Administrative Patent Judge*.

SZPONDOWSKI, *Administrative Patent Judge*.

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

## I. INTRODUCTION

Motorola Mobility LLC (“Petitioner”) filed a Petition (Paper 1, “Pet.”) pursuant to 35 U.S.C. §§ 311–319 to institute an *inter partes* review of claims 1–15 of U.S. Patent No. 7,072,673 B2 (Ex. 1001, “the ’673 patent”). Maxell, Ltd (“Patent Owner”) filed a Preliminary Response (Paper 6, “Prelim. Resp.”).

Institution of *inter partes* review is authorized when “the information presented in the petition . . . and any response . . . shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a). Based on the current record, and for the reasons explained below, we determine that Petitioner has not established a reasonable likelihood that it would prevail with respect to at least one challenged claim. Accordingly, we do not institute an *inter partes* review as to the challenged claims and grounds raised in the Petition.

## II. BACKGROUND

### A. *Real Parties in Interest*

Petitioner identifies itself, a direct, wholly owned subsidiary of Motorola Mobility Holdings LLC, which is an indirect wholly-owned subsidiary of Lenovo Group Ltd., as the real party in interest, and additionally identifies Lenovo Inc. as a potential real party in interest. Pet. 1. Patent Owner identifies itself as a real party in interest. Paper 3, 1.

### B. *Related Proceedings*

The parties identify *Maxell, Ltd. et al v. Lenovo Group Ltd., et al.*, Case No. 6:21-cv-01169-ADA (W.D. Tex.) and *Motorola Mobility LLC v.*

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*Maxell, Ltd.*, Case No. 1-22-cv-00256 (N.D. Ill. Jan. 14, 2022). Pet. 1;  
Paper 3, 1.

*C. The '673 Patent (Ex. 1001)*

The '673 patent is generally directed to “a radio handset and a position location system for accurately identifying its current position even when it is difficult to discriminate a base station from which the signal has been transmitted.” Ex. 1001, 1:12–16. The '673 patent was filed on October 22, 2002 and claims priority to U.S. Patent No. 6,484,034, which was filed on August 29, 2001 and Japanese Patent Application 2001-222533, filed on July 24, 2001. *Id.* at codes (22), (30), (63), 1:4–7.

The '673 patent describes that, in conventional systems, the current position of a radio handset is calculated using positions of base stations and propagation delay time differences between signals transmitted to a handset from different base stations. *Id.* at 1:17–34. “[A]ll the base stations use the same spread code (PN code)” and “each of the base stations has a pilot PN offset (PN offset value) as a transmission time difference predetermined for each of the base stations for identification” and “transmits a signal at a timing shifted from the standard timing by its PN offset value.” *Id.* at 1:39–45. “A radio handset calculates correlation between the received signal and the PN code so as to obtain a delay profile.” *Id.* at 1:45–48. “For example, a correlation value between the received signal and the PN code is calculated by using a matched filter.” *Id.* at 1:48–50. When base stations have “different PN offset values, the correlation values corresponding to the signals from the base stations are temporally separated from one another,” so in the delay profile “it is possible to isolate each of the signals transmitted from the different base stations as well as received timings of the signals

from the base stations” in order to “detect a location by using the signal propagation time from the base stations.” *Id.* at 1:52–62.

Figure 12, reproduced below, shows a delay profile in the conventional radio communication system.

**FIG. 12**

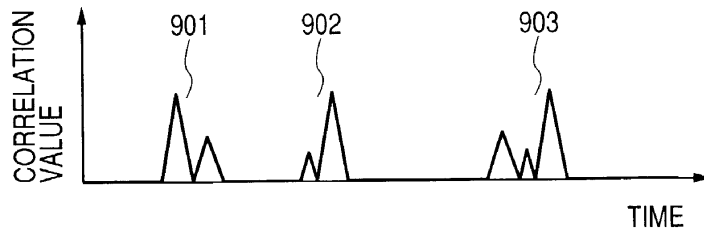


Figure 12, above, shows correlation values 901, 902, and 903 corresponding to signals received from base stations 801, 802, and 803, respectively. *Id.* at 1:52–54. “[S]ince the base stations have different PN offset values, the correlation values corresponding to the signals from the base stations are temporally separated from one another.” *Id.* at 1:54–57.

Figure 13, reproduced below, depicts another delay profile in the conventional radio communication system.

**FIG. 13**



Figure 13, above, shows correlation values 910 and 903, where base station 801 and 802 have the same PN offset value and base station 803 has a

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different PN offset value. *Id.* at 2:1–5. “[S]ince the base stations 801 and 802 have the same PN offset value, correlation values corresponding to the signals received from these base stations are overlapped at the same time as a delay profile waveform (matched filter output).” *Id.* at 2:6–10.

The ’673 patent discloses that for base stations having the same PN offset value, “when the received signals appear almost at the same time in the delay profile, it is difficult to isolate, according to the base station, a received timing of one signal from another signal.” *Id.* at 2:11–14. This means “there is a high possibility that this correlation value . . . is incorrectly correlated to a signal from a particular base station,” which “introduces a large error to the propagation time measurement of signals from the respective base station, thereby deteriorating the location accuracy.” *Id.* at 2:14–19. The ’673 patent, therefore, seeks “to provide a radio handset capable of accurately measuring its current position even when it is difficult to isolate respective signals from different base stations.” *Id.* at 2:22–25.

The ’673 patent discloses a number of embodiments, which describe using none or one of the base stations having an identical PN offset value for the position calculation. *Id.* at 5:1–4, 6:23–27, 8:47–52, 10:37–45. In general, the ’673 patent describes five steps, as illustrated in Figure 2, reproduced below:

**FIG. 2**

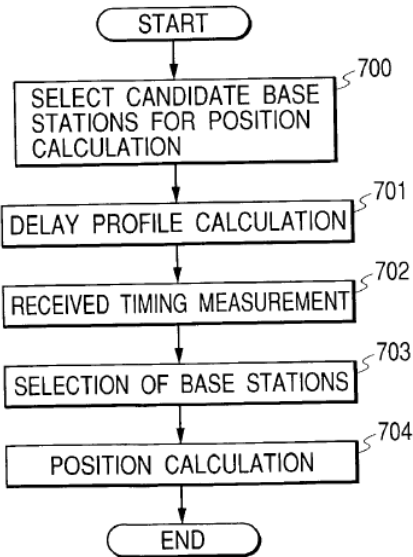


Figure 2 shows steps “select candidate base stations for position calculation” 700, “delay profile calculation” 701, “received timing measurement” 702, “selection of base stations” 703, and “position calculation” 704. These steps are described as follows:

Firstly, the radio handset 100 selects candidate base stations for the position calculation (step 700). For example, the radio handset 100 selects base stations 101 to 105 assumed to be in the vicinity from a base station list stored in advance.

Next, the radio handset 100 calculates correlation values of the signals transmitted from the base stations 101 to 105 with the PN codes and creates a delay profile (step 701). For example, when a correlation value is calculated between a received signal and a PN code using a matched filter, a delay profile waveform is obtained as an output of the matched filter. From the delay profile waveform, the timing having the maximum correlation value is extracted as a reception timing so as to measure reception timings of the signals transmitted from the base stations (step 702).

