

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS,
Petitioner,

v.

GENERAL ACCESS SOLUTIONS, LTD.,
Patent Owner.

IPR2023-01147
Patent 9,426,794 B2

Before KEN B. BARRETT, BARBARA A. PARVIS, and
TERRENCE W. McMILLIN, *Administrative Patent Judges*.

BARRETT, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining No Challenged Claims Unpatentable
35 U.S.C. § 318(a)

I. INTRODUCTION

A. *Background and Summary*

Cellco Partnership d/b/a Verizon Wireless (“Petitioner”)¹ filed a Petition requesting *inter partes* review of U.S. Patent No. 9,426,794 B2 (“the ’794 patent,” Ex. 1001). Paper 1 (“Pet.”). The Petition challenges the patentability of claims 1–6 of the ’794 patent. We instituted an *inter partes* review of all challenged claims on all proposed grounds of unpatentability. Paper 14. General Access Solutions, Ltd. (“Patent Owner”)² filed a Response to the Petition. Paper 18 (“PO Resp.”). Petitioner filed a Reply (Paper 22, “Pet. Reply”) and Patent Owner filed a Sur-reply (Paper 29, “PO Sur-reply”).

An oral hearing was held on October 8, 2024, and a transcript of the hearing is included in the record. Paper 39 (“Tr.”).

This Final Written Decision is entered pursuant to 35 U.S.C. § 318(a). For the reasons discussed below, we determine that Petitioner has *not* shown by a preponderance of the evidence that claims 1–6 of the ’794 patent are unpatentable.

B. *Related Proceedings*

Both parties identify, as a matter involving or related to the ’794 patent, *General Access Solutions, Ltd. v. Cellco Partnership d/b/a Verizon Wireless et al.*, No. 2-22-cv-00394 (E.D. Tex.). Pet. 2–3; Paper 5, 1; Paper 38, 1. Petitioner additionally asserts that “[t]he ’794 patent shares

¹ Petitioner identifies Cellco Partnership d/b/a Verizon Wireless, Verizon Communications Inc., and Verizon Corporate Resources Group LLC as real parties in interest. Pet. 2.

² Patent Owner identifies General Access Solutions, Ltd. as the real party in interest. Paper 5, 1; Paper 38, 1.

substantial subject matter with U.S. Patent No. 9,225,555 (“555 patent”), which was the subject of . . . *Unified Patents Inc. v. General Access Solutions, Ltd., f/k/a/Access Solutions, Ltd.*, IPR2017-01178 (instituted September 26, 2017; Final Written Decision issued September 25, 2018 (Ex. 1010)).” Pet. 3.

C. The ’794 Patent

The ’794 patent pertains “to a manner by which to provide mobile communications in a fixed wireless access (FWA) communication system.” Ex. 1001, 3:41–43. “More particularly, the present invention relates to [an] apparatus, and an associated method, for providing WLAN (wireless local area network) service at a subscriber station of the fixed wireless access communication system.” *Id.* at 3:43–47. Figure 1 is reproduced below.

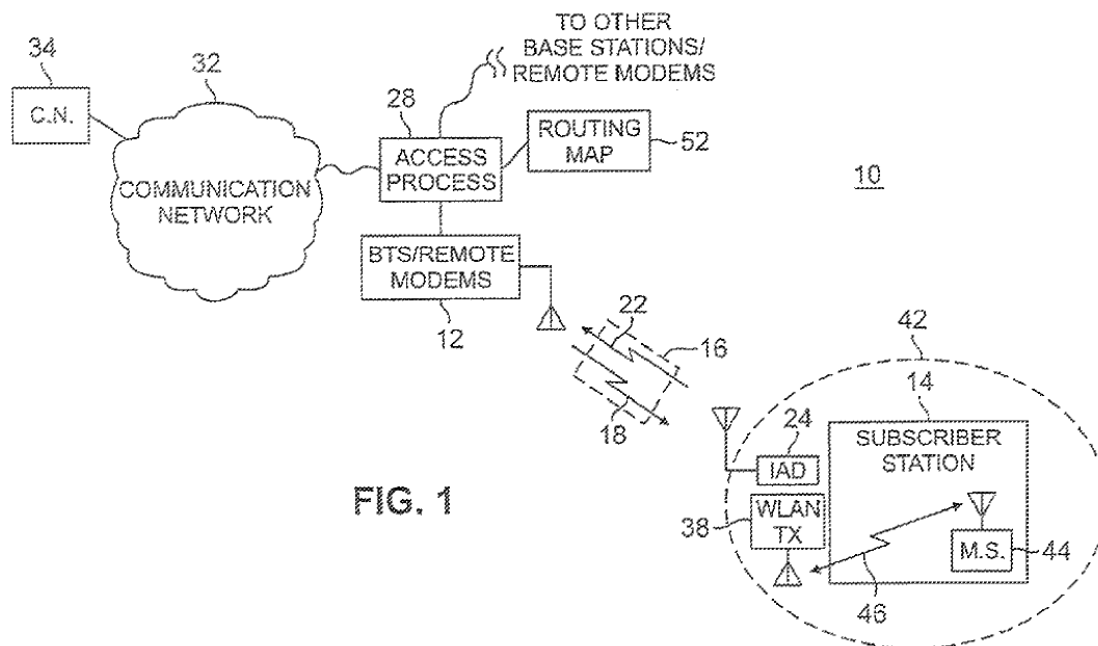


Figure 1 “illustrates a functional block diagram of a fixed wireless access (FWA) communication system.” Ex. 1001, 7:9–10. “[C]ommunication system 10 provides for radio communications between fixed-site base

stations, of which the base station 12 is exemplary and fixed-site subscriber stations 14 of which the subscriber 30 station 14 is exemplary.” *Id.* at 7:27–31. Located at subscriber station 14 is integrated access device (“IAD”) 24, which forms a transceiver that transmits signals to and receives signals from base station 12. *Id.* at 7:36–43. Base station 12 is coupled to access process 28, which is coupled to communication network 32—a network such as a public switched telephone network or packet data network. *Id.* at 7:50–56. Coupled to communication network 32 is correspondent node 34. *Id.* at 7:56–57. Accordingly, a communication path may be formed between IAD 24 and correspondent node 34. *Id.* at 7:57–61. “[T]he base station communicates with [a] first transceiver and a plurality of other wireless communication devices according to a wide area wireless communication protocol.” *Id.*, code (57) (Abstract).

Also located at subscriber station 14 is wireless local area network (“WLAN”) transceiver 38 connected to the circuitry of IAD 24. *Id.* at 7:65–8:2. “The WLAN transceiver defines a coverage area 42 defining a cell.” *Id.* at 8:2–3. Mobile station 44 positioned within cell 42 is capable of communicating with WLAN transceiver 38. *Id.* at 8:3–5. “Because of the connection of the WLAN transceiver to the transceiver of [IAD 24], signals originated at the mobile station . . . can . . . be provided to the transceiver of [IAD 24] . . . and, thereafter, be communicated to another device, such as the correspondent node 34.” *Id.* at 8:15–22. “Analogously, signals originated at . . . correspondent node [34], or elsewhere, can be communicated to the mobile station.” *Id.* at 8:22–24.

Figure 2 is reproduced below.

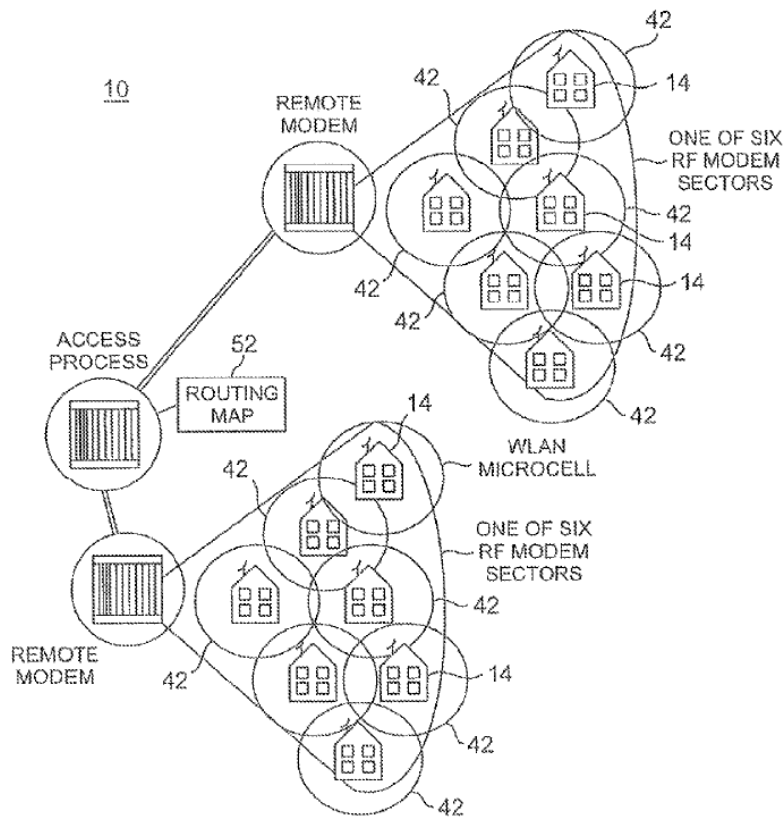


FIG. 2

Figure 2 illustrates “a fixed wireless access communication system similar to that shown in FIG. 1” but “also illustrating a plurality of cellular coverage areas defined by about a plurality of subscriber stations.” *Id.* at 7:12–15. Figure 2 shows “a plurality of subscriber stations 14 [that] include WLAN transceivers 38 (shown in FIG. 1) connected to corresponding [IADs 24].” *Id.* at 8:37–41. Each WLAN transceiver defines a coverage area 42. *Id.* at 8:41–43. A mobile station initially positioned within a first coverage area 42 defined by a WLAN transceiver at a first subscriber station “is permitted movement, such as out of the coverage area defined by the [WLAN] transceiver positioned at a first subscriber station and into the coverage area defined by a WLAN transceiver of another subscriber

