

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ITRON NETWORKED SOLUTIONS, INC.,
Petitioner,

v.

ACOUSTIC TECHNOLOGY, INC.,
Patent Owner.

Case IPR2017-01024
Patent 6,509,841 B1

Before THU A. DANG, JOSIAH C. COCKS, and
PATRICK M. BOUCHER, *Administrative Patent Judges*.

BOUCHER, *Administrative Patent Judge*.

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

In response to a Petition (Paper 1, “Pet.”) filed by Silver Spring Networks, Inc.,¹ we instituted an *inter partes* review of claim 8 of U.S.

¹ As a result of a reorganization, the petitioner in this proceeding changed from Silver Spring Networks, Inc. to Itron Networked Solutions, Inc. during the course of the proceeding. Paper 28. We refer collectively to these entities herein as “Petitioner.”

Patent No. 6,509, 841 B1 (“the ’841 patent”). Paper 10 (“Dec.”), 24. During the trial, Acoustic Technology, Inc. (“Patent Owner”) filed a Response (Paper 25, “PO Resp.”) to which Petitioner filed a Reply (Paper 32, “Reply”). Petitioner also filed a Motion to Exclude (Paper 36, “Mot.”), which Patent Owner opposed (Paper 42), and to which Petitioner replied (Paper 46). An oral hearing was held, and a copy of the transcript was entered into the record. Paper 48 (“Tr.”).

We have jurisdiction under 35 U.S.C. § 6. This Decision is a Final Written Decision under 35 U.S.C. § 318(a) as to the patentability of the claim on which we instituted trial. Based on the record before us, Petitioner has shown, by a preponderance of the evidence, that claim 8 is unpatentable.

I. BACKGROUND

A. The ’841 Patent

The ’841 patent “relates generally to utility monitoring systems,” particularly those for communicating between remote locations so that utility providers can remotely read utility meters used in monitoring consumption of water, electricity, gas, etc. Ex. 1001, col. 1, ll. 15–21. Figure 1 of the ’841 patent is reproduced below.

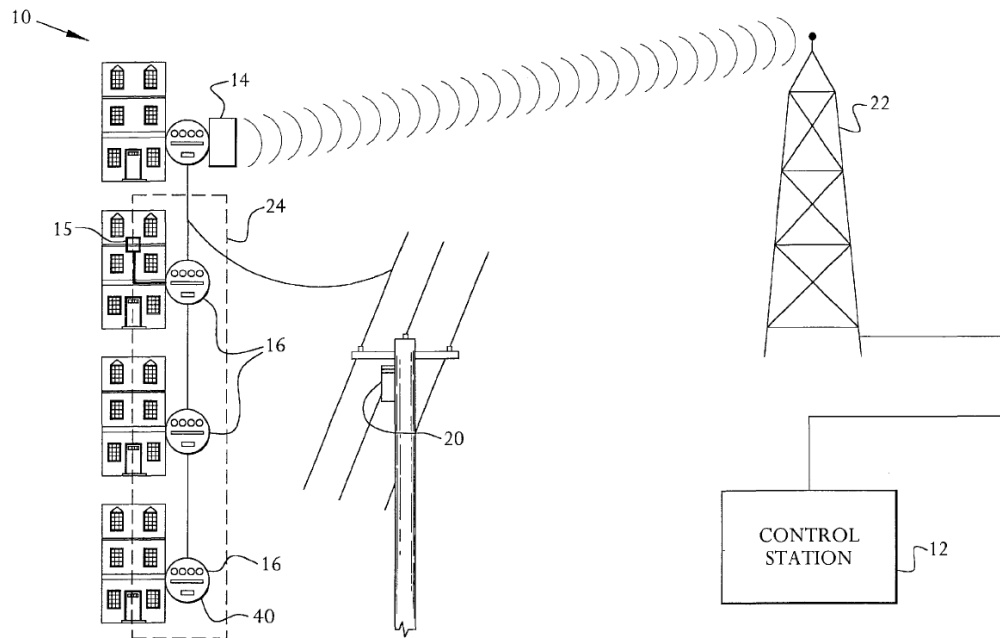


FIG. 1

Figure 1 provides an illustration of a communication system adapted for use by a utility provider for customer communication. *Id.* at col. 2, ll. 43–45. Communication system 10 includes “control station or means” 12, a defined number of “relay means” 14 in communication with control means 12, and at least one “servicing means” 16 comprised by servicing group 24, with each servicing means 16 in communication with relay means 14. *Id.* at col. 2, ll. 31–42, 48–49, col. 3, ll. 27–30. Each servicing means 16 “comprises means for transmitting and receiving data for communication with the control means 12 via the relay means 14,” such as with “conventional transmitter and receiver units.” *Id.* at col. 4, ll. 14–19. The Specification provides an example in which each servicing means 16 comprises a “typical rotary electro-mechanical or electronic type utility meter” that may be used “for measuring an amount of usage of a utility, such as electricity, gas or water” for the specific location to which the meter is connected. *Id.* at col. 4, ll. 19–29.

Control means 12 may be located at the site of the utility provider and, in the illustration of Figure 1, “is in communication by a wire medium with switching means comprising at least one radio tower 22, which in turn is in communication with the relay means 14 via a suitable wireless medium.” *Id.* at col. 2, ll. 53–54, col. 3, ll. 5–9. The Specification of the ’841 patent notes that control means 12 and relay means 14 may be in communication with radio tower 22 via a publicly available wide area network (“WAN”). *Id.* at col. 3, ll. 9–12. Communication between servicing group 24 and relay means 14 may be via a local area network (“LAN”), such as implemented with the Consumer Electronics Bus (CEBus) standard. *Id.* at col. 3, ll. 31–39. Relay means 14 may “comprise a concentrator in the form of a meter and positioned at the location of a customer,” in which case it may include (1) “LAN means . . . for receiving and transmitting data over the local area network, such as a conventional transmitter and receiver”; and (2) “WAN means . . . for communicating (receiving and transmitting) data over the wide area network with the control means 12 via the switching means 22, such as [with] Code Division Multiple Access [(“CDMA”)].” *Id.* at col. 5, ll. 4–17.

B. Challenged Claim

Claim 8, the only claim challenged by the Petition, is reproduced below.

8. A system for remote two-way meter reading comprising:
 - a metering device comprising means for measuring usage and for transmitting data associated with said measured usage in response to receiving a read command;

a control for transmitting said read command to said metering device and for receiving said data associated with said measured usage transmitted from said metering device; and
a relay for code-division multiple access (CDMA) communication between said metering device and said control, wherein said data associated with said measured usage and said read command is relayed between said control and metering device by being passed through said relay.

Ex. 1001, col. 8, ll. 24–39.

C. Prosecution History

During prosecution of the application that matured into the '841 patent, claim 8, the only challenged claim, was initially rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 5,801,643 (“Williams”). Ex. 1002, 38. The Examiner asserted that all the claim elements were disclosed by Williams, except for a specific recitation of the use of a CDMA communication link, which the Examiner concluded would have been obvious in light of Williams’s disclosure of using spread-spectrum radio signals. *Id.* The applicant submitted a Declaration under 37 C.F.R. § 1.131 to antedate the Williams reference, which ultimately resulted in allowance of claim 8 without amendment. *Id.* at 53, 71–92, 130–134.

D. Instituted Grounds of Unpatentability

Petitioner relies on the following references. Pet. 16–18, 25–27, 34–38.