As for the base stations having the same PN offset, the one to be used for the position calculation is selected so as to prevent deterioration of position measurement accuracy due to an incorrect identification of the base stations (step 703). The method of this selection procedure will be detailed later with reference to FIG. 3.

Next, using the signals of the base stations selected for the position calculation in step 703, the position of the radio handset 100 is calculated (step 704).

*Id.* at 4:27–51.

For the selection procedure, the '673 patent describes (1) a procedure for using none of the base stations having an identical PN offset value for position calculation (Figure 3); (2) a procedure for using one of the base stations having an identical PN offset value which is estimated to be nearer to the radio handset for position calculation (Figure 4); (3) a procedure for using, among the base stations having an identical PN offset value, a base station having the smallest reception timing error, i.e., for which the estimated value is nearer to the actual reception timing for position calculation (Figure 5); and (4) a procedure for using one of the base stations having an identical PN offset value giving a minimum position error for position calculation (Figure 7). *Id.* at 5:1–4, 6:23–27, 8:47–52, 10:37–45.

#### *D. Illustrative Claims*

Challenged claims 1, 5, 9, and 15 are independent. Ex. 1001, 17:43–58, 18:5–15, 18:27–46, 19:6–20:11. Independent claims 1 and 5 are representative, and are reproduced below, with brackets indicating Petitioner's identifiers.

1. [1pre] A radio handset for position calculation, comprising:

[1a] a storing means for storing information of a plurality of radio stations;

[1b] a signal receiver for receiving signals transmitted from at least a part of said plurality of radio stations;

[1c] a delay profile calculator for creating delay profiles for said received signals; and

[1d] a CPU for extracting signal reception timings of said received signals based on said delay profiles, wherein, if PN offset values corresponding to two or more of said plurality of radio stations are same, [1e] said CPU selects radio stations to be used for position calculation by determining not to use at least one of radio stations corresponding to said same PN offset value for position calculation.

5. [5pre] A method of position calculation for a radio handset, comprising the steps of [5a] storing information of a plurality of radio stations;

[5b] receiving signals transmitted from at least a part of said plurality of radio stations;

[5c] creating delay profiles for said received signals;

[5d] extracting signal reception timings of said received signals from said delay profiles; and

[5e] selecting radio stations to be used for position calculation by determining not to use at least one of radio stations having a same PN offset value.

*Id.* at 17:43–58, 18:5–15.



*E. Prior Art and Asserted Grounds of Unpatentability*

Petitioner challenges the patentability of claims 1–15 of the '673 patent on the following grounds (Pet. 7):

<b>Claim(s) Challenged</b>	<b>35 U.S.C. §</b>	<b>Reference(s)</b>
1–15	103(a) <sup>1</sup>	Hunzinger <sup>2</sup>
1–15	103(a)	Hunzinger, LeBlanc <sup>3</sup>
1–15	103(a)	Ruutu <sup>4</sup> , LeBlanc

Petitioner also filed and relies upon the Declaration of Dr. Apostolos K. Kakaes in support of the Petition. Ex. 1009.

III. ANALYSIS

*A. Legal Standards*

A claim is unpatentable for obviousness if, to one of ordinary skill in the pertinent art, “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.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007) (quoting 35 U.S.C. § 103(a)). The

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<sup>1</sup> The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284, 287–88 (2011), amended 35 U.S.C. §§ 102, 103, and 112. Because the '673 patent claims priority to an application filed before March 16, 2013 (the effective date of the relevant amendments), the pre-AIA versions of §§ 102, 103, and 112 apply. *See* Ex. 1001, code (22).

<sup>2</sup> Hunzinger, U.S. Patent Appl. Pub. No. 2002/0025822 A1, published Feb. 28, 2002 (Ex. 1003).

<sup>3</sup> LeBlanc et al., U.S. Patent No. 6,236,365 B1, issued May 22, 2001 (Ex. 1005) (“LeBlanc”).

<sup>4</sup> Ruutu et al., European Patent Application EP 0 930 513 A2, published July 21, 1999 (Ex. 1004) (“Ruutu”).

question of obviousness is resolved on the basis of underlying factual determinations, including “the scope and content of the prior art”; “differences between the prior art and the claims at issue”; and “the level of ordinary skill in the pertinent art.” *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). Additionally, secondary considerations, such as “commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. As indicia of obviousness or nonobviousness, these inquiries may have relevancy.”<sup>5</sup> *Id.*

A patent claim “is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.” *KSR*, 550 U.S. at 418. Rather, an obviousness determination requires finding “both ‘that a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, and that the skilled artisan would have had a reasonable expectation of success in doing so.’” *Intelligent Bio-Sys., Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1367–68 (Fed. Cir. 2016) (citation omitted); *see KSR*, 550 U.S. at 418 (for an obviousness analysis, “it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does”).

Further, an assertion of obviousness “cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *KSR*, 550 U.S. at 418 (quoting *In re Kahn*, 441 F.3d 977, 988

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<sup>5</sup> Neither party has submitted evidence of secondary considerations. *See Pet. 73.*

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(Fed. Cir. 2006)); *accord In re NuVasive, Inc.*, 842 F.3d 1376, 1383 (Fed. Cir. 2016) (stating that “conclusory statements” amount to an “insufficient articulation[] of motivation to combine”; “instead, the finding must be supported by a ‘reasoned explanation’” (citation omitted)); *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016) (“To satisfy its burden of proving obviousness, a petitioner cannot employ mere conclusory statements. The petitioner must instead articulate specific reasoning, based on evidence of record, to support the legal conclusion of obviousness.”).

The motivation to combine must be “accompanied by a reasonable expectation of achieving what is claimed in the patent-at-issue.” *Intelligent Bio-Sys.*, 821 F.3d at 1367. “The reasonable expectation of success requirement refers to the likelihood of success in combining references to meet the limitations of the claimed invention.” *Id.*

“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)); *see also Intelligent Bio-Sys.*, 821 F.3d at 1369 (“It is of the utmost importance that petitioners in the IPR proceedings adhere to the requirement that the initial petition identify ‘with particularity’ the ‘evidence that supports the grounds for the challenge to each claim.’” (quoting 35 U.S.C. § 312(a)(3))). Therefore, to prevail in an *inter partes* review, Petitioner must explain how the proposed combinations of prior art would have rendered the challenged claims unpatentable. At this preliminary stage, we determine whether the information presented in the Petition shows there is a reasonable likelihood that Petitioner would prevail in establishing that at least one of the challenged claims would have been obvious over the proposed combinations of prior art. *See* 35 U.S.C. § 314(a).

*B. Level of Ordinary Skill in the Art*

Petitioner asserts that a person of ordinary skill in the art “would have had at least a Bachelor of Science degree in electrical engineering, computer engineering, computer science, or a related field, and between 1–2 years of experience with mobile position determination techniques, or the equivalent. Additional education could compensate for experience and vice versa.” Pet. 9 (citing Ex. 1009 ¶ 30).

Patent Owner agrees with Petitioner’s proposal. Prelim. Resp. 5.

Petitioner’s proposal is consistent with the level of ordinary skill in the art reflected by the prior art. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001); *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995). On this record, the level of ordinary skill is neither in dispute nor dispositive of any challenge. For purposes of this Decision, we apply Petitioner’s proposed level of ordinary skill in the art.