station.” *Id.* at 8:50–56. Upon this movement, “a handover of communications is effectuated from the first WLAN transceiver to another WLAN transceiver” to “permit continued communications with the mobile station.” *Id.* at 8:56–60.

“Determination of when to initiate handover of communications is made responsive to measurements of signal characteristics of communication signals communicated between the WLAN transceiver and the mobile station.” *Id.* at 8:61–64. “In one implementation signal characteristics are measured, or otherwise determined, at the mobile station and results of such measures or determinations of are reported back to the WLAN transceiver and appropriate control circuitry,” and “[t]hereafter, if appropriate, the handover of communications is effectuated.” *Id.* at 8:64–9:3.

Shown in Figure 2 above is routing map 52, which is functionally connected to access process 28. *Id.* at 9:4–6. The routing map contains a listing of mobile stations indexed with the locations of the mobile stations. *Id.* at 9:6–10.

When communications are to be effectuated with a particular mobile station, such as communications originated by the correspondent node 34, the routing map is accessed and the communication signals are routed to the mobile stations at the position indicated in the routing map. And, when a handover is effectuated, information routed to a mobile station but not yet delivered is rerouted to the WLAN transceiver to which communications have been handed over.

Id. at 9:10–19.

D. Illustrative Claim

Of the challenged claims of the ’794 patent, claims 1 and 6 are independent claims. The remaining challenged claims depend directly or

indirectly from Claim 1. Claim 1, reproduced below bracketed annotations³ inserted, is illustrative.

1. [1Pre] A wireless communication device, comprising:
 - [1a] a first wireless transceiver operable to communicate with a base station, wherein the base station communicates with the first wireless transceiver and a plurality of other wireless communication devices according to a wide area wireless communication protocol; and
 - [1b] a second wireless transceiver coupled to the first wireless transceiver and operable to directly communicate with a first mobile station and a second mobile station, wherein the second wireless transceiver communicates with the first mobile station and the second mobile station according to a local area wireless communication protocol,
 - [1c] wherein the first wireless transceiver receives from the base station a first downlink signal intended for the first mobile station and provides the first downlink signal to the second wireless transceiver and wherein the second wireless transceiver receives the first downlink signal and re-transmits the first downlink signal to the first mobile station as a second downlink signal according to the local area wireless communication protocol, and
 - [1d] wherein *the second transceiver* monitors first signal characteristics of the second downlink signal of the first mobile station and monitors second signal characteristics of the second mobile station, and *based on the first signal characteristics and the second characteristics, routes information to the first mobile station and the second mobile station, respectively.*

Ex. 1001, 10:17–44 (emphasis added). Independent claim 6 recites a method for communicating with a wireless communication device that is the

³ We utilize annotations for claim 1 similar to Petitioner's.

same as or similar to the device recited in independent claim 1. *See id.*
at 10:57–11:22.

E. Evidence

Petitioner relies on the following references:

Name	Reference	Exhibit No.
Palmer	US 6,556,553 B1, issued April 29, 2003	1004
Hohnstein	US 6,816,706 B1, issued Nov. 9, 2004	1005
Mahany	US 5,790,536, issued Aug. 4, 1998	1006
Agrawal	US 5,722,051, issued Feb. 24, 1998	1007

Petitioner also relies on the declarations of Dr. Kevin C. Almeroth (Exs. 1002, 1024) in support of its arguments, and Patent Owner relies on the declaration of Dr. Douglas A. Chrissan (Ex. 2007) in support of its arguments. The parties also rely on other exhibits as discussed below.

F. Asserted Grounds of Unpatentability

Petitioner asserts that the challenged claims are unpatentable on the following grounds:

Claim(s) Challenged	35 U.S.C. §⁴	Reference(s)/Basis
1–4, 6	102(e)	Palmer
1–4, 6	103(a)	Palmer
1–6	103(a)	Hohnstein, Palmer
1–6	103(a)	Palmer, Mahany
1–4, 6	103(a)	Palmer, Agrawal
5	103(a)	Palmer, Agrawal, Mahany
1–6	103(a)	Hohnstein, Agrawal

⁴ The '794 patent was filed before the effective date of the Leahy Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“AIA”), and we apply the pre-AIA version of 35 U.S.C. §§ 102 and 103.

II. ANALYSIS

A. Principles of Law

Petitioner bears the burden of persuasion to prove unpatentability of the claims challenged in the Petition, and that burden never shifts to Patent Owner. *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). To prevail, Petitioner must establish by a preponderance of the evidence that the challenged claims are unpatentable. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d).

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros., Inc. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987); *see also Finisar Corp. v. DirecTV Group, Inc.*, 523 F.3d 1323, 1334 (Fed. Cir. 2008) (to anticipate a patent claim under 35 U.S.C. § 102, “a single prior art reference must expressly or inherently disclose each claim limitation”). Moreover, “[b]ecause the hallmark of anticipation is prior invention, the prior art reference—in order to anticipate under 35 U.S.C. § 102—must not only disclose all elements of the claim within the four corners of the document, but must also disclose those elements ‘arranged as in the claim.’” *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008) (quoting *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548 (Fed. Cir. 1983)). Whether a reference anticipates is assessed from the perspective of one of ordinary skill in the art. *See Dayco Prods., Inc. v. Total Containment, Inc.*, 329 F.3d 1358, 1368–69 (Fed. Cir. 2003) (“‘[T]he dispositive question regarding anticipation [i]s whether *one skilled in the art* would reasonably understand or infer from the [prior art reference’s] teaching’ that every claim element was disclosed in

that single reference.” (second and third alterations in original) (quoting *In re Baxter Travenol Labs.*, 952 F.2d 388, 390 (Fed. Cir. 1991))).

Additionally, “[u]nder the principles of inherency, if the prior art necessarily functions in accordance with, or includes, the claimed limitations, it anticipates.” *MEHL/Biophile Int’l Corp. v. Milgraum*, 192 F.3d 1362, 1365 (Fed. Cir. 1999); see *In re Cruciferous Sprout Litig.*, 301 F.3d 1343, 1349–50 (Fed. Cir. 2002).

A patent claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious at the time 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). The question of obviousness is resolved on the basis of underlying factual determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) if present, any objective evidence of obviousness or non-obviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

B. The Level of Ordinary Skill in the Art

In determining the level of ordinary skill in the art, various factors may be considered, including the “type of problems encountered in the art; prior art solutions to those problems; rapidity with which innovations are made; sophistication of the technology; and educational level of active workers in the field.” *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995) (quoting *Custom Accessories, Inc. v. Jeffrey–Allan Indus., Inc.*, 807 F.2d 955, 962 (Fed. Cir. 1986)).

Petitioner contends that:

A person of ordinary skill in the art (“POSA”) at the time of the purported invention would have had either: (1) a Bachelor of Science degree in computer science, electrical or computer engineering, or a related field, and at least 2 years of work or research experience in digital communications systems, such as wireless communications systems and networks, or equivalent, or a Master’s degree in electrical engineering, computer engineering, computer science or similar field. Additional education could compensate for less practical experience and vice versa. Ex. 1002, ¶¶1-46.

Pet. 10. Patent Owner does not address the level of ordinary skill in the art. Cf. Ex. 2007 ¶19 (Patent Owner’s declarant, after acknowledging Petitioner’s definition, stating: “Patent Owner has not offered a different understanding of a POSITA, and the PTAB accepted Petitioner’s submission. I accept and use Petitioner’s and the PTAB’s definition of a POSITA.”).