Gastouniotis	US 5,438,329	Aug. 1, 1995	Ex. 1007
Nelson	GB 2 230 629 A	Oct. 24, 1990	Ex. 1008
Roach	US 5,546,444	Aug. 13, 1996	Ex. 1009

NetComm Matures as Advanced Communication and Metering System, 19 RESEARCH NEWSLETTER 1 (Southern California Edison, 1990) (“NetComm”) (Ex. 1004)

Petitioner also relies on a Declaration by Samir S. Soliman, Ph.D. Ex. 1003.

We instituted trial with respect to whether claim 8 is unpatentable on the following grounds.

Reference(s)	Basis
NetComm	§ 102(b)
Gastouniotis	§ 102(b)
Nelson and Roach	§ 103(a)

E. Real Parties in Interest

The parties identify only themselves as real parties in interest. Pet. 1; Paper 6, 1; Paper 28, 2; *see supra* n.1.

F. Related Proceedings

The parties identify the following district court proceeding as involving the '841 patent: *Acoustic Tech., Inc. v. Silver Spring Networks, Inc.*, 2:16-cv-00831-JRG-RSP (E.D. Tex.). Pet. 1; Paper 6, 1.

In addition, related U.S. Patent No. 5,986,574 is the subject of petitions for *inter partes* review filed in IPR2017-01030 and IPR2017-01031, for which final written decisions are being issued concurrently with this Decision.

II. ANALYSIS

A. Claim Construction

The parties agree that the '841 patent has now expired. PO Resp. 20; Reply 1–2. Accordingly, we accord claim terms their ordinary and

customary meaning, as would be understood by a person of ordinary skill in the art at the time of the invention. *See Cisco Sys., Inc. v. AIP Acquisition, LLC*, Case IPR2014-00247, slip op. at 2 (PTAB July 10, 2014) (Paper 20) (citing *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313–1317 (Fed. Cir. 2005) (en banc)). In doing so, “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).²

The parties disagree regarding the construction of a number of terms that appear in the challenged claim, particularly whether certain limitations are properly construed as “means-plus-function” limitations in accordance with 35 U.S.C. § 112, ¶ 6.³ “In enacting this provision, Congress struck a balance in allowing patentees to express a claim limitation by reciting a

² In its Response, Patent Owner argues that “[u]nder this standard, the patent is presumed valid so a petitioner must establish invalidity by clear and convincing evidence.” PO Resp. 21 (citing *Large Audience Display Systems, LLC v. Tennman Productions, LLC*, 660 Fed. App. 966, 971 (Fed. Cir. 2016)). We disagree that this statement is legally accurate. *See, e.g., CPI Card Group Inc. v. Gemalto S.A.*, Case IPR2016-01092, slip op. at 7 n.1 (Paper 24) (PTAB Nov. 6, 2017) (explaining that no presumption of validity is accorded to expired patents in an *inter partes* review); 35 U.S.C. § 316(e) (“the petitioner shall have the burden of proving a proposition of unpatentability by a preponderance of the evidence”). Patent Owner recanted that position at the oral hearing. Tr. 44:20–46:13.

³ Section 4(c) of the Leahy-Smith America Invents Act (“AIA”) redesignated 35 U.S.C. § 112, ¶ 6, as 35 U.S.C. § 112(f). Pub. L. No. 112-29, 125 Stat. 284, 296 (2011). Because the ’841 patent has a filing date before September 16, 2012 (effective date of § 4(c)), we refer to the pre-AIA version of § 112.

function to be performed rather than by reciting structure for performing that function, while placing specific constraints on how such a limitation is to be construed.” *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1347 (Fed. Cir. 2015). When the provision applies, the scope of coverage is restricted “to only the structure, materials, or acts described in the specification as corresponding to the claimed function and equivalents thereof.” *Id.* at 1347–1348 (citing *Northrop Grumman Corp. v. Intel Corp.*, 325 F.3d 1346, 1350 (Fed. Cir. 2003)).

To determine whether the provision applies to a claim limitation, Federal Circuit precedent “has long recognized the importance of the presence or absence of the word ‘means.’” *Id.* at 1348. Use of the word “means” creates a rebuttable presumption that the provision applies; conversely absence of the word “means” creates a rebuttable presumption that the provision does not apply. *Id.*

The standard is whether the words of the claim are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure. *Greenberg*, 91 F.3d at 1583. When a claim term lacks the word “means,” the presumption can be overcome and § 112, para. 6 will apply if the challenger demonstrates that the claim term fails to “recite sufficiently definite structure” or else recites “function without reciting sufficient structure for performing that function.” *Watts*, 232 F.3d at 880. The converse presumption remains unaffected: “use of the word ‘means’ creates a presumption that § 112, ¶ 6 applies.” *Personalized Media*, 161 F.3d at 703.

Id. at 1349.

1. *“means for measuring usage and for transmitting data associated with said measured usage in response to receiving a read command”*

Claim 8 recites “a metering device comprising means for measuring usage and for transmitting data associated with said measured usage in response to receiving a read command.” Ex. 1001, col. 8, ll. 26–28. The parties agree that the recited “means for measuring usage and for transmitting data associated with said measured usage in response to receiving a read command” is correctly construed as a means-plus-function limitation. PO Resp. 21–23; Reply 2–3.

The preliminary construction adopted by our Institution Decision rejected the Petition’s proposal of separate constructions for “means for measuring . . .” and “means . . . for transmitting data.” Dec. 7–8; *see* Pet. 9–10. Rather, we found that “the recitation of what the ‘metering device’ comprises is a single ‘means’ that has the function of ‘measuring usage and . . . transmitting data associated with said measured usage in response to receiving a read command.’” Dec. 8. The parties agree with, and we maintain, this identification of the function performed by the recited “means.” PO Resp. 22; Reply 2. The parties also essentially agree that the structure identified in the Specification for performing this function is “a transmitter and rotary, electro-mechanical, or electronic meter of the incremental type, and equivalents thereof.” PO Resp. 22; *see* Reply 2; Ex. 1001, col. 4, ll. 13–30. We agree with these identifications and adopt them for this Decision.

2. “*metering device*”

As noted, claim 8 recites “a metering device comprising” the “means” discussed immediately above. Emphasizing the recitation’s use of the article “a,” and emphasizing the Specification’s repeated use of the word “each” in describing metering devices 16, Patent Owner contends that “each single, physical metering device includes means structure for transmitting data and measuring usage.” PO Resp. 24. We disagree with this reasoning.

Rather, we agree with Petitioner that Patent Owner’s argument “is really about what it means for the metering device to *comprise* means for measuring usage *and* for transmitting data.” Reply 4. “‘Comprising’ is a term of art used in claim language which means that the named elements are essential, but other elements may be added and still form a construct within the scope of the claim.” *Genentech, Inc. v. Chiron Corp.*, 112 F.3d 495, 501 (Fed. Cir. 1997). Under this interpretation, we discern no requirement from the claim language itself that “metering device” is limited to a “single, physical device.”

In particular, we are not persuaded by Patent Owner’s citation of a general-dictionary definition of “device” as “a piece of equipment or a mechanism designed to serve a special purpose or perform a special function.” PO Resp. 25–26 (quoting Ex. 2012). In citing that definition, Patent Owner provides no context or reasoning that would compel an understanding of “metering device” to be a “single, physical device.”

Patent Owner supports its argument further by reference to the Specification, particularly to Figure 1, which is reproduced above and which Patent Owner contends “clearly shows each metering device 16 as a single, physical device.” *See id.* at 25–26. Although we recognize that the

Specification necessarily informs the proper construction of the claims, we agree with Petitioner that Figure 1 “illustrates one embodiment of the claimed invention, [and] does not include sufficient detail to evaluate whether the transmitter and meter are part of a single, physical device.”