*C. Claim Construction*

We construe each 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,” the same standard used to construe the claim in a civil action. 37 C.F.R. § 42.100(b).

Petitioner states that the parties agree that the preamble of claim 5 includes a typographical error and should be separated as follows: “[5pre] A method of position calculation for a radio handset, comprising the steps of: [5a] storing information of a plurality of radio stations.” Pet. 11–12 (citing Ex. 1007, 7). Petitioner also provides function and structure constructions for the means-plus-function terms in claim 1 (“a storing means . . .”), claim 3 (“a means for . . .”), and claim 15 (“a storing means . . .”). *Id.* at 12–13.

Patent Owner “agrees that the preamble of claim 5 should be separated based on a clear typographical mistake.” Prelim. Resp. 11. Patent Owner also adopts Petitioner’s proposed constructions of the means-plus-function terms. *Id.* In addition, Patent Owner proposes that the term “delay profile” as recited in claims 1, 5, 9, and 15 should be constructed as “one or more correlation values between a received signal and a corresponding PN code for reception timing.” *Id.* at 11–12 (emphasis omitted). In support, Patent Owner contends that the term is defined in the ’673 patent. *Id.* at 12 (citing Ex. 1001, 1:46–50, 11:22–24, Figs. 12–13).

We determine that, at this stage of the proceeding, no express construction is necessary to resolve any controversy in this proceeding to determine whether to institute *inter partes* review. *See Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375 (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))).

#### *D. References Asserted*

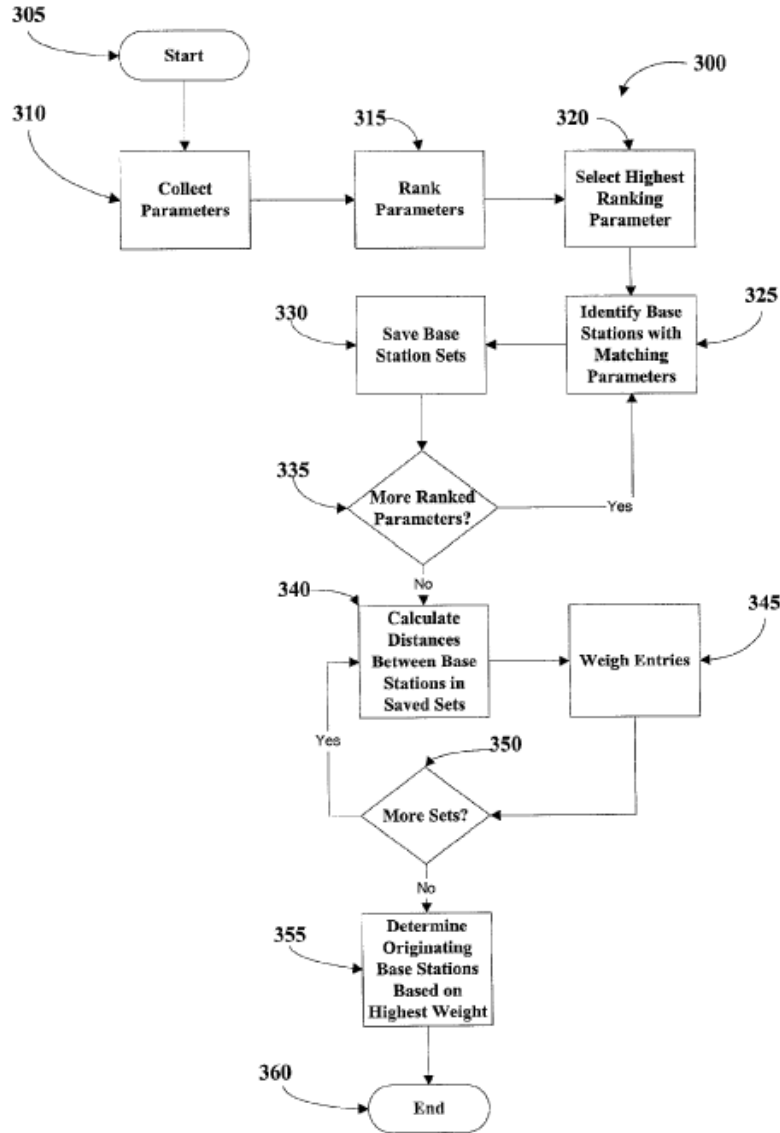
##### *1. Hunzinger (Ex. 1003)*

Hunzinger was filed on August 20, 2001, published on February 28, 2002, and claims the benefit of U.S. Provisional Application No. 60/226,378, filed on August 18, 2000 (“Hunzinger Provisional”). Ex. 1003, codes (22), (43), (63), ¶ 1. Petitioner contends that Hunzinger is prior art under 35 U.S.C. § 102(e) because it is entitled to the August 18, 2000 priority date of the Hunzinger Provisional. Pet. 14.

Hunzinger is titled “Resolving Ambiguous Sector-Level Location and Determining Mobile Location,” and is generally directed to determining position information of a mobile station. Ex. 1003, code (54), ¶ 2.

Hunzinger describes that a mobile station may obtain information from a variety of sources, including global positioning, triangulation between base stations, or internal calculations, regarding the current position of the mobile station. *Id.* ¶ 17. The mobile station may contain a memory that stores various conditions, including the current position information. *Id.* Hunzinger describes a process to resolve the ambiguity that arises when multiple base stations use the same PN offset information. *Id.* ¶ 18.

Figure 3, reproduced below, depicts a flowchart for determining the position of a mobile station.



**Figure 3**

Figure 3 shows the following process: (1) at block 310, collect parameters such as the pilot PN offset; (2) at block 315, rank the PNs according to weight; (3) at block 320, select the highest ranking parameter of block 315; (4) at block 325, the highest ranking parameter is used to identify all entries in a base station database with a matching parameter; (5) at block 330, the set of identified base stations with matching entries is saved as a set; (6) at block 335, it is determined if more ranked parameters are present, and if so, the process proceeds to block 325 to process the next highest ranking

parameter, and if not, the process proceeds to block 340, where the distances between each of the base stations in the saved sets are calculated; (7) at block 345, each of the distance calculations between entries is given a weight, which provides a measure of how likely it is that the two base stations are the ones corresponding to the PNs that the mobile is seeing; and (8) at block 350, the process determines if any more saved base station sets are available, and if so, the process proceeds back to block 340, and if not, the process proceeds to block 355, where the originating base stations corresponding to each parameter are determined based on the highest weighted entries in each set. *Id.* ¶¶ 19–28. Once “the system has identified which base stations correspond to the PN offsets reported by the mobile, it can triangulate (by search or computation) the location of the mobile station . . . using PN phase offset strength,  $E_c/I_o$ , or other measure[s].” *Id.* ¶ 32.