Petitioner’s definition is consistent with the level of ordinary skill reflected in the prior art references of record. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (recognizing that the prior art itself may reflect an appropriate level of skill in the art). For purposes of this decision, we apply Petitioner’s definition of the person of ordinary skill in the art.

C. Claim Construction

We apply the same claim construction standard used in district court actions under 35 U.S.C. § 282(b), namely that articulated in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). *See* 37 C.F.R. § 42.100(b). In applying that standard, claim terms generally are given their ordinary and customary meaning as would have been understood by a person of ordinary skill in the art at the time of the invention and in the context of the entire

patent disclosure. *Phillips*, 415 F.3d at 1312–13. “In determining the meaning of the disputed claim limitation, we look principally to the intrinsic evidence of record, examining the claim language itself, the written description, and the prosecution history, if in evidence.” *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 469 F.3d 1005, 1014 (Fed. Cir. 2006) (citing *Phillips*, 415 F.3d at 1312–17). “[W]hile extrinsic evidence can shed useful light on the relevant art, . . . it is less significant than the intrinsic record in determining the legally operative meaning of claim language.” *Phillips*, 415 F.3d at 1317 (internal quotation marks omitted).

The dispositive issues in this case pertain to the monitoring-and-routing limitation which, in independent claim 1, recites, “the second transceiver monitors [signal characteristics] . . . , and based on the first signal characteristics and the second characteristics, routes information to the first mobile station and the second mobile station, respectively.” Ex. 1001, 10:38–44.

The Petition states that “no claim terms require construction.” Pet. 10.

Patent Owner, in the claim construction section of its Response, does not explicitly propose a construction for any term. Patent Owner, however, notes that the District Court, in the parallel litigation, construed certain terms. *See* PO Resp. 26–27 (citing Ex. 2006, 20–24). Patent Owner states:

Particularly relevant to Petitioner’s Grounds is the district court’s construction of “[routes/routing] information to the first mobile station and the second mobile station, respectively” as “[directs/directing] information through a specified path to the first mobile station and the second mobile station, respectively.” (EX2006, 21–24.) Petitioner argued for such a construction, while Patent Owner argued for plain and ordinary meaning. (*See, id.*) In so ruling, the district court noted “that simply ‘forwarding information,’ without more, is not ‘routing’

because the intrinsic evidence (citing EX1001, 8:61–9:3, 9:6–19) and “cited definitions show the ordinary meaning of ‘routing’ requires a specific path.” (*Id.*, 22–23; EX2007, ¶60.)

Id. (alterations by Patent Owner).⁵

During oral argument, both parties confirmed their respective positions that the claim term “route” needs no construction. *See, e.g.*, Tr. 11:7–9 (Petitioner’s counsel: “Frankly, it doesn’t make any difference to the analysis of the prior art. And so, we don’t believe that the PTAB needs to construe the term route, and so we have not proposed a construction.”); *id.* at 58:25–59:2 (Patent Owner’s counsel: “You know, I don’t think that you have to define routing in order to decide the case. I think you can do it, you know, just apply whatever plain and ordinary meaning is.”); *cf.* Tr. 40:14–18 (Patent Owner’s counsel at oral argument: “For the routing itself, you know, there is a District Court construction and that’s a construction that the other—the Petitioner did not ask for determination whether that’s appropriate or not appropriate here. We did not address that as well, so the parties aren’t arguing that that construction should be applied here.”).

For the reasons discussed below, we determine that Petitioner has not proven by a preponderance of the evidence that the prior art discloses or teaches, under Petitioner’s articulated theories, that a second transceiver routes information based on monitored characteristics. This is dispositive of the *inter partes* review. Accordingly, we determine that no claim terms require express construction for purposes of deciding the dispositive issues.

⁵ Prior to the oral argument in this *inter partes* review, the jury verdict in the parallel litigation was vacated and a new trial ordered. *See* Tr. 43:8–9. The parties have not informed us as to whether the District Court revised the claim constructions in the jury instructions for the re-trial. *See id.* at 43:1–44:2.

D. The Alleged Unpatentability of Claims 1–4 and 6 as Anticipated by or Obvious over Palmer (Ground 1)

Petitioner contends that claims 1–4 and 6 of the '794 patent are anticipated by or would have been obvious over Palmer. *See* Pet. 11–32. Patent Owner argues, *inter alia*, that Palmer does not disclose limitation 1d of independent claim 1 and the corresponding limitation in independent claim 6 “because Palmer’s alleged second transceiver neither monitors signal characteristics nor routes information to the mobile stations as the Challenged Claims recite.” PO Resp. 40. For the reasons discussed below, we determine that Petitioner has failed to establish by a preponderance of the evidence that “[t]he access point 40 [of Palmer] routes information to the first mobile station and the second mobile station, respectively, based on the monitored first signal characteristics and the second characteristics,” as argued by Petitioner. Pet. 26.

1. Palmer (Ex. 1004)

Palmer pertains to “wireless communication systems, and more particularly, to a method for determining when a wireless communication device should rate shift or roam in order to improve communication performance.” Ex. 1004, 1:9–12. Palmer explains:

[I]n a WLAN, a mobile worker may move throughout the work area carrying a wireless communication device such as a portable terminal or computer. The work area may be within a building or from one building to another and the mobile worker may move from one cell to another. The wireless device must maintain a wireless connection that is transparently maintained so that the central host processing unit and the mobile worker can perform their assigned tasks. As the worker travels within a cell or from one cell to another, it may become necessary for the wireless communication device to lower the transmission rate in order to maintain the connection to the transmitter/receiver of the current cell. Alternatively, the

wireless communication device may switch (also known as roam) from the current cell to another cell that may offer better connection quality to the WLAN. In either case, the wireless communication device must make this transition without a loss of connection or service degradation being noticed by the mobile worker or the central host processing unit. The transition should be seamless and appear and operate as a wired connection.

Id. at 1:53–2:6. Palmer further explains that then-existing methods for determining whether to rate shift or roam were relatively inflexible and reacted to the current state rather than anticipated the state, thus resulting in performance problems. *Id.* at 2:7–25. According to Palmer, Palmer’s disclosed method “improves communication by dynamically and flexibly anticipating when a rate shift or roam should occur.” *Id.* at 2:63–65.

Figure 2 of Palmer is reproduced below.

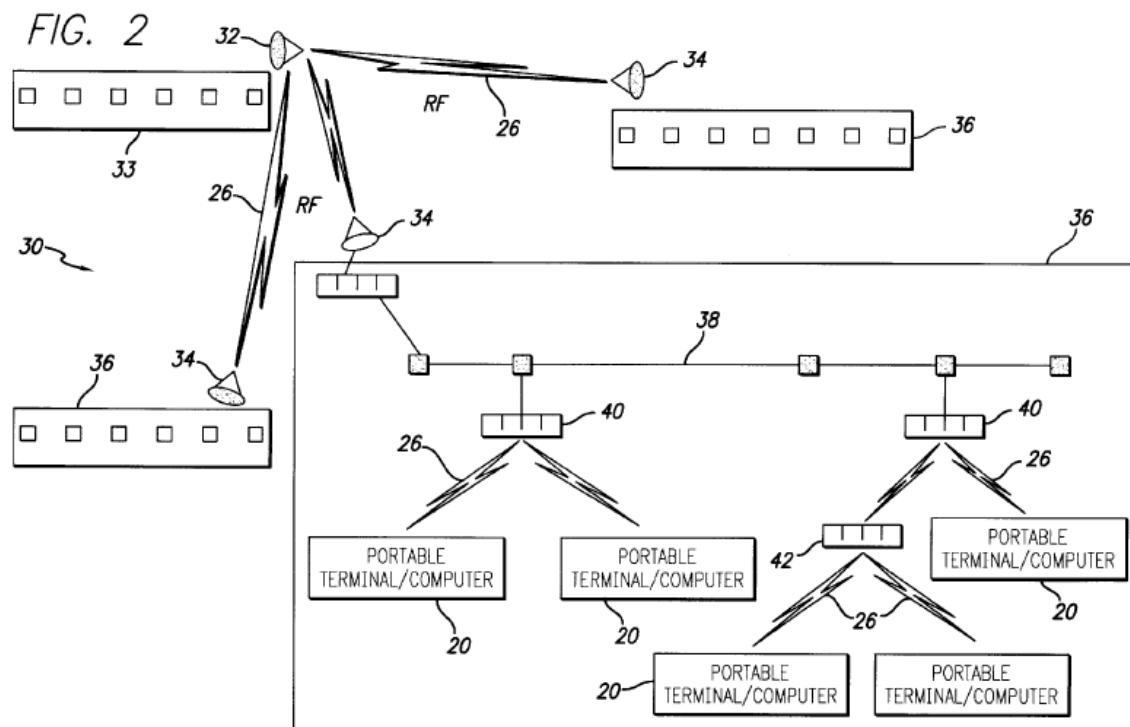


Figure 2 illustrates a communications system. *Id.* at 4:53. Palmer states that “[t]he communication system 30 [shown in Figure 2 above] . . . provid[es]

wireless coverage not only within a building, but also among several buildings or even within a city.” *Id.* at 4:53–57.