Reply 5. Even if the example of Figure 1 is suggestive of a single device, the Specification provides no definition of “metering device” with sufficient “clarity, deliberateness, and precision” to read in an unrecited limitation.

See In re Paulsen, 30 F.3d 1475, 1480 (Fed. Cir. 1994). And Patent Owner identifies nothing in the Specification that may be understood as “an intentional disclaimer, or disavowal, of claim scope” that would encompass a “metering device” in forms other than as a “single, physical device.” *See Phillips*, 415 F.3d at 1316.

Petitioner’s proposed construction of “metering device” as “a device that monitors the usage of a utility or medium” is consistent with the ordinary and customary meaning of the phrase. Accordingly, consistent with the Specification, we adopt Petitioner’s proposed construction.

3. “control”

Claim 8 recites a “control for transmitting said read command to said metering device and for receiving said data associated with said measured usage transmitted from said metering device.” Ex. 1001, col. 8, ll. 30–34. Because the limitation does not recite the word “means,” it is presumed that the limitation does not invoke 35 U.S.C. § 112, ¶ 6. *Williamson*, 792 F.3d at 1348–49. Although recognizing the presumption, Patent Owner nevertheless contends that “[t]he term ‘control’ is not modified in the claim by sufficiently definite structure.” PO Resp. 37. Applying the provisions of

§ 112, ¶ 6, Patent Owner then bootstraps an example provided in the Specification to propose a construction that limits the location of the recited control. *Id.* at 38 (“The specific structure identified in the specification is a control station . . . for example, a computer, microprocessor or similar device . . . located at the site of the utility provider.”).

We are not persuaded by this argument. First, we agree with Petitioner that Patent Owner provides insufficient evidence that the word “control” does not convey sufficiently definite structure to a person of ordinary skill in the art. *See* Reply 11. Although the Specification does not refer to a “control” outside of its claims, it refers interchangeably to a “control means” or to a “control station.” *See* Ex. 1001, col. 2, ll. 48–49. As Petitioner points out, Patent Owner “agrees that the specification refers to ‘control means’ as a ‘control station,’ so it is not clear why it believes the Board’s [preliminary construction of ‘control station,’ *see* Dec. 9,] is wrong.” Reply 11. Indeed, we agree with Petitioner that “the parties and the Board appear to be in agreement that a ‘control’ encompasses, at a minimum, a ‘control station.’” *Id.*

Patent Owner’s proposal to limit the location of the recited “control” to “the site of the utility provider” cannot be adopted because it is plainly inconsistent with the Specification. The Specification asserts that “[t]he control means or station preferably is located at a desired location,” and that, while an illustrative embodiment locates it at the site of the utility provider “any other desired location can also be utilized.” Ex. 1001, col. 2, ll. 48–55. Patent Owner articulates insufficient basis to read such other embodiments out of the claim. *See Oatey Co. v. IPS Corp.*, 514 F.3d 1271, 1276 (Fed. Cir.

2008) (“We normally do not interpret claim terms in a way that excludes embodiments disclosed in the specification.”).

Accordingly, we construe “control” without resort to the provisions of 35 U.S.C. § 112, ¶ 6, as a “control station.”

4. “relay”

Claim 8 recites a “relay for code-division multiple access (CDMA) communications between said metering device and said control.” Ex. 1001, col. 8, ll. 35–37. Again, notwithstanding the presumption that attaches because the term “relay” lacks the word “means,” Patent Owner argues that the term is subject to construction under 35 U.S.C. § 112, ¶ 6, because it “is not modified by sufficiently definite structure but only functional languages.” PO Resp. 27. This argument is directly contrary to Patent Owner’s argument in its Preliminary Response that “relay” should be construed without resort to 35 U.S.C. § 112, ¶ 6. Paper 7, 13 (“It should be interpreted to mean an actual device that transmits data between sources, rather than as describing the function of forwarding data from one source to another.”).

Filing of a preliminary response to a petition for *inter partes* review is optional. 37 C.F.R. § 42.107. But the optional nature of preliminary responses does not provide a basis simply to discount admissions made on the record. In this instance, the Preliminary Response relevantly admitted that “[r]elay[s] are devices well known in the telecommunications industry.” Paper 7, 13. That admission is consistent with a conclusion that the term “relay,” by itself, conveys sufficiently definite structure to a person of ordinary skill in the art. The term is not so generic as to be considered a

nonce word like “mechanism,” “element,” or “device,” which “may be used in a claim in a manner that is tantamount to using the word ‘means’ because they ‘typically do not connote sufficiently definite structure.’” *See Williamson*, 792 F.3d at 1350.

Patent Owner also makes the point that, “[e]xcept for limited references in the ‘SUMMARY OF THE INVENTION,’ the ’841 patent recites ‘relay means’ throughout the specification rather than ‘relay.’” PO Resp. 26. But that fact undercuts, rather than supports, Patent Owner’s argument because it demonstrates both that the applicant clearly understood the distinction between reciting “means” or not, and that the recitation of “relay” instead of “relay means” in the claim was deliberate. Patent Owner agrees that the “‘SUMMARY OF THE INVENTION’ generally paraphrases the claims,” and does not recite “relay means” even though the remainder of the Specification does. *Id.* Furthermore, the claims of the ’841 patent sometimes recite “means” and sometimes do not, reinforcing the conclusion that use and omission of the word in specific limitations is deliberate. *See* Ex. 1001, col. 8, l. 26 (“means for measuring usage” in claim 8), col. 8, ll. 42–43 (same in claim 9), col. 8, ll. 64 (“control means” in claim 13).

Patent Owner articulates insufficient basis to overcome the presumption and for us simply to “replac[e] the word ‘relay’ with ‘relay means’” in order to reach 35 U.S.C. § 112, ¶ 6. *See* PO Resp. 27. Accordingly, we construe “relay” without resort to the provisions of 35 U.S.C. § 112, ¶ 6.

5. “*code-division multiple access (CDMA) communication*”

Petitioner contends that “code-division multiple access (CDMA) communication” should be construed to include both Direct Sequence CDMA (“DS-CDMA”) and Frequency Hopping CDMA (“FH-CDMA”). Pet. 10–12. As Petitioner’s expert testifies, such different implementations of CDMA use different types of codes assigned to users, namely a “chipping code” in DS-CDMA and a “hopping sequence” in FH-CDMA. Ex. 1003 ¶ 54. Patent Owner disputes this construction, contending that “[t]he recitation of ‘CDMA’ in claim 8 specifically refers to direct sequence code division multiple access type (DS-CDMA).” PO Resp. 33.

Patent Owner offers three reasons to support its position. First, Patent Owner contends that “CDMA” in claim 8 must refer to DS-CDMA because “[t]he specification of the ’841 patent refers to CDMA as commercially available from Qualcomm” and because “[o]nly DS-CDMA was and is commercially available from Qualcomm.” *Id.* at 34. Patent Owner supports these assertions with testimony by Laurence J. Colton, P.E., an inventor named on the ’841 patent, who testifies that he is “unaware of any frequency hopping CDMA (FH-CDMA) that was commercially available at the time.” Ex. 2005 ¶ 57. But Patent Owner does not cite any legal authority for the proposition that claim language must be construed in accordance with commercial availability of certain limitations.