## 2. *LeBlanc (Ex. 1005)*

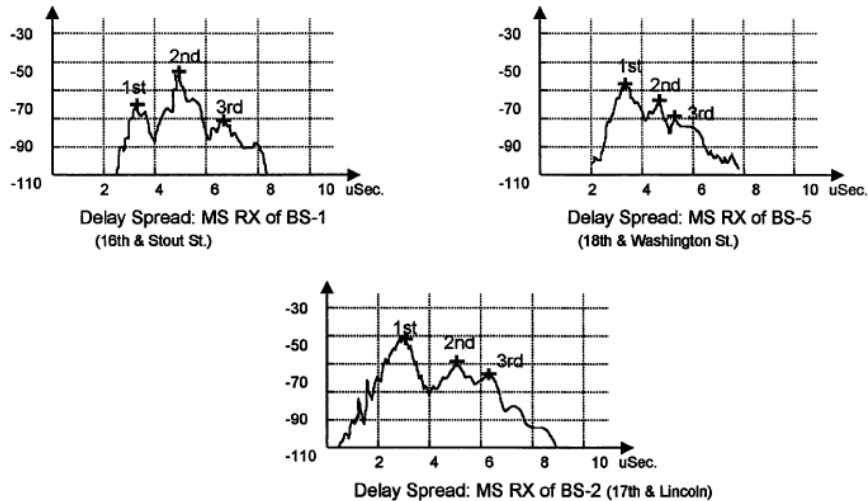
*LeBlanc* is titled “Location of a Mobile Station Using a Plurality of Commercial Wireless Infrastructures,” and generally describes a system for outputting requested locations of commercially available hand-sets or mobile stations. *Ex. 1005*, codes (54), (57). *LeBlanc* describes that it uses time-of-arrival wireless signal processing techniques, time-difference-of-arrival wireless signal processing techniques, and other wireless signal processing techniques. *Id.* at 7:57–67, 52:66–53:17.

*LeBlanc* describes that for each mobile station or base station transmitted signal detected, multiple delayed signals or “fingers” may be detected and tracked resulting from multipath radio propagation conditions. *Id.* at 38:49–54. Typically, “the ‘first’ finger represents the most direct, or least delayed multipath signal.” *Id.* at 38:55–57. Other fingers may be



detected and tracked, and although traditionally those subsequent fingers would be discarded, collection and use of these additional values can be useful to reduce location ambiguity. *Id.* at 38:57–65.

Figure 18, reproduced below, illustrates a case where signals from three base stations can be detected.



**Figure 18: MS Received Delay Spreads of 3 Base Stations (Dense Urban Canyon)**

Figure 18 is titled “MS Received Delay Spreads of 3 Base Stations (Dense Urban Canyon)” and shows a mobile station at location “A” detects base stations 1b, 5c, and 4a. *Id.* at 39:48–49. “[A]lthough a triad of signals are received, if varying multipath signals are received from one or more base stations, then ambiguity can still result.” *Id.* at 39:49–52.

### 3. *Ruutu (Ex. 1004)*

*Ruutu* is titled “Cellular radio positioning,” and is directed to a “cellular radio network based positioning system for determining the position of a mobile station.” *Ex. 1004*, codes (54), (57). *Ruutu* states that a list of base transceiver stations that enable the position of a mobile station to be determined is “transmitted to the mobile station (16) via the serving base

transceiver station (6) and the mobile station determines an observed time difference for each of the listed base transceiver stations, relative to the serving base transceiver station (6), from signals broadcast by the listed base transceiver stations.” *Id.* at code (57). “The observed time differences are transmitted from the mobile station ([1]6) to the serving base transceiver station (6) and are used by the network to compute the position of the mobile station (16).” *Id.*

*E. Grounds 1 and 2: Obviousness Over Hunzinger; Obviousness Over Hunzinger and LeBlanc*

Petitioner challenges claims 1–15 as obvious over Hunzinger (Ground 1) and obvious over Hunzinger and LeBlanc (Ground 2). Pet. 25–58. The parties dispute whether Hunzinger qualifies as prior art to the ’673 patent. Petitioner contends that the “earliest claimed priority date of the ’673 patent is July 24, 2001.” Pet. 6 (citing Ex. 1001, code (30)). On its face, Hunzinger is not prior art to the ’673 patent because it was filed on August 20, 2001 and published on February 28, 2002. Prelim. Resp. 6; Ex. 1003, codes (22), (43).

Petitioner contends that Hunzinger is prior art under 35 U.S.C. § 102(e) because it is entitled to claim priority to the Hunzinger Provisional filing date of August 18, 2000. Pet. 6, 14. Petitioner provides arguments and citations that purport to show the support in the Hunzinger Provisional for claim 1 of Hunzinger. *Id.* at 17–21. Additionally, where Hunzinger is applied in Petitioner’s arguments regarding unpatentability of claims 1–15, citations are also provided for disclosures in the Hunzinger Provisional (Ex. 1006). *See* Pet. 25–58. For example, in its discussion of Hunzinger’s teachings relevant to limitation [5a] of the ’673 patent, “storing information

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of a plurality of radio stations,” Petitioner cites to pages 3 and 4 and Figure 1<sup>6</sup> of the Hunzinger Provisional and to paragraphs 5, 17–25, 27–33, 30–32 and Figures 1–3 of Hunzinger. *Id.* at 27–28.

Patent Owner argues that Petitioner has not shown that the Hunzinger Provisional “supports the subject matter used by Petitioner from Hunzinger to support Grounds I and II.” Prelim. Resp. 13. According to Patent Owner, Petitioner has the burden to demonstrate that the relied upon disclosure in Hunzinger qualifies as prior art under § 102(e). *Id.* at 14. Patent Owner contends that Petitioner must show two distinct requirements: (1) that the Hunzinger Provisional supports the subject matter relied upon in Petitioner’s unpatentability contentions, and (2) that at least one of the claims in Hunzinger is supported by the written description in the Hunzinger Provisional. *Id.* at 14–17. Patent Owner argues that Petitioner only attempts to address the latter requirement, and Petitioner’s showing is conclusory and does not show that the Hunzinger Provisional supports Hunzinger’s claim 1. *Id.* at 17–31.

The burden of persuasion is on the petitioner to prove unpatentability by a preponderance of the evidence, and that burden never shifts to the patentee. *Dynamic Drinkware, LLC v. National Graphics, Inc.*, 800 F.3d 1375, 1378–79 (Fed. Cir. 2015). The burden of production, for the purposes of establishing a priority date for asserted prior art, rests on the petitioner, and once the petitioner meets that burden, the burden of production shifts to the patent owner to establish that its claimed invention is entitled to an earlier priority date than the asserted reference. *Dynamic Drinkware*, 800

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<sup>6</sup> Petitioner also cites to Figures 2 and 3 of the Hunzinger Provisional, but there are no Figures 2 or 3 in the Hunzinger Provisional. *See* Pet. 27; Ex. 1006.

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F.3d at 1379–1380; *see Magnum Oil Tools*, 829 F.3d at 1375 (describing the shift in burden of production to patentee as warranted because “the patentee affirmatively seeks to establish a proposition not relied on by the patent challenger and not a necessary predicate for the unpatentability claim asserted”). Thus, our task is to determine whether Petitioner has met the burden of production of establishing a priority date for Hunzinger which would support its assertions of unpatentability.

A reference patent or published patent application can be entitled to the benefit of its provisional application’s filing date for pre-AIA 35 U.S.C. 102(e) prior art purposes on two conditions. First, the provisional application must provide sufficient support for at least one claim in the reference patent or published patent application. *See Dynamic Drinkware*, 800 F.3d at 1382 (“A provisional application’s effectiveness as prior art depends on its written description support for the claims of the issued patent of which it was a provisional.”); *Ex parte Mann*, No. 2015-003571, 2016 WL 7487271, at \*6 (PTAB Dec. 21, 2016) (discussing whether *Dynamic Drinkware* requires “support in the provisional . . . for all claims, any claim, or something in between” (emphases omitted)).