The communication system 30 includes a central antenna 32 that communicates through RF [(radio frequency)] links 26 to a plurality of remote antennas 34. The central antenna 32 may be attached to an administration building 33 or other central location based upon the location of the remote antennas 34. The remote antennas 34 may be located on various buildings 36 or other convenient remote locations. The building 36 may include a wired network 38 with a plurality of access points 40. The access point 40 . . . would consist of a transmitter/receiver defining a cell 18 [as shown in Figure 1] that provides RF coverage for the wireless communication devices 20.

Id. at 4:57–5:1. “The wired network 38 is then linked to the administration building 33 and its associated network through the remote antenna 34 to the central antenna 32 and finally through its link to a wired network (not shown [in Figure 2]) within the administration building 33.” *Id.* at 5:4–9.

Palmer explains that, as a mobile worker with wireless communication device 20 moves throughout the work area, it is necessary for wireless communication device 20 to maintain the wireless connection. *Id.* at 5:10–13. “In FIG. 2, the wireless communication device 20 may also transition between buildings or comprise part of a wireless wide area network.” *Id.* at 5:17–19.

If the RF connection begins to degrade, a determination should be made as to whether communication performance would improve by transmitting at a lower information rate or roaming to another cell offering a higher quality RF connection. This determination could be made by the wireless communication device 20 having a processor and a memory, with the processor executing a stored program for carrying out the method steps discussed below. Alternatively, the method steps may be

performed centrally, for example, by the network or a central host processor.

Id. at 5:26–36

Palmer discloses “a predictive method for determining when a communication device should rate shift or roam in a wireless environment.”

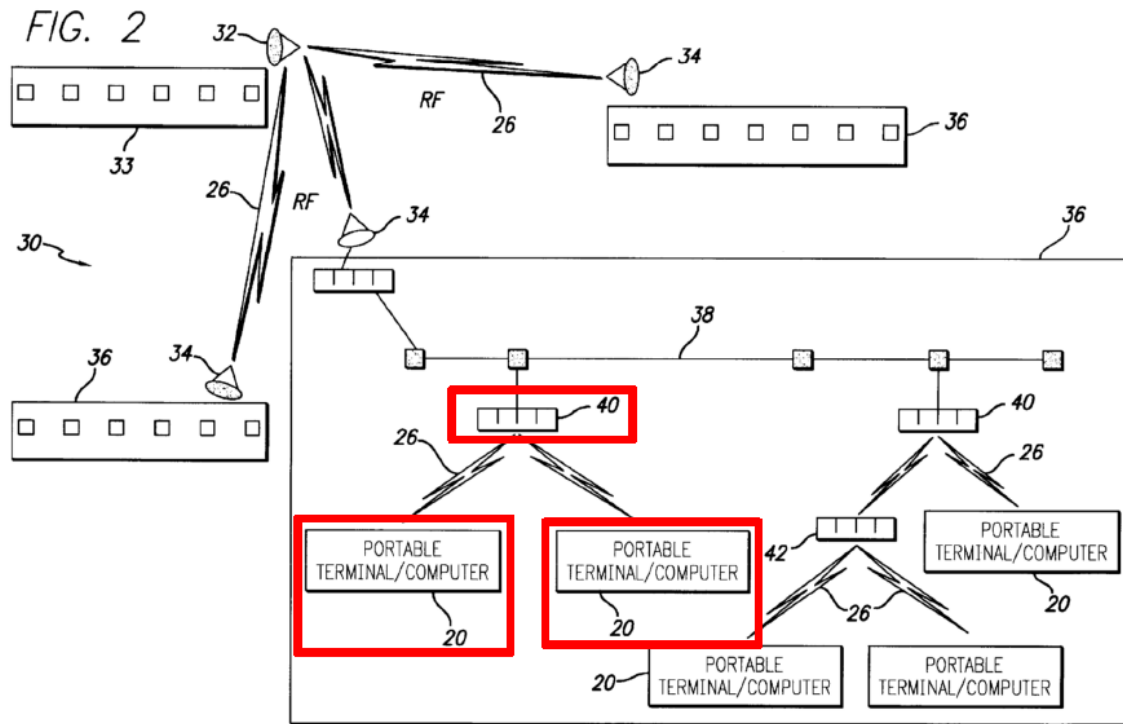
Id. at 5:37–40. “The method would utilize various measurements to evaluate connection quality.” *Id.* at 5:41–42. “These measurements may include but are not limited to: 1) signal-to-noise ratio (SNR), 2) bit error rate (BER), 3) number of transmission retries (NTR), 4) received signal strength indicator (RSSI), 5) bit energy-to-noise density (E_b/N_o), 6) global position information (GPS), and 7) cell congestion information (also known as load factor).” *Id.* at 5:43–49.

2. Discussion

Independent claim 1 recites that “the second transceiver monitors [first and second signal characteristics] . . . , and based on the first signal characteristics and the second characteristics, routes information to the first mobile station and the second mobile station, respectively.” Ex. 1001, 10:38–44 (limitation 1d). Independent claim 6 similarly calls for “monitoring, using the second transceiver, [first and second signal characteristics],” and “based on the first signal characteristics and the second characteristics, routing, using the second transceiver, information to the first mobile station and the second mobile station, respectively.” *Id.* at 11:14–22. The recited “second transceiver” is the transceiver for the WLAN-side of the claimed device and, in the communication chain, is located between the WWAN transceiver and the mobile stations. *See id.* at 10:23–29. The pertinent dispute here involves routing and, specifically, whether Petitioner

has demonstrated adequately that a WLAN transceiver in Palmer performs the routing. *See, e.g.*, PO Resp. 40–41.

Petitioner contends that Palmer’s access point 40 is the recited second transceiver (the WLAN transceiver). *See* Pet. 20, 24. Petitioner’s annotated version of Palmer’s Figure 2 is reproduced below.



Pet. 21. Above is Palmer’s Figure 2, illustrating a communications system, with Petitioner’s annotations in the form of red boxes around one of a plurality of access points 40 and two wireless communication devices 20. Ex. 1004, 4:53–5:1; *see id.* at 4:64–65 (“The building 36 may include a wired network 38 with a plurality of access points 40.”). Access points 40 “define basic wireless service areas called cells 18” and “provide a bridge for the wireless communication devices 20 to the wired network 38.” *Id.* at 4:36–38, 5:1–9. The access points receive information from administration building 33 via upstream components including remote

antenna 34 at building 36 and central antenna 32 at administration building 33. *Id.* at 5:1–9, Fig. 2. As the worker moves around the building or between buildings, and, thus, from one cell to another, the RF connection between the worker’s wireless communication device and the access point may deteriorate and a determination must be made so that the worker’s device can maintain an adequate connection. *See id.* at 5:9–16, 5:24–30. That determination is whether to adjust the information rate or to roam to another cell with a better connection. *Id.* at 5:26–30.

Petitioner contends that Palmer’s access point routes information as recited because “access point 40 determines whether roaming by a portable terminal 20 should take place and routes data packets accordingly.” Pet. 26–27 (citing Ex. 1004, 5:20–36); *see also id.* at 32 (Petitioner, for the corresponding routing limitation of independent claim 6, relying on its contentions for independent claim 1). In its Reply, Petitioner confirms that “Petitioner’s unpatentability ground . . . relies on Palmer’s performing of the routing when a mobile device 20 roams from one WLAN transceiver to another.” Pet. Reply 17; *see id.* (referring to “routing in the context of a roaming/handover operation”). Thus, we understand Petitioner to contend that Palmer’s routing includes both determining whether to roam and, if appropriate, then “rout[ing] data packets” to the appropriate new cell and its corresponding transceiver.

Petitioner analogizes Palmer’s disclosure to that of the challenged patent, asserting that, “[t]o the extent the ’794 patent specification describes this limitation at all, it likewise uses these measured characteristics to determine whether to initiate handoff(‘handover’) of a mobile station from one wireless transceiver to another.” Pet. 27 n.9 (citing Ex. 1001, 8:50–9:3,

8:61–64); *but see* Tr. 14:9–12 (Petitioner’s counsel at oral argument: “[W]e have urged in the District Court that the claim lacks written description because [the Specification] does not explicitly describe whether or not the transceiver performs anything that you might consider routing.”). According to Petitioner, Palmer discloses that access point 40 determines when the wireless RF connection becomes unstable based on the measurements and “determines whether or not to reduce the data rate or to hand off the wireless connection to another access point,” and “[o]nce a mobile station has been handed off to a new access point based on the signal monitoring, the original access point no longer routes downlink signals to the mobile station to which it is no longer connected.” *Id.* at 27 (citing Ex. 1004, 5:20–36; Ex. 1002 ¶¶ 93–98); *see also, e.g.*, Tr. 12:20–13:20 (Petitioner arguing that making a decision whether or not to send a piece of information constitutes routing).