Although as a general matter, “the specification necessarily informs the proper construction of the claims,” the Specification of the ’841 patent is clear in referring to commercially available CDMA as an “example.” *Phillips*, 415 F.3d at 1316; Ex. 1001, col. 5, ll. 17–19 (“*for example*, the Code Division Multiple Access type, *commercially available from*

Qualcomm” (emphasis added)). The portion of the Specification cited by Patent Owner does not “reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess.” *Phillips*, 415 F.3d at 1316. The “example” of commercially available CDMA lacks the requisite “clarity, deliberateness, and precision” to act as a definition of CDMA that would warrant imposing an unrecited limitation on the claim. *See In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). Petitioner’s expert, Dr. Soliman, testifies at some length regarding spread-spectrum techniques, explaining in detail the basis for his assertion opinion that “a person of ordinary skill in the art [at] the time of the invention would have understood that one reasonable interpretation of the term ‘code-division multiple access (CDMA) communication’ encompasses both DS-CDMA and FH-CDMA.” Ex. 1003 ¶ 111; *see id.* ¶¶ 55–65, 105–111.

Nor does the portion of the Specification cited by Patent Owner “reveal an intentional disclaimer, or disavowal, of claim scope by the inventor.” *Phillips*, 415 F.3d at 1316. Nothing in the Specification’s identification of a commercially available form of CDMA evidences an intention by the inventor to disavow the use of other forms of CDMA. This is particularly the case in light of the Specification’s explicit assertion that “this invention is not limited to the particular embodiments disclosed, but it is intended to cover all modifications which are within the scope and spirit of the invention as defined by the appended claims.” Ex. 1001, col. 7, ll. 35–39.

Second, Patent Owner quotes testimony by Petitioner’s expert, Dr. Soliman, to support an assertion that “[n]othing in Dr. Soliman’s declaration indicates Qualcomm ever developed commercially available FS-CDMA

products.” PO Resp. 34–35. Although this may support Patent Owner’s contention that the CDMA example referred to in the Specification involved DS-CDMA rather than FS-CDMA, it does not provide an independent reason to limit “CDMA” as recited in claim 8 to that particular embodiment.

Third, Patent Owner contends that the prosecution history of the ’841 patent supports its proposed construction. PO Resp. 35. In particular, Patent Owner draws our attention to certain drawings included as parts of exhibits to the antedating Declaration filed during prosecution under 37 C.F.R. § 1.131. *Id.*; Ex. 1002, 99–125. According to Patent Owner, two of those drawings are to a “Qualcomm [CDMA] mobile phone.” PO Resp. 35. As we best understand, Patent Owner appears to rely on an argument similar to the one addressed above, namely that illustration of an actual reduction to practice that uses DS-CDMA requires construction of “CDMA” as limited to DS-CDMA. *See id.* at 35–36. But Patent Owner does not explain how that aspect of its antedating evidence impacted the Examiner’s decision to allow the application, nor otherwise “provides evidence of how the PTO and the inventor understood the patent.” *Phillips*, 415 F.3d at 1317. The mere fact that the invention had actually been reduced to practice at a time to disqualify certain art cited by the Examiner does not operate as evidence that any particular characteristic of that reduction to practice was in any way instrumental in achieving allowance of the claim.

For these reasons, we are not persuaded that broad reference to “code-division multiple access (CDMA) communication” in claim 8 should be narrowed from its plain and ordinary meaning as Patent Owner proposes. Accordingly, we construe the term as including all variations of CDMA,

including Direct Sequence CDMA and Frequency Hopping CDMA. *See* Pet. 10–12.

6. “*code-division multiple access (CDMA) communication between said metering device and said control*”

With respect to claim 8’s fuller recitation of CDMA “between said metering device and said control,” Petitioner contends that the phrase should “encompass[] a communication path between a metering device and a control that includes CDMA communication along at least some of the communication path.” Pet. 12 (citing Ex. 1003 ¶ 113). In support of its construction, Petitioner identifies an embodiment disclosed in the Specification in which CDMA is not required along the entire signal path. *Id.* at 12–13. In particular, Petitioner observes that the Specification sometimes refers to the relay as a “concentrator meter,” and that such a concentrator meter “preferably includes means for exchanging between two media, for example between radio frequency signals and signals transmitted over the power lines.” *Id.* at 12–13; Ex. 1001, col. 5, ll. 38–42. As such, according to Petitioner, “the specification makes clear that the communication between the metering device and the control may be partially via radio frequency signals (such as CDMA) and partially via other media, such as ‘over the power lines.’” *Id.* at 13 (citing Ex. 1003 ¶ 116).

In its Response, Patent Owner agrees that CDMA is not required along the entire signal path, but advocates for an even narrower construction: “Patent Owner’s position is that CDMA is used exclusively between the relay and the control not between the metering device and the relay.” PO Resp. 32. That is, Patent Owner proposes a construction in

which the relay “can exchange data between two different mediums” and in which communication between the relay and the control uses DS-CDMA but communication between the relay and the metering device uses something other than DS-CDMA. *Id.* at 36–37 (emphasis omitted).

We are not persuaded by Patent Owner’s argument, which impermissibly attempts to read an embodiment from the Specification into the claim. Claim 8 merely recites “a relay for code-division multiple access (CDMA) communication between said metering device and said control,” without specifying which portions of the path use CDMA and which might use something else, and without specifying that the relay “can exchange data between two different mediums.” Ex. 1001, col. 8, ll. 34–36. “Though understanding the claim language may be aided by the explanations contained in the written description, it is important not to import into a claim limitations that are not a part of the claim. For example, a particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment.” *SuperGuide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004).

Rather, we agree with Petitioner that “[t]he ability to exchange data from different media supports Petitioner’s argument that CDMA communication along the entire path from the metering device to the control is not *required*.” Reply 8. As Petitioner asserts, “nothing about this argument or conclusion means that CDMA communication along the entire path is *excluded* from the claims,” which would be a consequence of adopting Patent Owner’s proposed construction. *Id.* The claim language is sufficiently broad to encompass both scenarios, i.e., one in which a portion

of the communication path uses CDMA and one in which the entire communication path uses CDMA. Patent Owner articulates insufficient reason to limit the claim to be narrower than what it plainly recites.

Accordingly, we adopt Petitioner's proposed construction that the phrase "between said metering device and said control" encompasses a communication path between a metering device and a control that includes CDMA communication along at least some of the communication path.

B. Legal Principles

Petitioner makes both anticipation and obviousness challenges. A claim is unpatentable as anticipated under 35 U.S.C. § 102 if a single prior-art reference expressly or inherently describes each limitation set forth in the claim. *See Perricone v. Medicis Pharm. Corp.*, 432 F.3d 1368, 1375 (Fed. Cir. 2005); *Verdegaal Bros., Inc. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987).

A claim is unpatentable for obviousness under 35 U.S.C. § 103 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) objective evidence of non-

obviousness, i.e., secondary considerations.⁴ *See Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

Additionally, the obviousness inquiry typically requires an analysis of “whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *KSR*, 550 U.S. at 418 (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (requiring “articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”)); *see In re Warsaw Orthopedic, Inc.*, 832 F.3d 1327, 1333 (Fed. Cir. 2016) (citing *DyStar Textilfarben GmbH & Co. Deutschland KG v. C. H. Patrick Co.*, 464 F.3d 1356, 1360 (Fed. Cir. 2006)).

To prevail on its challenges, Petitioner must demonstrate by a preponderance of the evidence that the claims are unpatentable. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d). “In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.* 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)). This burden never shifts to Patent Owner. *See Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (citing *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1326–27 (Fed. Cir. 2008)) (discussing the burden of proof in *inter partes* review). Furthermore, Petitioner does not

⁴ The parties do not address secondary considerations, which, accordingly, do not form part of our analysis. We note that Patent Owner’s witness, Mr. Colton, provides testimony that relates to secondary considerations, *see, e.g.*, Ex. 2005 ¶¶ 65–68, but Patent Owner does not rely on that testimony in its Response.

satisfy its burden of proving obviousness by employing “mere conclusory statements.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016).