Second, the provisional application must provide sufficient support for the subject matter relied upon for prior art purposes in the reference patent or published patent application. *See In re Giacomini*, 612 F.3d 1380, 1383 (Fed. Cir. 2010) (“[A]n applicant is not entitled to a patent if another’s patent discloses the same invention, which was carried forward from an earlier U.S. provisional application or U.S. non-provisional application.”); *Dynamic Drinkware*, 800 F.3d at 1377, 1381–82 (acknowledging that the Board found the petitioner failed to show the provisional application

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supported subject matter relied upon in the asserted reference, but affirming the Board by also determining that “[n]owhere” does the petitioner show the provisional application supported claims of the asserted reference (i.e., the first condition discussed above)); *Ex parte Mann*, at \*5 (explaining that “[t]his subject matter test is in addition to the comparison of claims required by *Dynamic Drinkware*,” and that “absurd results would be reached if a subject matter test were not required”); *Comcast Cable Commc ’ns, LLC v. Promptu Sys. Corp.*, IPR2018-00345, Paper 10 at 25–26 (PTAB July 2, 2018) (agreeing with the patent owner that the petitioner’s “barebones analysis” in its petition is insufficient to show “how the [provisional underlying the asserted reference] provides support for the subject matter relied upon [in the asserted reference]”); *Forescout Technologies, Inc. v. Fortinet, Inc.*, IPR2021-01328, Paper 12 at 9–10 (PTAB Jan. 27, 2022) (“[the petitioner] has an initial burden, not just to compare the challenged claims with the disclosure in [the asserted reference], but to show that the subject matter that [the petitioner] relies on in [the asserted reference] is also found in the [provisional]”).

This two-prong requirement to show entitlement to the benefit of a provisional application’s filing date in the prior art context is expressly embodied in the MPEP:

The pre-AIA 35 U.S.C. 102(e) date of a reference that did not result from, nor claimed the benefit of, an international application is its earliest effective U.S. filing date, taking into consideration any proper benefit claims to prior U.S. applications under 35 U.S.C. [§] 119(e) or 120. *For all benefit claims, the prior application(s) must properly support the subject matter used to make the rejection in compliance with pre-AIA 35 U.S.C. [§] 112, first paragraph or 35 U.S.C. [§] 112(a). See MPEP § 2136.02. In addition, for benefit claims under 35 U.S.C. [§] 119(e), at least one claim of the*

*potential reference must be supported by the written description of the relied upon provisional application in compliance with pre-AIA 35 U.S.C. [§] 112, first paragraph, or 35 U.S.C. [§] 112(a), in order for the potential reference to be usable as prior art under pre-AIA 35 U.S.C. [§] 102(e) as of a relied upon provisional application's filing date.*

MPEP § 2136(I)(B) (9th ed. rev. 10.2019 June 2020) (emphases added); *see* MPEP § 2136.03(III) (explaining that prior art effect under § 102(e) requires (1) “at least one of the claims in the reference patent . . . is supported by the written description of the provisional application”; and (2) the “provisional application must also describe . . . the subject matter relied upon in the reference patent or publication to make the rejection”); MPEP § 2136, Examples 2, 4, and 7. Therefore, in order to determine whether Hunzinger can receive the benefit of the priority date of the Hunzinger Provisional, we examine (1) whether Petitioner sufficiently shows that at least one claim in Hunzinger is supported by the written description of the Hunzinger Provisional, and (2) whether Petitioner sufficiently shows that the Hunzinger Provisional supports the subject matter relied upon in Hunzinger in Grounds 1 and 2.

On this record, and for the reasons set forth by Petitioner, we determine that Petitioner has made an adequate showing for the first condition for purposes of institution, that is, that the Hunzinger Provisional provides support for claim 1 of Hunzinger.<sup>7</sup> *See* Pet. 17–21. We, therefore,

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<sup>7</sup> Although Patent Owner argues that Petitioner's showing as to the first condition is “conclusory” and “inadequate,” Patent Owner's arguments are primarily directed to the second condition. *See* Prelim. Resp. 19 (“even if Petitioner has shown that claim 1 is supported by the Hunzinger Provisional . . . the Petition does not make a sufficient showing that the Hunzinger

turn to the second condition. As discussed above, where Hunzinger is asserted in Petitioner’s unpatentability arguments against the claims of the ’673 patent, citations are also provided for the Hunzinger Provisional. *Id.* at 25–58. However, to address the issue of support from the Hunzinger Provisional for those portions of Hunzinger that Petitioner uses to establish unpatentability, Petitioner merely provides a citation to the Hunzinger Provisional. There is no discussion of any alleged relationship between the cited disclosures and the elements of the challenged claims, and in the majority of cases, only a bare citation to the Hunzinger Provisional with no further explanation.

The issue is whether the citations to the Hunzinger Provisional sufficiently support the subject matter relied upon in Hunzinger, and thus, show Hunzinger is properly within the scope of available prior art that Petitioner may use against the claims of the ’673 patent to support a determination that Petitioner demonstrates a reasonable likelihood that it will prevail in showing the unpatentability of at least one challenged claim of the ’673 patent. We agree with Patent Owner that Petitioner has not sufficiently shown that the subject matter relied upon is supported in the Hunzinger Provisional. *See* Prelim. Resp. 19–31.

For example, as described above, in its discussion of Hunzinger’s teachings relevant to limitation [5a] of the ’673 patent,<sup>8</sup> “storing information

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Provisional supports all of the subject matter the Petition relies upon from Hunzinger”). *Id.*

<sup>8</sup> Petitioner provides contentions for independent claim 5 as representative, and generally refers back to that analysis in its contentions for independent claims 1, 9, and 15. *See* Pet. 25–38 (claim 5), 40–41 (claim 1), 43–45 (claim 9), 48–49 (claim 15).

of a plurality of radio stations,”<sup>9</sup> Petitioner cites to pages 3 and 4 and Figure 1 of the Hunzinger Provisional and to paragraphs 5, 17–25, 27–33, 30–32 and Figures 1–3 of Hunzinger. Pet. 27–28. Petitioner, therefore, cites to 20 paragraphs and three figures from Hunzinger, and essentially the entirety of the description in the Hunzinger Provisional.

Petitioner also contends that “Hunzinger discloses that a mobile station obtains—and thus stores—PN offset information.” *Id.* at 27 (citing Ex. 1003 ¶ 18; Ex. 1006, 3–4). Petitioner also relies on Figure 2 of Hunzinger, which depicts a block diagram of a mobile station, including memory, and paragraph 17 of Hunzinger, which states that “[t]he mobile station 106 may obtain information regarding the current position of the mobile station 106. . . . A memory 210 may store various conditions including current position information.” *Id.* However, it is not apparent, and Petitioner does not explain, where or how any of the foregoing is disclosed in the Hunzinger Provisional. Figure 2 of Hunzinger does not appear in the Hunzinger Provisional, nor does the cited description relating to the mobile station that is relied upon. Rather, the Hunzinger Provisional generically refers to a “system” that receives PN information and does not

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<sup>9</sup> To the extent that Petitioner contends that claim 5 does not require the information to be stored *in the radio handset*, we note that each of the other independent claims explicitly recite this requirement, and Petitioner relies on the same disclosures in Hunzinger and the Hunzinger Provisional in its unpatentability contentions as to those claims: “A radio handset . . . comprising: a storing means for storing information of a plurality of radio stations” (claim 1); “in said radio handset, storing information of a plurality of radio stations,” (claim 9); “A radio handset . . . comprising: a storing means for storing information on locations of each of a plurality of radio stations” (claim 15). Ex. 1001, 17:43–45, 18:31–32, 19:6–8; Pet. 41, 44, 49.



describe the system as a mobile station as described in Hunzinger. *See* Ex. 1006.