As an initial matter, Petitioner, in drawing an analogy to the Specification of the ’794 patent, stops short. While the Specification does, as Petitioner asserts (Pet. 27 n.9), describe the determination of when to initiate a handover from one WLAN transceiver to another, the description of routing does not end there. *See, e.g.*, Ex. 1001, 8:56–19. The Specification also describes the use of a routing map, which indexes mobile stations with their locations, to affect a handover by routing information to the WLAN transceiver to which communications have been handed over. *See id.* at 9:4–19; *see also id.* at 9:46–56 (“[M]ovement [of a mobile station between sectors of different cells] results in access process to access process routing resolution, access processing routing to the new cell, access process routing to the new remote modem sector, and remote modem routing to the new subscriber access integrated device. Thereby, handovers of

communications are effectuable”). Even if, as Petitioner contends (Pet. 26), “[Palmer’s] access point 40 determines whether roaming by a portable terminal 20 should take place,” that, at most, is a determination that routing should occur and not proof that the access point performs the routing.

As to the other half of Petitioner’s contention—that, after a decision to roam has been made, Palmer’s “access point 40 . . . routes data packets accordingly”—Petitioner has not demonstrated adequately that this is true. *See* Pet. 26–27 (citing Ex. 1004, 5:20–36). As a purported example of this routing in Palmer, Petitioner contends that “the access point 40 determines when the wireless RF connection (involving both transmissions and receptions) between itself and the portable terminal 20 becomes unstable based on the measurements, and *determines whether or not to reduce the data rate or to hand off the wireless connection to another access point.*” *Id.* at 27 (citing Ex. 1004, 5:20–36) (emphasis added). First, this assertion is again that Palmer’s access point determines *whether to route* via, for example, handing off, as opposed to actually handing off (routing) to the appropriate WLAN transceiver.

Second, even if this determination constitutes routing within the meaning of the ’794 patent, Petitioner does not show by a preponderance of the evidence that Palmer’s access point 40 makes those determinations. Neither Petitioner nor Dr. Almeroth point to any explicit disclosure in Palmer of the access point 40 making the determinations. *See* Pet. 26–27; Ex. 1002 ¶ 98. Rather, Petitioner, in a parenthetical quote, points to Palmer’s statement that the determination to change the information rate or to roam to another cell may be performed “by the network.” Pet. 27 (citing

Ex. 1004, 5:20–36). Petitioner does not explain adequately how Palmer’s statement about performing acts by the network equates to a disclosure of Palmer’s access points performing the routing. *See id.*; *see also* Ex. 1002 ¶ 98 (Dr. Almeroth’s declaration). We acknowledge that Petitioner, for the separate and distinct “monitors” aspect of the limitation⁶, argues:

Palmer describes the monitoring “may be performed centrally, for example, ***by the network***” (*id.*, 5:34–36) and the access point 40 is part of the network and the specific component directly interacting wirelessly with the portable terminals 20 and therefore collecting such measurements.

Pet. 25; *see also* Pet. Reply 13 (“A POSA would have understood Palmer’s explanation to indicate to a POSA that the access point 40 performs such monitoring, since the access point 40 forms part of the network and actually performs the relevant communication.”). Out of an abundance of caution, we will address that argument as if it was also made for the “routes” aspect of the limitation.

The relied-on portion of Palmer, in context, is quoted below.

The wireless connection should be transparent to the mobile worker as the wireless communication device 20 roams from cell to cell or rate shifts. There should be no loss of connection or service degradation and it should appear as if there is a wired connection. If the RF connection begins to degrade, a determination should be made as to whether communication performance would improve by transmitting at a lower information rate or roaming to another cell offering a higher quality RF connection. *This determination could be made by the wireless communication device 20 having a processor and a memory, with the processor executing a stored program for carrying out the method steps discussed below. Alternatively,*

⁶ Petitioner contends that “Palmer’s access point 40 satisfies the claimed monitoring simply by receiving measurement data from portable terminals 20.” Pet. Reply 14.

the method steps may be performed centrally, for example, by the network or a central host processor.

Ex. 1004, 5:25–36 (emphasis added). Thus, Palmer discloses that the determination to roam to another cell may be done by the mobile worker’s wireless communication device 20 having a specifically-programmed processor or may be done centrally, with examples being the “network” or central host processor. We disagree that this constitutes a disclosure of the access point 40 performing the roaming determinations. Rather, we find to be persuasive and credible Dr. Chrissan’s testimony that “a POSITA recognizes that an access point does not qualify as ‘centrally, for example, by the network or a central host processor,’” and, “[i]nstead, this phrase refers to one of the centrally located devices such as network 14 or central host processor 12 (in Fig. 1), or a device in administration building 33 (in Fig. 2).” Ex. 2007 ¶ 71 (citing Ex. 1004, Figs. 1, 2). Dr. Chrissan’s opinion is consistent with Palmer’s disclosure, as we will now discuss.

Palmer's Figure 1 is reproduced below.

FIG. 1

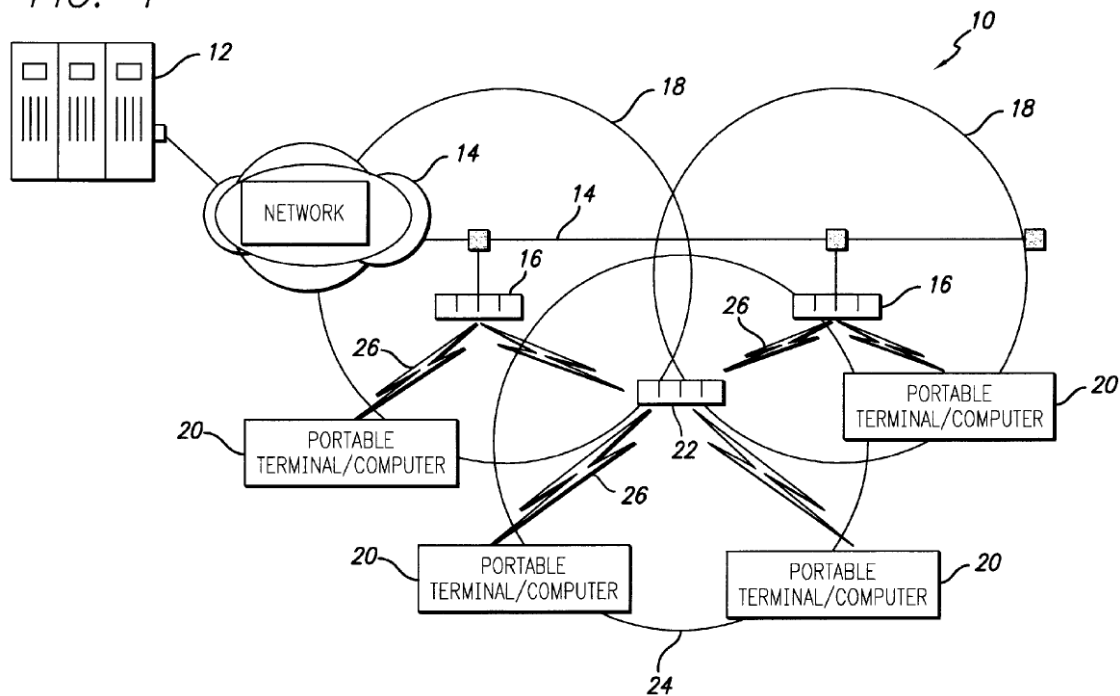


Figure 1 depicts “communication system 10 [which] includes a *central host processor 12* connected to a *wired network 14*,” with “[t]he wired network 14 [having] a plurality of *access points 16* that are coupled to the *wired network 14*,” and with “[t]he plurality of access points 16 [being] transmitter/receivers that define basic wireless service areas called cells 18 within which [is] a *wireless communication device 20*.” Ex. 1004, 4:26–39 (emphasis added). Palmer explains that “[t]he access point 16 acts as a bridge from the wireless communication arena defined by its cell 18 to the wired network 14.” *Id.* at 4:42–44. In the embodiment of Palmer’s Figure 2, the access point is element number 40, and, like access point 14 of the Figure 1 embodiment, defines a cell and “provide[s] a bridge for the wireless communication devices 20 to the wired network 38.” *Id.* at 4:66–5:3.

As indicated above, Palmer identifies, as distinct and separate components: network central host processor 12, wired network 14/38, and access points 16/40. Palmer, rather than referring to the access points as determination-making parts of the network, as Petitioner urges, indicates that access points are coupled to the network and that the access points serve as bridges between the network and the wireless communication devices. *See* Ex. 1004, 4:26–44, 4:64–5:3.