C. Level of Skill in the Art

Petitioner asserts that a person of ordinary skill in the art “would have at least an undergraduate degree in electrical engineering, computer engineering, computer science, or a related field, familiarity with automatic meter reading systems and one to three years working with telecommunications system[s].” Pet. 7–8. In addition, Petitioner asserts that such a person “would have had a working knowledge of automated meter reading components, data communication concepts and techniques, and knowledge of wide area/local area networking principles and multiple access techniques.” *Id.* at 8. Dr. Soliman makes the same assertions. Ex. 1003 ¶ 23.

Patent Owner does not explicitly address the level of skill in the art. Because Petitioner’s assertion is reasonable, supported by testimony of Dr. Soliman, and uncontested by Patent Owner, we adopt Petitioner’s statement of the level of skill in the art.

D. Anticipation by NetComm

NetComm describes an “advanced communication system . . . based on a network of packet radios which interface with electrical distribution devices for monitoring and automation, and with customer service devices such as electronic meters.” Ex. 1004, abst. The system is illustrated by Figure 1 of NetComm, reproduced below.

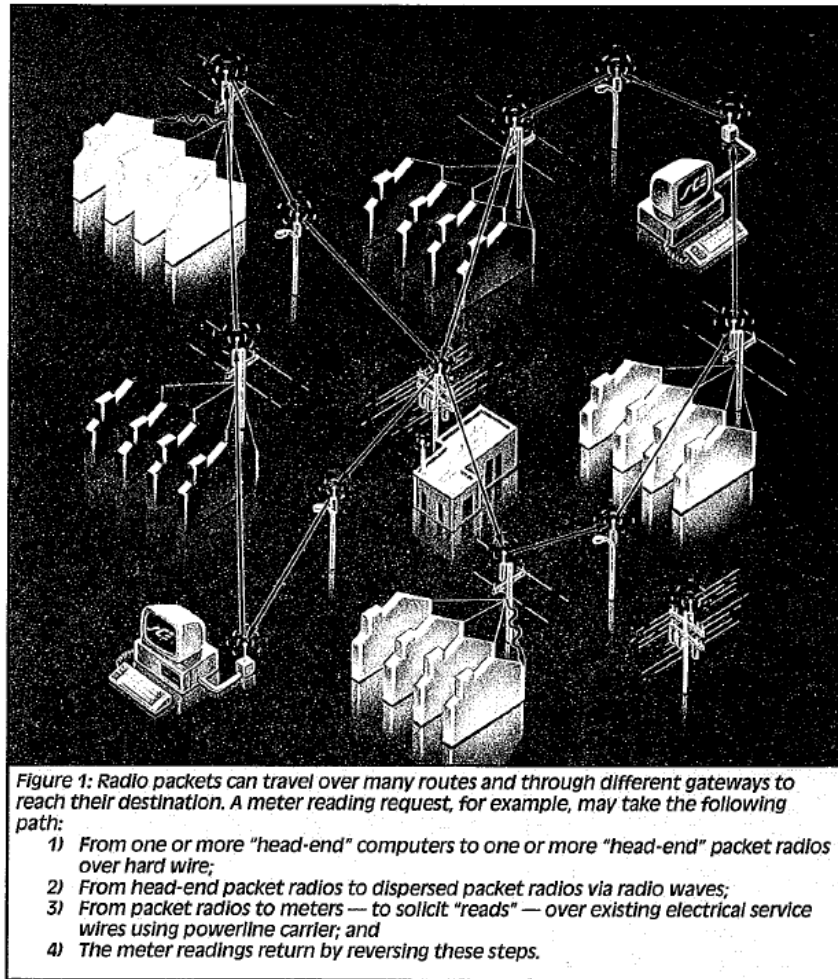


Figure 1 illustrates routes that may be followed by communications in both directions between a head-end computer or central computer and an electric meter. *Id.* at 1, 2. For example, a "meter reading request" that "solicits 'reads'" may take a path to "'head-end' packet radios over hard wire," then to "packet radios via radio waves," and then to "meters . . . over existing electrical wires service using powerline carrier." *Id.* at 1, Fig. 1. "The meter readings return by reversing these steps." *Id.*

Radio communications are effected by "access[ing] 240 channels over the 902-928 MHz band using a programmable, pseudo-random pattern" that "makes the network highly immune to interference since radios will

dynamically ‘hop’ over any unusable channel in the process of transmitting the packet.” *Id.* at 3. Petitioner’s expert, Dr. Soliman, describes such communication as “spread-spectrum radio communication” and testifies that “a person of ordinary skill in the art in 1997 would understand this to refer to FH-CDMA communication.” Ex. 1003 ¶ 129.

Petitioner contends that the system described by NetComm anticipates claim 8 of the ’841 patent. Pet. 18–25. Petitioner’s analysis draws the following correspondences: (1) the recited “meter device” corresponds to a “commercial” incremental-type meter suitable for installation at a business customer and that uses a “powerline carrier” to transmit “meter readings,” *id.* at 19–21; (2) the recited “control” corresponds to the central or head-end computer, *id.* at 22; and (3) the recited “relay” corresponds to a packet radio, *id.* at 22–23. Based on its expert’s testimony, Petitioner addresses claim 8’s requirements for CDMA communication by further contending that one of skill in the art “would recognize that the radio communication described in NetComm is FH-CDMA” and is used “along at least some of the communication path.” *Id.* at 23–24. This analysis is consistent with our adopted claim constructions.

Patent Owner makes three responses, which we consider below.

1. Metering Device

First, Patent Owner contends that NetComm does not disclose a “metering device” as recited in claim 8. PO Resp. 42–44. In making this response, Patent Owner relies on its proposed construction—which we reject—that “[c]laim 8 requires a single, physical device that includes a transmitter and rotary, electro-mechanical, or electronic meter of the

incremental type and their equivalents that measure usage and transmit data associated with said measured usage in response to receiving a read command.” *Id.* at 43–44. But as discussed above, we disagree that the claim requires the meter and transmitter components to form a “single, physical device.” Accordingly, we are not persuaded that Petitioner’s analysis is deficient in this respect.

2. Relay

Second, Patent Owner contends that NetComm fails to disclose a “relay” that communicates with both the metering device and the control. *Id.* at 44. Patent Owner appears to argue that claim 8 requires the relay to be in *direct* communication with the metering device and the control: “At best, NetComm would have multiple relays that work together to perform the stated functions.” *Id.* But nothing in the claim demands such direct communication. The claim recites “a relay,” and our reviewing court “has repeatedly emphasized that an indefinite article ‘a’ on ‘an’ in patent parlance carries the meaning of ‘one or more’ in open-ended claims containing the transitional phrase ‘comprising.’” *KCJ Corp. v. Kinetic Concepts, Inc.*, 223 F.3d 1351, 1356 (Fed. Cir. 2000). Although Patent Owner further argues that “the claim element specifically states that both the data associated with the usage and the read command pass ‘through **said** relay,’” our reviewing court has also emphasized that “subsequent use of definite articles ‘the’ or ‘said’ in a claim to refer back to the same claim term does not change the general plural rule, but simply reinvokes that non-singular meaning.” *Baldwin Graphic Sys., Inc. v. Siebert, Inc.*, 512 F.3d 1338, 1342 (Fed. Cir. 2008). Patent Owner articulates inadequate reason to depart from the

general rule because it insufficiently identifies “language of the claims themselves, the specification, or the prosecution history [that] necessitate[s] a departure from the rule.” *Id.* at 1343. Accordingly, we are also not persuaded that Petitioner’s analysis is deficient in this respect.