Petitioner also relies on certain disclosures in Hunzinger for storing information in “database entries” and in “memory locations, denoted by ‘L’.”. Pet. 27 (citing Ex. 1003 ¶¶ 21–25, 27, 28, 32, Fig. 3). Although the Hunzinger Provisional describes a “base station database (which has entries correlating base station PNs with each base station or vice versa)” and refers to “sets L(i)” of “base station entries” (Ex. 1006, 4), it does not describe either of these as being stored in the mobile station. *See* Ex. 1006.

Moreover, Petitioner also relies on certain steps in Figure 3 of Hunzinger that are not depicted in Figure 1 of the Hunzinger Provisional, such as Step 310 (“Collect Parameters”) and Step 330 (“Save Base Station Sets”), but provides no explanation regarding this discrepancy. Pet. 28.

As another example, independent claim 1 recites “[a] radio handset for position calculation, comprising: [1a] a storing means for storing information . . . [1b] a signal receiver for receiving signals . . . [1c] a delay profile calculator for creating delay profiles . . . [1d] a CPU for extracting signal receptions timings . . . [1e] said CPU selects radio stations to be used for position calculation.” Ex. 1001, 17:43–58. In other words, all of the recited functionality, i.e., storing information, receiving signals, creating delay profiles, extracting signal receptions, and selecting radio stations to be used for position calculation, occurs in the radio handset. For each of limitations [1a], [1b], [1c], and [1e], Petitioner relies on its contentions for limitations [5a], [5b], [5c], and [5e].<sup>10</sup> Pet. 41. For limitation [1d],

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<sup>10</sup> Independent claim 15 recites similar limitations, i.e., “[a] radio handset . . . comprising: a storing means for storing information . . . a signal receiver for

Petitioner asserts that “Hunzinger discloses a mobile station containing a processor 200 (i.e., a CPU),” and cites to Figure 2 and paragraph 16 of Hunzinger, and pages 3 and 4 of the Hunzinger Provisional. *Id.*

However, Petitioner does not specifically identify in the Hunzinger Provisional a disclosure for the claimed “storing means,” “signal receiver,” “delay profile calculator,” or “CPU” in the mobile station, or provide any explanation supporting its broad citation to pages 3 and 4 of the Hunzinger Provisional. Moreover, the Hunzinger Provisional does not disclose Figure 2 of Hunzinger, or the information cited to in Hunzinger. As discussed above, the Hunzinger Provisional generically refers to a “system” and does not describe the system as being a mobile station as described in Hunzinger. *See* Ex. 1006. For example, the Hunzinger Provisional discloses that “after *the system* has identified which base stations correspond to the PN offsets reported by the mobile, *it* can triangulate (by search or computation) the mobile’s location using PN phase offset (not to be confused with pilot PN offset), strength, or  $E_c/I_o$  or other measure.” Ex. 1006, 4 (emphasis added). Although Hunzinger explicitly states that “[t]he process of resolving the ambiguity may be done at a position determination entity, at a server, at the mobile station or at any other network entity,” Ex. 1003 ¶ 18, the Hunzinger Provisional does not identify *the system* that resolves the ambiguity as a mobile station. We are cognizant that *in haec verba* recitation is not necessary to determine whether one disclosure supports another, but the

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receiving signals . . . a delay profile calculator for creating delay profiles . . . a CPU for extracting signal receptions timings,” and Petitioner similarly simply relies on its contentions for claims 1 and 5. Ex. 1001, 19:5–20:12; Pet. 48–49. Independent claim 9 recites “in said radio handset, storing information of a plurality of radio stations,” and Petitioner similarly relies on its contentions for claim 5. Ex. 1001, 18:30–31; Pet. 44.

disclosure must do more than “merely render[] the invention obvious.” *See Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351–52 (Fed. Cir. 2010) (en banc).

As Patent Owner points out (Prelim. Resp. 21–30), Petitioner repeatedly cites to virtually the entire Hunzinger Provisional (i.e., pages 3, 4 and Figure 1)<sup>11</sup> for support of its unpatentability contentions, without providing further explanation. Although there are some apparent relationships and similarities between the disclosures in the Hunzinger Provisional and Hunzinger, Petitioner fails to explain the significance of the citations to the Hunzinger Provisional. Moreover, Petitioner also relies on Figures 1 and 2 of Hunzinger, which are not in the Hunzinger Provisional (*see* Prelim. Resp. 22–23), and there are extensive citations to Hunzinger that do not appear to be disclosed in the Hunzinger Provisional (*see* Prelim. Resp. 29–30). We agree with Patent Owner that “even where the Petition and Petitioner’s expert rely on some supported disclosure from Hunzinger, it is unclear precisely on which disclosure they rely because citation is often made to both undisclosed and disclosed matter in Hunzinger as a result of Petitioner’s imprecise citations to evidence.” Prelim. Resp. 30.

Accordingly, for all of the foregoing reasons, as well as the reasons set forth by Patent Owner (Prelim. Resp. 19–30), we agree with Patent Owner that Petitioner’s approach does not meet its burden to particularly articulate its arguments in the Petition. *See Forescout Technologies, Inc. v. Fortinet, Inc.*, IPR2021-01328, Paper 12 at 9–19 (PTAB Jan. 27, 2022); *Google LLC v. Ikorongo Technology LLC*, IPR2021-00058, Paper 14 at 15

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<sup>11</sup> Pages 1 and 2 are title pages that are devoid of content, and pages 6–16 are source code to implement the algorithm described on pages 3 and 4 and depicted in Figure 1.

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(PTAB May 10, 2021) (“determining the significance of the [provisional] citations would require us to ‘play archaeologist with the record’ and we decline to do so”). On its face, Hunzinger does not qualify as prior art to the ’673 patent, so when Petitioner filed its Petition, it was clear that Petitioner needed to rely on the Hunzinger Provisional to establish that Hunzinger was prior art to the ’673 patent.

We, therefore, determine that Petitioner has not sufficiently shown that Hunzinger is prior art under 35 U.S.C. § 102(e). Therefore, we determine that Petitioner has not established a reasonable likelihood that it would prevail for Grounds 1 and 2.

*F. Ground 3: Obviousness Over Ruutu and LeBlanc*

Petitioner challenges claims 1–15 as obvious over Ruutu and LeBlanc. Pet. 58–73. For the reasons explained below, we are not persuaded that Petitioner has established a reasonable likelihood that it would prevail with respect to at least one challenged claim on this ground.