Additionally, as Figure 1 above shows, the centrally located network (like central host processor 12) has oversight over multiple access points and their corresponding cells. Ex. 1004, Fig. 1; *see also id.*, Fig. 2 (depicting wired network 38, which is wirelessly connected to administration building 33, as upstream of multiple access points 40 and wireless access points 42). Thus, it is understandable that Palmer would have that centralized component making roaming decisions for transitioning a mobile wireless communication device 20 from one cell to another. Petitioner does not adequately explain how a given access point would have the perspective or capability to determine where a given moving device is relative to other access points so as to decide which new cell is appropriate to receive the handover. In that regard, Petitioner’s declarant, Dr. Almeroth, notes that Palmer’s access point 40 is a bridge and, in testifying as to the understanding of a person of ordinary skill, quotes from a technical dictionary that states, “[c]lassic bridges are relatively dumb devices, which are fast and inexpensive; they simply accept data packets, perhaps buffering them during periods of network congestion, and forward them.” Ex. 1002 ¶¶ 90–91 (quoting Ex. 1011, 126–127) (emphasis omitted); *see id.* at ¶ 91 n.1 (Dr. Almeroth testifying that “the entire definition is relevant to a POSA’s

understanding on the meaning of ‘bridge’”); *cf.* Ex. 1004, 5:3–4 (Palmer describing the separate wireless access points 42 in Figure 2 as transmitter/receiver repeaters.). Petitioner does not explain adequately or persuasively why a person of ordinary skill in the art would understand Palmer to disclose a “relatively dumb device[]” as capable of routing.

Petitioner further contends that “[o]nce a mobile station has been handed off to a new access point based on the signal monitoring, the original access point no longer routes downlink signals to the mobile station to which it is no longer connected.” Pet. 27 (citing Ex. 1002 ¶¶ 93–98). To the extent that Petitioner argues that this is a disclosure of limitation 1d, we disagree. Petitioner has not offered any persuasive argument or evidence that a person of ordinary skill in the art would understand *not routing* a signal to show, as recited in the claim, that “the second transceiver . . . routes information.” Ex. 1001, 10:38–44.

In its reply brief, Petitioner argues, for example, “Palmer uses routing to maintain network connectivity for a portable terminal 20 when roaming, and the ’794 Patent likewise describes routing for the same purpose.” Pet. Reply 16 (citing Ex. 1001, 9:15–19); *see also, e.g., id.* at 12 (“Palmer uses such monitored properties to determine whether [to rate shift or roam].”). The issue, however, is not whether Palmer discloses routing, but whether Petitioner has demonstrated that Palmer discloses that the *access points* (mapped to the recited second transceiver) route information based on monitored characteristics. Petitioner’s Reply does not address adequately that key issue. *See* Pet. Reply 12, 16–18.

Petitioner, also in the reply brief, argues that the inventor of the ’794 patent, Mr. Paul Struhsaker, “testified that ‘*all* WLANs’ at the time of

the '794 Patent used the claimed 'second transceiver performing routing to the first and second mobile stations.'" Pet. Reply 17–18 (citing Ex. 1023, 269:9–21, 188:13–189:3). We do not agree with Petitioner's characterization of the ambiguous testimony at least because Mr. Struhsaker used the present tense, testifying that "all WLANs perform that function." Ex. 1023, 269:20; *but see id.* at 269:16–17 ("The concept is sitting there in the document as WLAN, as any person skilled in the art at that time would know."). Further, we cannot adequately evaluate the testimony or the witness's qualifications to testify about "all WLANs" because Petitioner placed in the record only the transcript page where Mr. Struhsaker's direct testimony began and the single page containing this statement made during cross-examination, rather than providing the surrounding pages that would have given us context for this vague testimony.⁷ Adding to the ambiguity of this district court testimony is Petitioner's assertion—in distinguishing its non-infringement argument in district court with its patentability arguments—that "Petitioner's unpatentability ground does not rely on any routing functionality within the WLAN itself, but rather relies on Palmer's performing of the routing when a mobile device 20 roams from one WLAN transceiver to another." Pet. Reply 17; *cf. id.* (Petitioner conspicuously noting that Mr. Struhsaker's testimony was during a district court trial that resulted in an infringement finding). This suggests that, in the district court, a distinction was drawn between "routing" by roaming and "routing functionality within the WLAN," with one argued to be applicable to the

⁷ Petitioner's excerpt ends with Petitioner's counsel objecting to the testimony that Petitioner now seeks to rely on, and the Court sustaining that objection. Ex. 1023, 269:22–24.

claimed invention and one not. *See also id.* (Petitioner arguing that the accused cellular hotspot provides Wi-Fi connectively but lacks Wi-Fi handoff/roaming ability between hotspots). We have inadequate context to discern which type was the subject of the inventor’s testimony. Notably, Petitioner does not rely on any testimony from Dr. Almeroth or Dr. Chrissan for the proposition that it attributes to Mr. Struhsaker and does not concede that the proposition is correct. We find that Mr. Stuhlsaker’s testimony is inadequate to satisfy Petitioner’s burden to show that Palmer discloses that its access points route information as recited in the challenged claims.

We determine that Petitioner has not established by a preponderance of the evidence its foundational assertion that Palmer discloses that “access point 40 determines whether roaming by a portable terminal 20 should take place and routes data packets accordingly.” Pet. 26–27; *see Technology Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1327 (Fed. Cir. 2008) (“Failure to prove the matter as required by the applicable standard means that the party with the burden of persuasion loses on that point—thus, if the fact trier of the issue is left uncertain, the party with the burden loses.”). As such, Petitioner has not met its burden to show that Palmer discloses, as recited in independent claim 1, a second transceiver that, “based on the first signal characteristics and the second characteristics, routes information to the first mobile station and the second mobile station, respectively,” or, as recited in independent claim 6, “based on the first signal characteristics and the second characteristics, routing, using the second transceiver, information to the first mobile station and the second mobile station, respectively.” Ex. 1001, 10:38–44, 11:19–22.

The Petition does not contain a contention that this “route” aspect of the claims would have been obvious. *Compare* Pet. 25–26 (offering an alternative argument for the monitoring aspect; contending that, “to the extent the Board disagrees that Palmer’s access point 40 performs the monitoring, it would have nonetheless been obvious to a POSA to select the access point 40 to perform the monitoring since it directly communicates with the portable terminals 20.”), *with id.* at 26–27 (making the anticipation-type contention that “[t]he access point 40 routes information” without an alternative obviousness contention); *see also* Pet. Reply 12–13 (arguing, under the monitoring-and-routing heading, that monitoring by the access point would have been obvious, but not arguing the same for routing).

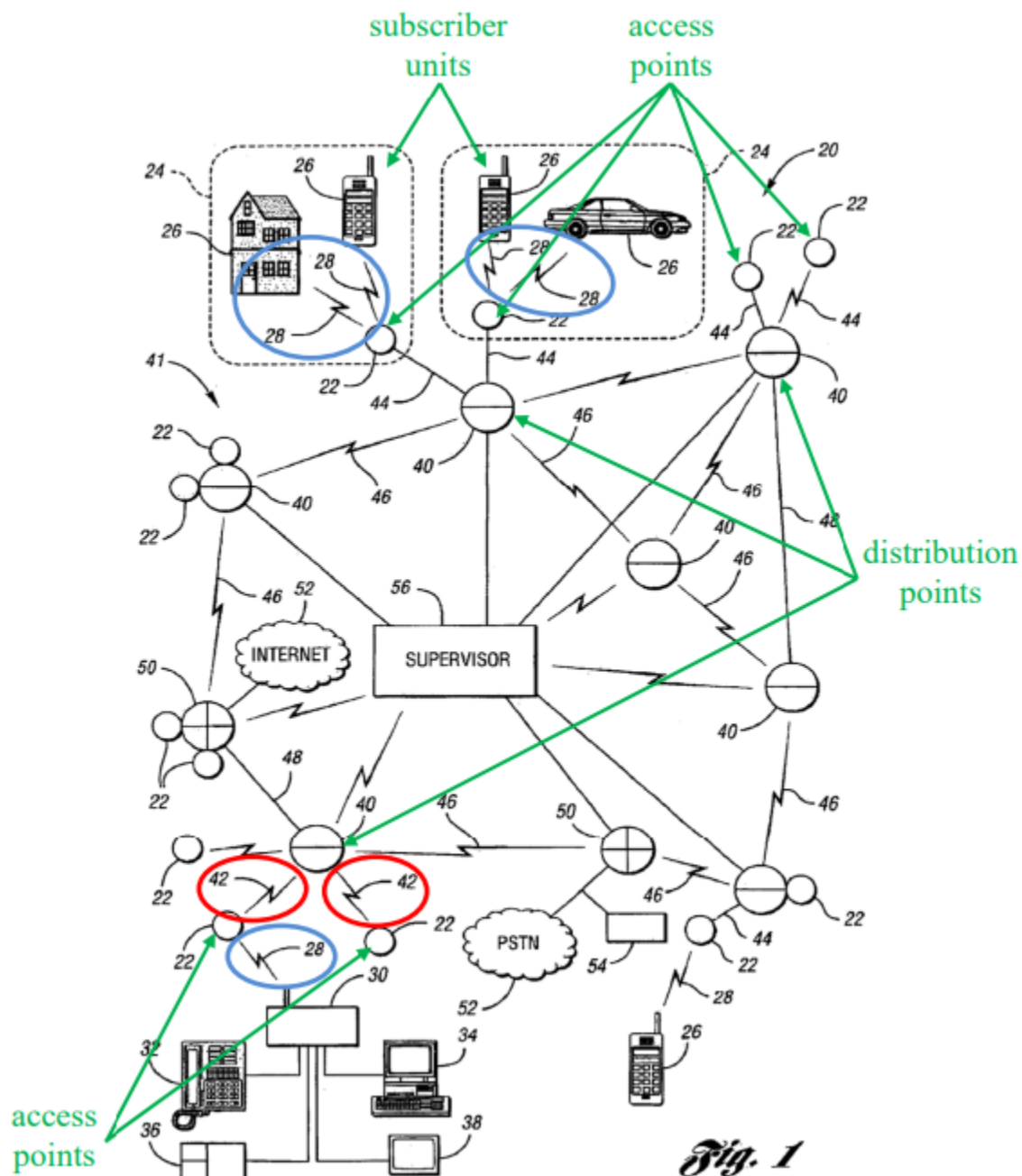
Petitioner has not shown by a preponderance of the evidence that independent claims 1 and 6 and dependent claims 2–4 are anticipated by or would have been obvious over Palmer.