3. CDMA

Third, Patent Owner contends that NetComm does not communicate by CDMA. PO Resp. 44–48. There are two distinct aspects to Patent Owner’s argument, namely that “[c]laim 8 requires exclusively ‘DS-CDMA’ communication,” and that “NetComm does not disclose FH-CDMA.” *Id.* at 46. The first of these is precluded by our adopted construction of “code-division multiple access (CDMA) communication,” which is not limited to DS-CDMA. For the second aspect, Patent Owner provides considerable attorney argument, but does not support its assertions with *evidence* that rebuts Dr. Soliman’s expert testimony. In the absence of controverting evidence that we might weigh against Dr. Soliman’s opinion, we are not in a position to discount Dr. Soliman’s expert view. “[U]nsworn attorney argument . . . is not evidence and cannot rebut . . . evidence.” *Gemtron Corp. v. Saint-Gobain Corp.*, 572 F.3d 1371, 1380 (Fed. Cir. 2009).

Furthermore, we agree with Petitioner that “[t]he fact that Dr. Soliman referenced a patent to Flammer (Ex-1037) does not convert his anticipation analysis into one of obviousness, as [Patent Owner] suggests.” Reply 17 (citing PO Resp. 48). It is clear from Dr. Soliman’s statement that his citation of Flammer was meant to “confirm[] [his] opinion that a person of ordinary skill in the art would recognize that the system described in the NetComm reference operates using FH-CDMA communication.” Ex. 1003

¶ 174; see *Continental Can Co. USA, Inc. v. Monsanto Co.*, 948 F.2d 1264, 1268 (Fed. Cir. 1991) (“To serve as an anticipation when the reference is silent about the asserted inherent characteristic, such gap in the reference may be filled with recourse to extrinsic evidence.”).

4. Summary

For these reasons, we conclude that Petitioner demonstrates, by a preponderance of the evidence, that claim 8 is anticipated by NetComm.

E. Anticipation by Gastouniotis

Gastouniotis describes a “duplex bi-directional multi-mode remote instrument reading and telemetry system.” Ex. 1007, col. 4, ll. 6–7.

Figure 1 of Gastouniotis is reproduced below.

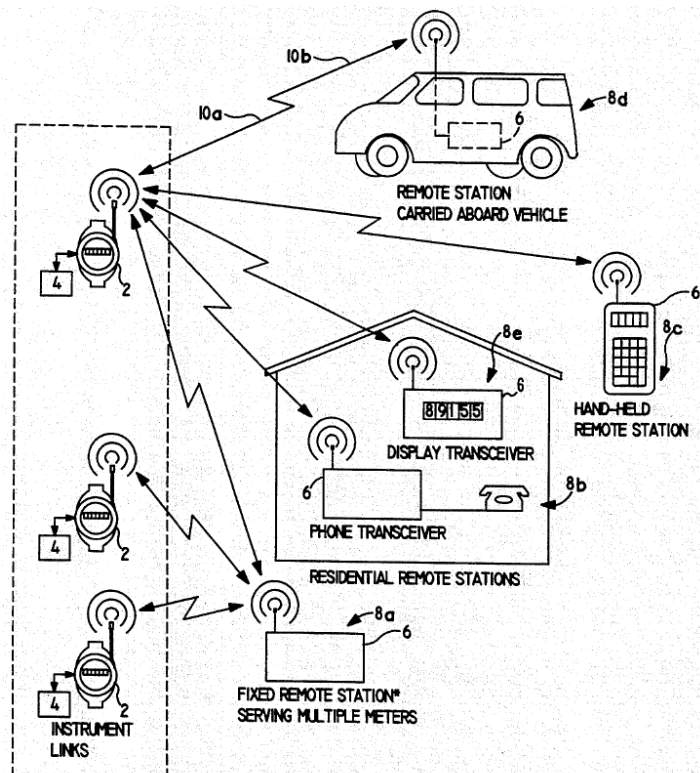


FIG. 1

Figure 1 illustrates that the system includes “a plurality of remotely located instrument reading units or instruments links 2, each associated with a[] data gathering device 4 or instrument such as a utility meter.” *Id.* at col. 4, ll. 9–12. To gather information regarding usage of a utility, “an RF signal 10a is sent out by a remote station 6 to each instrument link 2 to obtain information acquired by the data gathering unit 4 (e.g., a utility meter) since the last reading.” *Id.* at col. 4, ll. 47–50. In response to RF signal 10a, “each instrument link interrogated transmits a RF signal 10b (i.e., a reply message) back to the remote station 6.” *Id.* at col. 4, ll. 52–54. Instead of being transmitted directly between an instrument link and the target remote station, “data obtained by one remote station can be communicated to a central location using the other remote stations as a relay.” *Id.* at col. 4, ll. 39–42.

Petitioner challenges claim 8 as anticipated by Gastouniotis. Pet. 27–34. Petitioner’s analysis identifies the combination of instrument link 2 and data gathering device 4 as corresponding to the recited “metering device.” *Id.* at 28. Because data gathering device 4 may be a “utility meter,” Ex. 1007, col. 4, l. 12, and because instrument link 2 receives an interrogation message to obtain information acquired by data gathering unit 4, *id.* at col. 4, ll. 47–50, Petitioner makes a sufficient showing with respect to this element. *See* Pet. 28–30.

Petitioner also makes a sufficient showing with respect to the “control” and “relay” elements by identifying the “remote station” of Gastouniotis with the recited “control,” and by identifying Gastouniotis’s disclosure of “using the other remote stations as a relay.” Pet. 30–31 (citing Ex. 1007, col. 4, ll. 32–42). As Petitioner observes, Gastouniotis specifies use of a spread spectrum modulation technique, expressly teaching that

“[t]he simultaneous transmission of several signals using different spreading functions is referred to as Code Division Multiple Access (CDMA),” which is applied over at least a portion of the signal path. *Id.* at 32–34; Ex. 1007, col. 7, ll. 44–47.

Patent Owner makes three responses, again generally relying on claim-construction positions that we reject.

1. Control

First, Patent Owner contends that Gastouniotis does not disclose a “control” because “[t]he remote station of Gastouniotis is not a computer *located at the site of the utility provider.*” PO Resp. 50. But for the reasons explained above, we disagree that a proper construction of claim 8 requires such a location for the recited “control.”

In disputing that Gastouniotis discloses a “control,” Patent Owner also presents an argument that involves the recited “relay.” Specifically, Patent Owner contends that “claim 8 requires a control that ‘*transmits said read command*’ [and] a relay that ‘*said read command is relayed between said control and said metering device.*’” *Id.* at 51. According to Patent Owner, the remote stations of Gastouniotis, when acting as relays, operate only to transmit data associated with measured usage from the metering device to another remote station, and do not also operate to transmit the read command from another remote station to the metering device. *Id.* at 51–53.

Petitioner replies to this argument by arguing that “Gastouniotis discloses that there is two-way communication between the individual remote stations, as well as the remote station directly coupled to the metering device.” Reply 20. Accordingly, Petitioner reasons that “[t]he

interrogation signal (the read command) can be transmitted from any of them and relayed to the metering device through other remote stations acting as relays ‘as dictated by the specific application.’ *Id.* (citing Ex. 1007, col. 4, l. 35).