Petitioner relies on the combination of Ruutu and LeBlanc to teach limitations [5c] and [5d]. Pet. 60–62. For limitation [5c] (“creating delay profiles for said received signals”), Petitioner contends that “Ruutu expressly states that it can be implemented in CDMA” and “LeBlanc discloses creating delay profiles for received signals to implement CDMA.”

*Id.* at 60. Petitioner contends that:

A POSITA would have been motivated to combine Ruutu and LeBlanc. For example, a POSITA would have used the known techniques disclosed in LeBlanc to improve the teaching of Ruutu. A POSITA also would have understood combining Ruutu and LeBlanc according to known methods (e.g., as explained below in the CDMA context) to yield predictable results. A POSITA would have understood that it is necessary

to create delay profiles and extract signal reception timings (as taught in LeBlanc) [in] order to use Ruutu's time of arrival position calculation technique. EX1004, ¶29. APOSITA also would have found LeBlanc's teaching to be one of a finite number of identified, predictable solutions with a reasonable expectation of success, and therefore, obvious to try. EX1009, ¶¶197–198.

*Id.*

Petitioner does not establish a sufficient rationale to combine Ruutu and LeBlanc.<sup>12</sup> *See, e.g.*, Prelim. Resp. 40–42. A determination of obviousness cannot be reached where the record lacks “explanation as to *how* or *why* the references would be combined to produce the claimed invention.” *TriVascular, Inc. v. Samuels*, 812 F.3d 1056, 1066 (Fed. Cir. 2016); *see In re Nuvasive, Inc.*, 842 F.3d 1376, 1382–86 (Fed. Cir. 2016) (holding that an obviousness determination cannot be reached where there is no “articulat[ion of] a *reason why* a [person having ordinary skill in the art] would combine” and “modify” the prior art teachings).

Neither Petitioner nor Dr. Kakaes provides a sufficient explanation as to how or why Ruutu would be combined with LeBlanc to produce the

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<sup>12</sup> Patent Owner disputes that LeBlanc discloses creating delay profiles, arguing that the examples from LeBlanc cited by Petitioner show delay spreads of signals from three distinct base stations instead of one waveform with multiple PN offset signals. Prelim. Resp. 32. For purposes of our analysis here, we assume, without deciding, that LeBlanc teaches the claimed “creating delay profiles” recited in limitation [5c]. However, we note that Petitioner's contentions regarding LeBlanc's disclosures suffer from the same types of inadequacies discussed herein, i.e., conclusory statements that lack sufficient explanation and evidentiary support. For example, Petitioner does not explain why or how LeBlanc's delay *spreads* teach the claimed delay *profiles*, but simply describes what LeBlanc discloses and equates the two in a parenthetical with a conclusory assertion that LeBlanc teaches delay profiles. Pet. 30–31.

claimed invention. For example, Petitioner does not explain how Ruutu would be improved by using the “known techniques disclosed in LeBlanc.” Moreover, Petitioner’s contention that a person of ordinary skill in the art “would have understood combining Ruutu and LeBlanc according to known methods (e.g., as explained below in the CDMA context) to yield predictable results” is conclusory and lacks support. For example, Petitioner does not identify what predictable results it is relying upon. Petitioner’s contentions that a person of ordinary skill in the art “would have understood that it is necessary to create delay profiles and extract signal reception timings (as taught in LeBlanc) [in] order to use Ruutu’s time of arrival position calculation technique” also lack explanation and support. For example, Petitioner does not explain why it is “*necessary* to create delay profiles and extract signal reception timings . . . [in] order to use Ruutu’s time of arrival position calculation technique.”<sup>13</sup>

Petitioner’s contention that “LeBlanc’s teaching [is] one of a finite number of identified, predictable solutions with a reasonable expectation of success, and therefore, obvious to try” is also without support. For example, Petitioner does not explain what the finite number of identified predictable solutions are, or articulate any “design need or market pressure,” or identify any problem, that would have been known to an artisan of ordinary skill at the time of the invention that would have made it obvious to try LeBlanc’s solution as an alternative to the solution already set forth in Ruutu. *See KSR*,

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<sup>13</sup> It is not clear from the record whether Petitioner is relying on an inherency theory. “In order to rely on inherency to establish the existence of a claim limitation in the prior art in an obviousness analysis—the limitation at issue necessarily must be present, or the natural result of the combination of elements explicitly disclosed by the prior art.” *PAR Pharmaceutical, Inc. v. TWI Pharmaceuticals, Inc.*, 773 F.3d 1186, 1195–1196 (Fed. Cir. 2014).

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550 U.S. 398 at 421 (“When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense. In that instance the fact that a combination was obvious to try might show that it was obvious . . .”). “A factfinder should be aware . . . of the distortion caused by hindsight bias and must be cautious of arguments reliant upon ex post reasoning.” *KSR*, 550 U.S. at 421 (citing *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 36 (1966)). By failing to articulate any reasoning beyond the conclusory statements that the combination of LeBlanc and Ruutu would “improve the teaching of Ruutu,” “yield predictable results,” and be “obvious to try,” Petitioner fails to show that the proffered combination would have been obvious to a person of ordinary skill in the art.

Petitioner further asserts that both Ruutu and LeBlanc are “directed to the same field, namely position determination, and have applications to CDMA wireless technologies.” Pet. 60 (citing Ex. 1004, code (57), ¶¶ 1–13, 18–23, 28–39; Ex. 1005, code (27), 19:62–67, 20:30–27:4, 38:20–49:25, Tables SP-1–SP-5). Petitioner argues that a person of ordinary skill in the art “would have been motivated to combine Ruutu and LeBlanc because Ruutu expressly teaches, suggests, and motivates expanding its teachings to applications to CDMA and LeBlanc provides detailed teachings about performing position calculation.” *Id.* at 60–61 (citing Ex. 1004 ¶ 39; Ex. 1005, code (57), 19:62–67, 20:30–27:4, 38:20–49:25, Tables SP-1–SP-5). Petitioner asserts that “[b]oth Ruutu and LeBlanc disclose that position determination may be carried out by, for example, triangulation and time of

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arrival.” *Id.* (citing Ex. 1004 ¶¶ 6–10, 29; Ex. 1005, 2:1, 12:39–67, 38:29–39:67, 41:34–42:24, 54:64–56:67). Petitioner argues that a person of ordinary skill in the art “would have understood that Ruutu’s location determination via time of arrival and triangulation would make use of LeBlanc’s teaching of creating delay profiles and extracting signal reception timings because LeBlanc’s teachings allow the system to determine the time at which a signal was received.” *Id.* at 61 (citing Ex. 1004 ¶¶ 6–10, 29; Ex. 1005, 15:11–25, 39:44–59, 49:11–25, Figs. 18–19, 22–23). Petitioner contends that:

A POSITA would have been motivated to combine Ruutu and LeBlanc, and would have done so with reasonable expectation of success, *based on these exemplary similarities between the two references*. A POSITA would have understood there to be a reasonable expectation of success in this combination because combining Ruutu and LeBlanc would have yielded predictable results to a POSITA, e.g., position determination using extracted signal reception timings and PN offset values in a CDMA system. EX1009, ¶¶199–200.

*Id.* (emphasis added).