E. The Alleged Unpatentability of Claims 1–6 as Obvious over Hohnstein and Palmer (Ground 2)

Petitioner alleges that claims 1–6 of the ’794 patent would have been obvious over Hohnstein and Palmer. *See* Pet. 37–67. Patent Owner argues that the component identified by Petitioner as the WLAN transceiver (the recited second transceiver) in the proposed combination does not monitor and route as recited in independent claims 1 and 6. *See* PO Resp. 60–63. We, as with Ground 1, focus on the routing aspect. For the reasons discussed below, we determine that Petitioner has failed to establish by a preponderance of the evidence that the proposed combination discloses or teaches a second transceiver (i.e., a WLAN transceiver) that, based on monitored signal characteristics, routes information to the mobile stations.

1. *Hohnstein (Ex. 1005)*

Hohnstein pertains to “equipment through which subscriber units access a wireless communication system.” Ex. 1005, 1:18–19. Hohnstein describes a communication system with “a plurality of access points 22 which may be, for example, a local radio access point (LRAP).” *Id.* at 4:9–11. Figure 1 of Hohnstein, as annotated by Petitioner, is reproduced below:



Pet. 38; Ex. 1005, Fig. 1. Figure 1, with annotations by Petitioner, illustrates Hohnstein's communication system in which "[e]ach access point 22 defines coverage area 24 such as, for example, a cell, covering a reception range of access point 22." *Id.* at 4:11–13. "Subscriber unit 26 within coverage area 24 may establish two-way wireless link 28 with access point 22." *Id.* at 4:16–18. Each access point, in turn, communicates with at least one distribution point 40 over radio link 42, or may be wired or cabled to distribution point 40 through wireline link 44, or may be packaged with distribution point 40. *Id.* at 5:42–48.

Hohnstein's distribution points 40 route packets within the network, such as from another distribution point, from subscriber unit 26 in communication with distribution point 40 through access point 22, or from an external communication system, to an access point 22, to another distribution point 40, or to other networks. *Id.* at 5:57–59, 6:34–48, 8:49–54. In that regard, Hohnstein states:

Distribution point 40 also includes back end communication interfaces 106 for connecting distribution point 40 with additional distribution points 40, with supervisor 56, and, if distribution point 40 is a gateway 50, with telecommunication systems, private network systems, video distribution systems, the Internet, or the like. This may be typically referred to as backhaul communication.

Id. at 8:49–55.

Hohnstein's access point 22 may be embodied as an antenna module 502 with multiple transceivers. *See id.* at 13:40–46, 15:1–18, 15:29–33, Figs. 9, 11; *see also id.* at 16:33–37 (the antenna system of Figure 13, "implements a combined access point 22 and distribution point 40"). Hohnstein's Figure 11 is reproduced below.

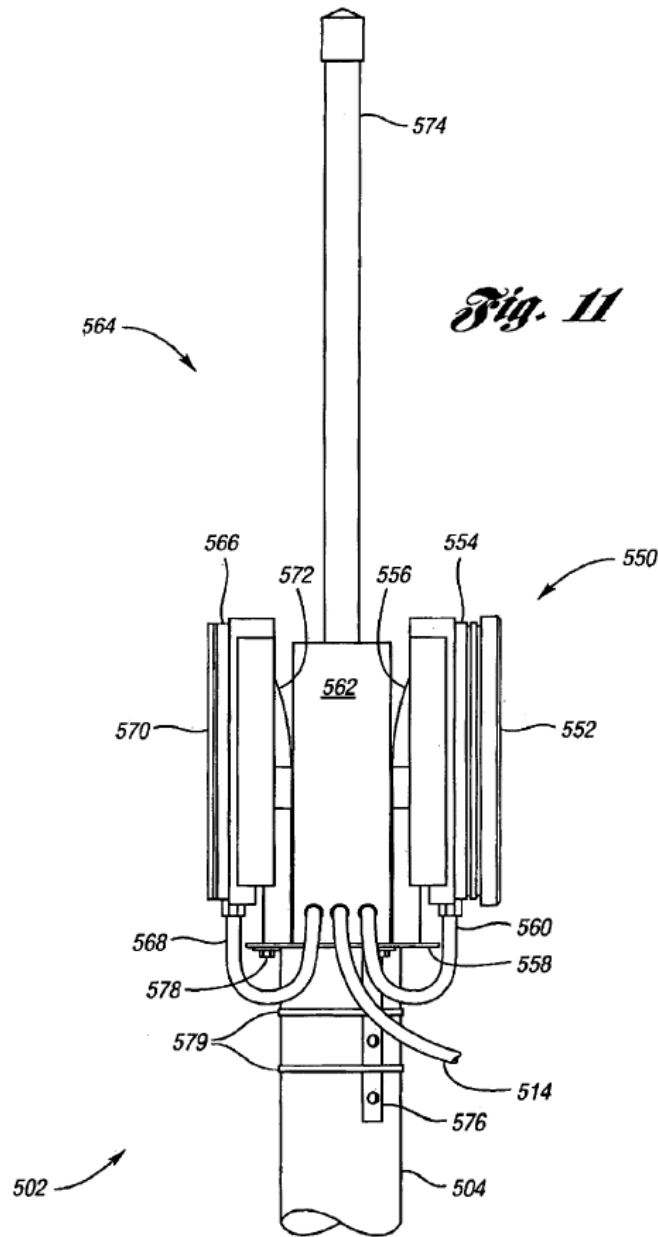


Figure 11 is an elevation view drawing of an antenna system according to an embodiment of Hohnstein. *Id.* at 3:63–64. Antenna module 502 includes backhaul system 550, which has backhaul antenna 552 attached to backhaul data terminal 554. *Id.* at 15:15–18. Antenna module 502 also includes access system 564, which includes access data terminal 566 connected to junction box 562 through access cable 568. *Id.* at 15:29–32. “Directional

access antenna 570 is attached to access data terminal 566 and may form a directional coverage area 24 for access point 22.” *Id.* at 15:32–34.

“[A] quality error bit rate is established for each subscriber unit 26.” *Id.* at 5:1–2. “The quality error bit rate may be modified while subscriber unit 26 is within communication system 20 to reflect changing conditions such as noise, demand, connectivity, or any other suitable parameter.” *Id.* at 5:8–11. “Applications providing services to subscriber unit 26 may adjust these services based on the quality error bit rate,” and, for example, “may reduce the frame update rate as noise increases, guaranteeing successful transmission at a lower information rate.” *Id.* at 5:12–17. “Control of the information rate may be achieved by having subscriber unit 26 monitor a signaling channel transmitted by access point 22 for each coverage area 24.” *Id.* at 5:22–24.