The relevant disclosure is Gastouniotis is:

It should be recognized that while one remote station configuration is illustrated (e.g., one fixed installation), the number of remote stations used to *interrogate and receive* information from remotely located instrument links is dictated by the specific application. For multiple fixed remote station installations, the remote stations *can be configured to communicate with each other as well as with the instrument links*. In this way, data obtained by one remote station can be communicated to a central location using the other remote stations as a relay. Also, while the following description of the remote station 6 and associated instrument links 2 imply a serial mode, the transmit and receive functions of both the remote station and instrument links may operate simultaneously to allow full duplex operation.

Ex. 1007, col. 4, ll. 32–46 (emphases added). “[T]he dispositive question regarding anticipation [is] whether one skilled in the art would reasonably understand or infer” from this disclosure that the remote stations operate to relay both “data associated with said measured usage” and the “read command.” *See In re Baxter Travenol Labs.*, 952 F.2d 388, 390 (Fed. Cir. 1991).

Although Patent Owner emphasizes that the disclosure provides an explicit example of using other remote stations as a relay for communication of data obtained by one remote station, the disclosure also explicitly teaches using multiple remote stations both to “interrogate and receive information.” One of skill in the art would reasonably infer from such disclosure that the

remote stations are used for two-way communication. *See* Reply 20. Against Petitioner’s citation of expert testimony that supports this inference, Patent Owner relies only on attorney argument. *See* Ex. 1003 ¶¶ 214–216. In light of these factors, we conclude that Petitioner establishes that the recited “control” is taught by Gastouniotis by a preponderance of the evidence.

2. Relay

Second, Patent Owner contends that Gastouniotis does not disclose a “relay” because “the remote stations do not use two different communications – one between themselves and another between the meter and itself.” PO Resp. 53–54. This argument relies on a construction of “relay” that we do not adopt for the reasons given above, and is therefore not persuasive.

3. Metering Device

Third, Patent Owner contends that Gastouniotis does not disclose a “metering device” because “it is clear [in Gastouniotis] that the meter and the instrument links, which transmit the data, are separate devices.” PO Resp. 54. This argument relies on a construction of “metering device” that we do not adopt for the reasons given above, namely that the “metering device” must be a “single, physical device.” *Id.* Accordingly, the argument is not persuasive.

4. Summary

For these reasons, we conclude that Petitioner demonstrates, by a preponderance of the evidence, that claim 8 is anticipated by Gastouniotis.

F. Obviousness over Nelson and Roach

1. Nelson

Nelson “relates to meters of the type used to record the rate of consumption of electricity, gas, water, etc. . . . by customers of utility companies.” Ex. 1008, p. 1, ll. 2–6. Nelson teaches that

[t]he meter may transmit information to a van. Alternatively a plurality of meters may transmit information to a central unit mounted on a lamp-post, the central unit transmitting information to the van. In a further embodiment a meter may transmit information to a central unit via one or more intermediate meters.

Id. at abst. Figure 14 of Nelson is reproduced below.

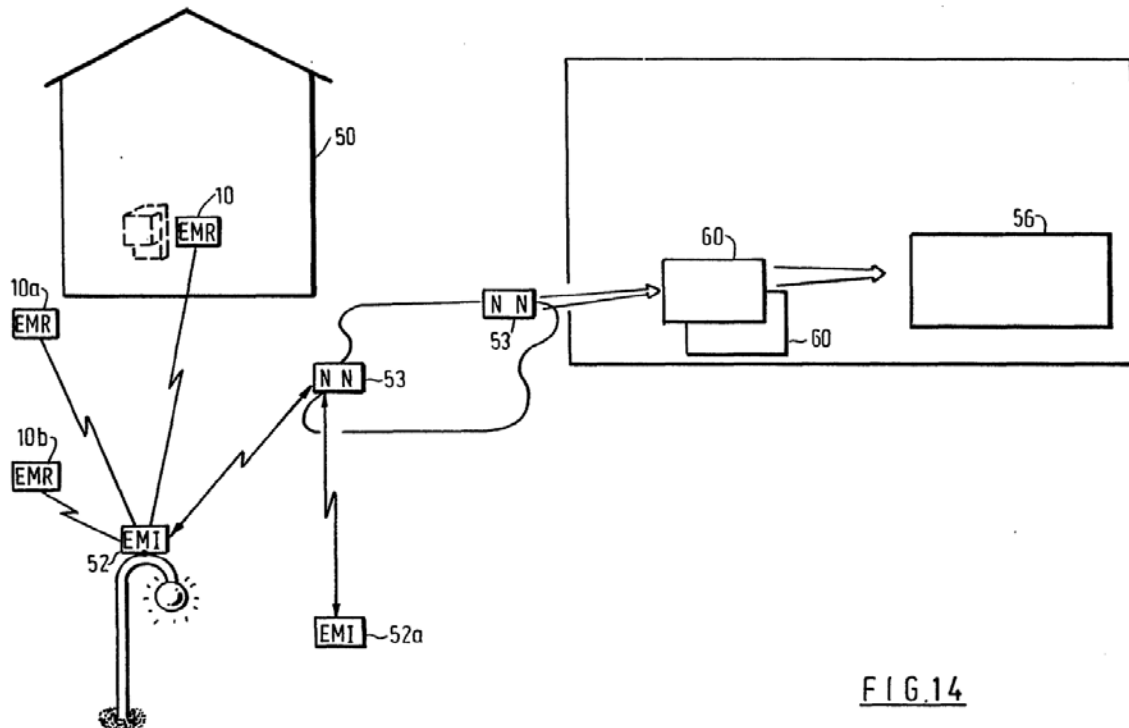


FIG. 14

Figure 14 illustrates a “fully automated system” in which “it is now no longer necessary for a meter reader, in the human sense, to be employed.” *Id.* at p. 28, ll. 4–10. As illustrated in the drawing, electronic meter interrogator 52 is installed on a pole, such as an electric light support pole, and can, via wireless communication, interrogate a plurality of meter apparatuses 10, 10a, 10b, which include electronic meter readers (“EMRs”). *Id.* at p. 27, ll. 19–24; p. 28, ll. 7–8 (“The components of Figure 14 of the drawings are identical to the components of Figure 13), p. 16, ll. 22–25. Electronic meter interrogator (“EMI”) 52 transmits its information via network nodes 53 to a delivery system under the overall control of meter management system 60. *Id.* at p. 28, ll. 12–15. “The ability of an EMI device to access metering information is enhanced by the use of EMR communication relays.” *Id.* at p. 28, ll. 16–18. Nelson explains operation of the electronic meter readers as follows:

Authorized personnel can selectively query the desired EMR device. A communicator within the EMR device is continually monitoring the wireless communication channel, awaiting selection. Once selected, the EMR device will return an immediate wireless response in reply to the EMI query. This response contains the information requested by the EMI device. The EMR device will remain silent until queried again.

Id. at p. 25, ll. 5–13.

2. *Roach*

Roach discloses a system for collection of data from reporting devices “via a cellular network control channel of a cellular mobile radiotelephone system” so that “selected data acquired from various remote sites can be

communicated to a single location.” Ex. 1009, abst., col. 5, ll. 12–14.

Roach specifically contemplates that a data source may be a utility meter:

For example, if the data source is an electrical utility meter located proximate to the consumer’s location, then a utility can obtain parameters, such as the power demand for a certain time interval, recorded by a monitor connected to the source and communicated via the channel control of the [cellular mobile radiotelephone] system.

Id. at col. 5, ll. 18–23. Roach also teaches that various types of cellular systems may be used, including “IS 95-CDMA.” *Id.* at col. 16, l. 66–col. 17, l. 6.