That Ruutu and LeBlanc may be in the same field and have similarities does not suffice as an articulated reason with rational underpinning to combine their respective teachings—more is required to support the legal conclusion of obviousness. *See KSR*, 550 U.S. at 418. The Federal Circuit has concluded that merely asserting that two references “were drawn from the same general field of art, the skilled artisan would have turned to them to solve the problems identified in the [challenged] Patent” is “simply too conclusory to satisfy [a petitioner’s] burden of proving by a preponderance of the evidence that the skilled artisan would have combined these references in the way of the claimed invention.”



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*Securus Techs., Inc. v. Glob. Tel\*Link Corp.*, 701 F. App'x 971, 976 (Fed. Cir. 2017); *see Microsoft Corp. v. Enfish, LLC*, 662 F. App'x 981, 990 (Fed. Cir. 2016) (“[T]he Board correctly concluded that [the petitioner] did not articulate a sufficient motivation to combine. With respect to . . . [certain challenged claims, the petitioner] gave no reason for the motivation of a person of ordinary skill to combine . . . [the two references] except that the references were directed to the same art or same techniques . . .”).

Accordingly, Petitioner’s contentions that the references are similar, even if true, are insufficient to show why a person of ordinary skill in the art would have combined Ruutu and LeBlanc.

Petitioner further contends that a person of ordinary skill in the art “would have been motivated to combine Ruutu and LeBlanc because their respective teachings are compatible and yield favorable results, including as described in the preceding paragraphs.” Pet. 61 (citing Ex. 1009 ¶ 201). Here again, Petitioner’s assertions do not provide a *reason* to combine the references and are merely conclusory. Although Petitioner refers to “favorable results, . . . as described in the preceding paragraphs,” Petitioner has not identified any favorable results provided by the combination.

For limitation [5d] (“extracting signal reception timings of said received signals from said delay profiles”), Petitioner contends that LeBlanc discloses the recited limitation,<sup>14</sup> and that the combination of Ruutu and

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<sup>14</sup> Patent Owner disputes that LeBlanc discloses “extracting signal reception timings from delay profiles,” arguing that Petitioner’s contentions are conclusory, and that the examples from LeBlanc cited by Petitioner show delay spreads of signals from three distinct base stations instead of one waveform with multiple PN offset signals. Prelim. Resp. 33–36. For purposes of our analysis here, we assume, without deciding, that LeBlanc

LeBlanc renders this limitation obvious. Pet. 62. Petitioner generally refers back to its contentions for limitation [5c], stating that:

A POSITA would have been motivated to combine Ruutu and LeBlanc with reasonable expectation of success for the reasons stated above [for limitation [5c]], and including because a POSITA would have understood from LeBlanc to extract signal reception timings in order to calculate position as required by Ruutu's CDMA embodiment. §X.C.1.d [(referring to the discussion in limitation [5c])]. Thus, a POSITA would have understood that Ruutu and LeBlanc render this limitation obvious. EX1009, ¶203.

*Id.*

Petitioner's rationale is deficient for the same reasons set forth above for limitation [5c], i.e., that Petitioner has not provided a reason to combine Ruutu and LeBlanc. Petitioner does not provide explanation or supporting evidence for these contentions, i.e., why a person of ordinary skill in the art would have been motivated to combine Ruutu and LeBlanc with a reasonable expectation of success and why a person of ordinary skill in the art would have understood to extract signal reception timing from delay profiles when implementing Ruutu's location determining method.

Dr. Kakae's declaration testimony does little to support Petitioner's contentions regarding the motivation to combine Ruutu and LeBlanc. We agree with Patent Owner that Dr. Kakae's cited testimony (Ex. 1009 ¶¶ 197–203) repeats nearly *verbatim* what is stated in the Petition and does not

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teaches the claimed “extracting signal reception timings from delay profiles,” recited in limitation [5d]. However, we note that Petitioner's contentions regarding LeBlanc's disclosures suffer from the same types of inadequacies discussed herein, i.e., conclusory statements that lack sufficient explanation and evidentiary support.

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provide any additional supporting evidence or technical reasoning. Prelim. Resp. 40–42. Therefore, the cited declaration testimony is conclusory, unsupported, and entitled to little or no weight. *See* 37 C.F.R. § 42.65(a) (“Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight.”); *Xerox Corp. v. Bytemark, Inc.*, IPR2022-000624, Paper 9 at 15 (PTAB Aug. 24, 2022) (precedential).

Petitioner must make a sufficient showing that is more than “mere conclusory statements,” to establish a reason that would have prompted a skilled artisan to combine the prior art teachings in the way of the claimed invention. *KSR*, 550 U.S. at 418–419. Here, the Petition lacks an adequate explanation as to why a person of ordinary skill in the art reading Ruutu would have looked to LeBlanc for its particular teachings, and how a person of ordinary skill in the art would have combined the teachings of Ruutu and LeBlanc in the manner claimed. Therefore, we are not persuaded that the Petition has made a sufficient showing that a person of ordinary skill in the art would have combined Ruutu and LeBlanc. Accordingly, we determine that Petitioner has not demonstrated a reasonable likelihood of prevailing in showing that claims 1–15 would have been obvious over Ruutu and LeBlanc.

#### IV. CONCLUSION<sup>15</sup>

For the foregoing reasons, we determine that the information presented in the Petition and Preliminary Response does not establish that

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<sup>15</sup> Patent Owner raised additional arguments that the Petition should be denied under 35 U.S.C. § 325(d), as well as additional arguments regarding the merits on Grounds 1, 2, and 3. Prelim. Resp. 31–38. Because we

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there is a reasonable likelihood that Petitioner would prevail in challenging at least one claim of the '673 patent. Therefore, we do not institute review of the challenged claims of the '673 patent.

#### V. ORDER

Accordingly, it is

ORDERED that the Petition is denied and no *inter partes* review is instituted.

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determine that Petitioner has not established a reasonable likelihood that it would prevail in challenging at least one claim of the '673 patent for the reasons discussed above, we need not reach these additional arguments.

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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MOTOROLA MOBILITY LLC,  
Petitioner,

v.

MAXELL, LTD,  
Patent Owner.

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Before KEVIN C. TROCK, KARAL. SZPONDOWSKI,  
and JASON W. MELVIN, *Administrative Patent Judges*.

MELVIN, *Administrative Patent Judge*, dissenting.

I respectfully dissent from the majority’s conclusion regarding reason to combine. In my view, Petitioner has shown an adequate reason that skilled artisans would have combined LeBlanc and Ruutu. Specifically, Petitioner asserts that because Ruutu’s location determination uses “time of arrival and triangulation,” skilled artisans had reason to use LeBlanc’s “teaching of creating delay profiles and extracting signal reception timings because LeBlanc’s teachings allow the system to determine the time at which a signal was received.” Pet. 61. In my view, that is sufficient. *See Intel Corp. v. Qualcomm Inc.*, 21 F.4th 784, 800 (Fed. Cir. 2021) (“It’s not

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necessary to show that a combination is ‘the *best* option, only that it be a *suitable* option.’” (quoting *PAR Pharm., Inc. v. TWI Pharms., Inc.*, 773 F.3d 1186, 1197–98 (Fed. Cir. 2014))). Petitioner has shown that LeBlanc’s method for determining a signal’s time of arrival was a suitable option for Ruutu’s method of location determination.

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