2. Discussion

Petitioner maps Hohnstein’s access point 22 to the overall claimed “wireless communication device.” *See* Pet. 45 (mapping for the preamble of independent claim 1). Petitioner contends the two sides of the access point correspond to the claims’ two recited transceivers. *See id.* at 48.⁸ Specifically, Petitioner contends that backhaul system 550 of the access point is the recited first wireless transceiver (the WWAN transceiver) and that access system 564 is the recited second wireless transceiver (the WLAN transceiver). *See id.* at 49, 52; *see also id.* at 50 & 53 (annotated versions of Hohnstein’s Figure 11 with Petitioner’s red boxes around the two sides of the antenna system). As a reminder, limitation 1d requires that the second

⁸ We cite to Petitioner’s contentions for independent claim 1. Petitioner, for independent claim 6, relies on those same contentions. *See* Pet. 66–67.

transceiver monitor signal characteristics, and based on the signal characteristics, route information to mobile stations. Ex. 1001, 10:38–44. Thus, under Petitioner’s mapping, the monitoring and routing must be done by Hohnstein’s access system 564, which is a subcomponent of access point 22.

Petitioner, for the first aspect of the limitation, contends that Hohnstein describes the access system 564 monitoring the signal characteristics. Pet. 58. However, for the routing aspect of the limitation, the Petition does not contain an explicit contention that access system 564 itself routes the information. *See id.* at 58–60. Rather, Petitioner’s contentions are in terms of the larger component—access point 22—which, as mentioned, Petitioner maps to the overall claimed “wireless communication device.” Specifically, Petitioner contends, “Hohnstein . . . describes the *access point 22 routing* information to first and second subscriber units 26,” and “describes the *access points 22 performing a hand off operation* from one access point 22 to another” as a subscribing unit moves from the coverage area of one access point 22 to another. *Id.* at 59 (citing Ex. 1005, 2:50–54, 2:60–64, 3:4–6, 13:25–39, 16:12–15, 16:46–54) (emphasis added); *see also, e.g., id.* at 41 (“Hohnstein . . . describes the access point 22 routing information.”), 43 (“Hohnstein discloses that its access points 22 oversee the handoff.”); Pet. Reply 28 (“With respect to routing, Hohnstein teaches an access point 22 performing a handoff operation of the subscriber unit 26 to another access point.”⁹).

⁹ In its reply brief, Petitioner argues that an access point forwarding undeliverable packets back into distribution point network 41 and then onward to the new access point matches the description of rerouting

Petitioner turns to Palmer for the purported teaching of the monitoring and routing performed by the WLAN transceiver, and relies on its contentions for Ground 1, which we have discussed above. *See* Pet. 41–43, 59. According to Petitioner, in the proposed modification, “Hohnstein’s access system 564 . . . [would,] based on the first signal characteristics and the second characteristics, route information to the first and second subscriber units 26, respectively, as taught by Palmer.” *Id.* at 42–43.

For the reasons discussed above in the context of Ground 1, we determine that Petitioner has not demonstrated by a preponderance of the evidence that Palmer teaches routing by the second transceiver. Accordingly, Petitioner also has not demonstrated that the proposed combination of Hohnstein and Palmer, which is premised on that teaching, would have rendered obvious subject matter having a second transceiver that routes information as recited in the challenged claims.

As mentioned, Petitioner contends that Hohnstein describes the *access point 22* routing information and performing a hand off operation from one access point 22 to another. Pet. 59 (citing Ex. 1005, 2:50–54, 2:60–64, 3:4–6, 13:25–39, 16:12–15, 16:46–54). To the extent that Petitioner contends that Hohnstein’s *access system 564* (mapped to the second transceiver) does the recited routing, Petitioner’s string cite is not a substitute for an adequately explanation as to how that is disclosed. Regardless, even

undelivered information in the ’794 patent. Pet. Reply 28 (citing Ex. 1005, 13:33–37). The cited portion of Hohnstein ends with the packets being returned to (forwarded back into) the distribution point network, and does not disclose the access point—or, more importantly, the portion thereof mapped to the second transceiver—forwarding the packets onward to the new access point, as Petitioner implies. *See* Ex. 1005, 13:33–37.

considering the cited portions, we fail to discern such a disclosure. For example, the references to information being “routed” uses the passive voice, and does not identify the component performing the routing. *See* Ex. 1005, 2:60–64 (“information . . . is routed to an access antenna . . . [or] routed to a backhaul antenna”), 16:46–54 (similar); *see also* Ex. 1002 ¶ 151 (Dr. Almeroth’s conclusory assertion that “Hohnstein describes the access point 22 routing information to first and second subscriber units 26,” followed by the string cite); Ex. 2007 ¶ 114 (Dr. Chrissan testifying that “none of these passages in Hohnstein teach or disclose ‘routing information to the first mobile station and the second mobile station’ as the Challenged Claims recite.”).

Petitioner asserts that “the Board already found unpatentable a related patent containing similar claims, based on Hohnstein.” Pet. 33 (section heading with capitalization and bolding omitted). Petitioner is referring to a prior *inter partes* review, which involved a different panel, a different patent, different claims, a different petitioner, and different arguments. *See, e.g., id.* at 33–36; Ex. 1010 (the final written decision in IPR2017-01178). Petitioner notes (Pet. 59–60) that the earlier panel found “that Hohnstein discloses ‘the second wireless local area network transceiver *determines signal characteristics* of the first computing device, and the second transceiver *transmits the first signal* to the first computing device based on the determined signal characteristics of the first computing device.’” Ex. 1010, 45 (quoting the limitation before the prior panel) (emphasis added).

The claims of the two patents contain substantive differences. Relevant here, the pertinent limitation in the earlier IPR calls for a second

transceiver that “determines” signal characteristics and “transmits signals” based on the characteristics, as opposed to the limitation before us, which involves monitoring and routing. *But see* Pet. 41 (Petitioner arguing that “any colorable substantive difference” between the claims “relates solely” to the monitoring aspect of the ’794 patent). Petitioner does not persuade us that merely transmitting a signal is substantively the same as the routing requirement before us. *See, e.g.*, Ex. 2006, 22 (The District Court stating: “Regarding the claim language, Defendants [(including the Petitioner here)] argue the use of both ‘transmitting’ and ‘routing’ as different steps of the method[of independent claim 1] imply they have different meanings.”); *compare* Ex. 1010, 45 (indicating that the prior petitioner argued that Hohnstein disclosed *transmitting* based on the signal characteristics because there was frame rate adjustment), *with* Pet. 59 (the current Petitioner associating *routing* with a roaming handoff from one access point to another). The prior panel’s determinations regarding a different claim does not relieve Petitioner of the burden to prove its proposition that the Hohnstein-Palmer combination discloses or teaches the routing limitation of the claims before us now.

Petitioner has not shown by a preponderance of the evidence that independent claims 1 and 6 and dependent claims 2–5 would have been obvious over Hohnstein and Palmer.

F. The Remaining Grounds (Grounds 3–6)

Petitioner contends that independent claims 1 and 6 and certain dependent claims would have been obvious: over Palmer and Mahany (Ground 3, claims 1–6), Palmer and Agrawal (Ground 4, claims 1–4 and 6), over Hohnstein and Agrawal (Ground 6, claims 1–6). Pet. 67–82; Pet.

Reply 28–31. Petitioner also contends that dependent claim 5 would have been obvious over Palmer, Agrawal, and Mahany (Ground 5). Pet. 79; Pet. Reply 31.

In these grounds, Petitioner does not rely on the respective secondary reference in a manner that cures the underlying defect regarding the limitation directed to routing by the second transceiver. *See, e.g.*, Pet. 78–79 (Petitioner, in Ground 4, relying on Agrawal “to the extent Patent Owner alleges Palmer does not describe its *monitoring* as being the second transceiver monitoring [signal characteristics].” (emphasis added)).

We determine that Petitioner has not demonstrated by a preponderance of the evidence that each of the combinations of relied-on references renders obvious the claims challenged in grounds 3 through 6.

III. CONCLUSION

Petitioner has *not* shown by a preponderance of the evidence that claims 1–6 of the ’794 patent are unpatentable.

In summary:

Claim(s)	35 U.S.C. §	Reference(s)/Basis	Claim(s) Shown Unpatentable	Claim(s) Not Shown Unpatentable
1–4, 6	102(e)	Palmer		1–4, 6
1–4, 6	103(a)	Palmer		1–4, 6
1–6	103(a)	Hohnstein, Palmer		1–6
1–6	103(a)	Palmer, Mahany		1–6
1–4, 6	103(a)	Palmer, Agrawal		1–4, 6
5	103(a)	Palmer, Agrawal, Mahany		5
1–6	103(a)	Hohnstein, Agrawal		1–6
Overall Outcome				1–6

IV. ORDER

For the foregoing reasons, it is

ORDERED that claims 1–6 of the '794 patent have *not* been proven to be unpatentable; and

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

IPR2023-01147
Patent 9,426,794 B2

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