3. *Combination of Nelson and Roach*

Petitioner’s analysis draws the following correspondences between limitations of challenged claim 8 and Nelson’s disclosure: (1) the recited “metering device” corresponds to Nelson’s “meter apparatus”, Pet. 43–46; (2) the recited “control” corresponds to Nelson’s “electronic meter interrogator,” *id.* at 46–49; and (3) the recited “relay” corresponds to “electronic meter readers” described by Nelson as relaying requests targeted to another electronic meter reader, *id.* at 49–50, 52–54. In identifying these correspondences, Petitioner notes that the “meter apparatus” described by Nelson includes electronic equipment with a radio transmitter in addition to structure that is “substantially the same as a conventional meter apparatus designed to indicate the amount of electricity consumed by a consumer’s electrical system.” *Id.* at 43–46; *see* Ex. 1008, p. 8, ll. 7–26, p. 14, ll. 21–26, p. 16, ll. 21–25.

Petitioner acknowledges that “Nelson does not expressly teach ‘code-division multiple access (CDMA) communication.’” Pet. 50–51. For this limitation, Petitioner relies on Roach, which expressly teaches that its cellular mobile radiotelephone system “can be compatible with alternative cellular systems implementing a control channel for mobile to cell communications, including . . . IS 95-CDMA.” Ex. 1009, col. 16, l. 67–col. 17, l. 6. Petitioner’s expert, Dr. Soliman, testifies that IS 95-CDMA is one type of code-division multiple access (CDMA) communication. Ex. 1003 ¶ 274.

Petitioner reasons that a person of ordinary skill in the art would have been motivated to combine the wireless system of Nelson with the CDMA communication taught by Roach “in order to produce the obvious, beneficial, and predictable result of Nelson’s automated two-way meter reading system having the capability of communicating via a cellular mobile radiotelephone system, and specifically via CDMA communication through such a system.” Pet. 38. In articulating its reasoning, Petitioner observes that both Nelson and Roach “describe two-way automated systems for collecting data regarding utility usage from utility meters.” *Id.* at 38–39.

Petitioner further contends that modifying Nelson’s system to employ CDMA communication would have been predictable to a person of ordinary skill because Roach evidences that such persons were already using CDMA communication in systems for wireless automated two-way meter reading, and that the commercial availability of such communication would have made such employment straightforward. *Id.* at 39. Petitioner supports its reasoning with testimony by Dr. Soliman, including its further reasoning that

Roach suggests use of its disclosed techniques to overcome limitations of conventional systems recognized by Nelson. Ex. 1003 ¶¶ 231–241.

We find that Petitioner’s articulated reasoning is supported by sufficient rational underpinning.

4. Patent Owner Responses

Patent Owner makes a number of responses, generally relying on claim-construction positions that we do not adopt, and also attacks the qualifications of Petitioner’s witness. PO Resp. 55–60. We address these responses in turn below.

First, Patent Owner contends that Nelson does not disclose a “control” because the electronic meter interrogator identified by Petitioner for that element “is not a computer located *at the site of the utility provider.*” *Id.* at 56. For the reasons expressed above, our adopted construction of “control” does not require the control to be in a specific location, and Patent Owner’s argument is accordingly unpersuasive.

Second, Patent Owner contends that Nelson does not disclose a “relay” because “Nelson uses the same communication between the EMRs and EMRs and between the EMRs and EMI[s].” *Id.* at 57. In addition, Patent Owner contends that “nothing in Nelson or Roach disclose the ability to exchange data between two different mediums.” *Id.* For the reasons expressed above, claim 8 requires neither that the “relay” be capable of exchange data between two different mediums nor that different communication methodologies be used with the control and with the metering device. Accordingly, Patent Owner’s contentions are unpersuasive.

Third, Patent Owner contends that neither Nelson nor Roach discloses DS-CDMA, relying on its position that “[c]laim 8 requires the relay to use *direct sequence code-division multiple access (DS-CDMA)*.” *Id.* at 58. This position is unpersuasive in light of our construction of “CDMA” as including all variations of CDMA.

Fourth, Patent Owner contends that Nelson does not disclose a “metering device” because Nelson’s monitor 32 and cellular communications device 34 “are two distinct devices and not a ‘single, physical device.’” *Id.* For the reasons expressed above, our construction of “metering device” does not require it to be a “single, physical device,” and Patent Owner’s contention is therefore unpersuasive.

Fifth, Patent Owner sweepingly asserts that the Petition and Dr. Soliman’s Declaration “contain nothing but conclusory statements unsupported by any factual evidence.” *Id.* at 59. In addition, Patent Owner attacks Dr. Soliman’s qualifications as “relat[ing] solely to wireless communication systems” but “lack[ing] experience with automated meter reading systems.” *Id.* at 59–60. We are not persuaded that Dr. Soliman is unqualified to testify as an expert in this proceeding and for his opinions to be given no weight.

“To testify as an expert under FRE 702, a person need not be a person of ordinary skill in the art, but rather ‘qualified in the pertinent art.’” *A.C. Dispensing Equip. Inc. v. Prince Castle, LLC*, Case IPR2014-00511, slip op. at 10 (Paper 33) (PTAB Aug. 4, 2015); *see* 37 C.F.R. § 42.62(a) (Federal Rules of Evidence apply to *inter partes* review proceedings). Even so, Patent Owner acknowledged at the oral hearing that Dr. Soliman is “a CDMA wizard” and that Dr. Soliman “offered as his experience in meter

reading systems that he was the inventor on two patents.” Tr. 81:19, 82:21–83:2.

Petitioner makes the further point that we addressed a preliminary form of Patent Owner’s attack on Dr. Soliman’s qualifications by stating in our Institution Decision that “Patent Owner will have an opportunity to explore . . . through cross-examination . . . its contention that Dr. Soliman lacks sufficient experience with automated meter reading systems.” Dec. 23. As Petitioner asserts, Patent Owner “does not cite to any of his deposition testimony in this portion of its Response.” Reply 24. We additionally note that Patent Owner does not dispute Dr. Soliman’s articulation of the level of skill possessed by one of ordinary skill in the art, and does not proffer any different articulation of that level. *See* Ex. 1003 ¶ 23.

In our analysis above, we have identified specific arguments made by Petitioner, and supported by the testimony of Dr. Soliman. Based on those identifications, we disagree with Patent Owner’s contention that the Petition and Dr. Soliman’s Declaration contain “nothing but” conclusory statements unsupported by any factual evidence. We discern no compelling basis not to accord weight to Dr. Soliman’s testimony as an expert.

5. *Summary*

We conclude that Petitioner demonstrates, by a preponderance of the evidence, that claim 8 is unpatentable under 35 U.S.C. § 103(a) over Roach and Nelson.

III. MOTION TO EXCLUDE

Petitioner moves to exclude paragraphs 22–27 and 65–68 of Exhibit 2005, and to exclude Exhibits 2009 and 2011 in their entirety. Mot. 1. None of that material factors into our conclusion that claim 8 is unpatentable, and consideration of whether that material should be excluded is irrelevant to this Decision. Accordingly, Petitioner’s Motion is moot, and we dismiss it for that reason.

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, based on a preponderance of the evidence, claim 8 of U.S. Patent No. 6,509,841 B1 is held to be unpatentable;

FURTHER ORDERED that Petitioner’s Motion to Exclude (Paper 36) is *dismissed* as moot; and

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

IPR2017-01024
Patent 6,509,841 B1

PETITIONER

Adam R. Brausa
DURIE TANGRI LLP
abrausa@durietangri.com

PATENT OWNER

Daniel C. Callaway
James L. Day
FARELLA BRAUN + MARTEL, LLP
dcallaway@fbm.com
jday@fbm.com