

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ONE WORLD TECHNOLOGIES, INC.
d/b/a TECHTRONIC INDUSTRIES POWER EQUIPMENT,
Petitioner,

v.

THE CHAMBERLAIN GROUP, INC.,
Patent Owner.

Case IPR2017-01137
Patent 6,998,977 B2

Before JONI Y. CHANG, JUSTIN T. ARBES, and
JON M. JURGOVAN, *Administrative Patent Judges*.

CHANG, *Administrative Patent Judge*.

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

I. INTRODUCTION

One World Technologies, Inc. d/b/a Techtronic Industries Power Equipment (“Petitioner”) filed a Petition requesting an *inter partes* review of claims 1–11 and 22–25 (“the challenged claims”) of U.S. Patent No. 6,998,977 B2 (Ex. 1001, “the ’977 patent”) and a Declaration of Stuart Lipoff (Ex. 1008). Paper 2 (“Pet.”). The Chamberlain Group, Inc. (“Patent Owner”) filed a Preliminary Response. Paper 6 (“Prelim. Resp.”). Upon consideration of the Petition and Preliminary Response, we instituted the instant *inter partes* review as to claims 1–11 and 22–25. Paper 7 (“Dec.”).

Subsequent to institution, Patent Owner filed a Response (Paper 10, “PO Resp.”) and a Declaration of Nathaniel J. Davis IV, Ph.D. (Ex. 2001). Petitioner filed a Reply (Paper 14, “Reply”) and a second Declaration of Mr. Lipoff (Ex. 1014). A combined oral hearing with Case IPR2017-01132 was held on June 14, 2018, and a transcript has been entered into the record as Paper 29 (“Tr.”).

This Final Written Decision is entered pursuant to 35 U.S.C. § 318(a). For the reasons that follow, Petitioner has demonstrated by a preponderance of the evidence that claims 1–11 and 22–25 of the ’977 patent are unpatentable.

A. Related Matters

Petitioner also challenges claims 12–21 of the ’977 patent in Case IPR2017-01132. Petitioner indicates that the ’977 patent has not been asserted against Petitioner. Pet. 1. Petitioner also identifies other related proceedings—e.g., U.S. Patent Nos. 7,224,275 and 7,635,966 are involved in

The Chamberlain Group, Inc. v. Techtronic Industries Co. Ltd., Case No. 1:16-cv-06097 (N.D. Ill.). *Id.* at 1–2.

B. The '977 Patent

The '977 patent describes a method and an apparatus for monitoring a movable barrier (e.g., a garage door) over a network. Ex. 1001, 1:12–15.

Figure 3 of the '977 patent is reproduced below with color highlighting added by Petitioner (Pet. 5).

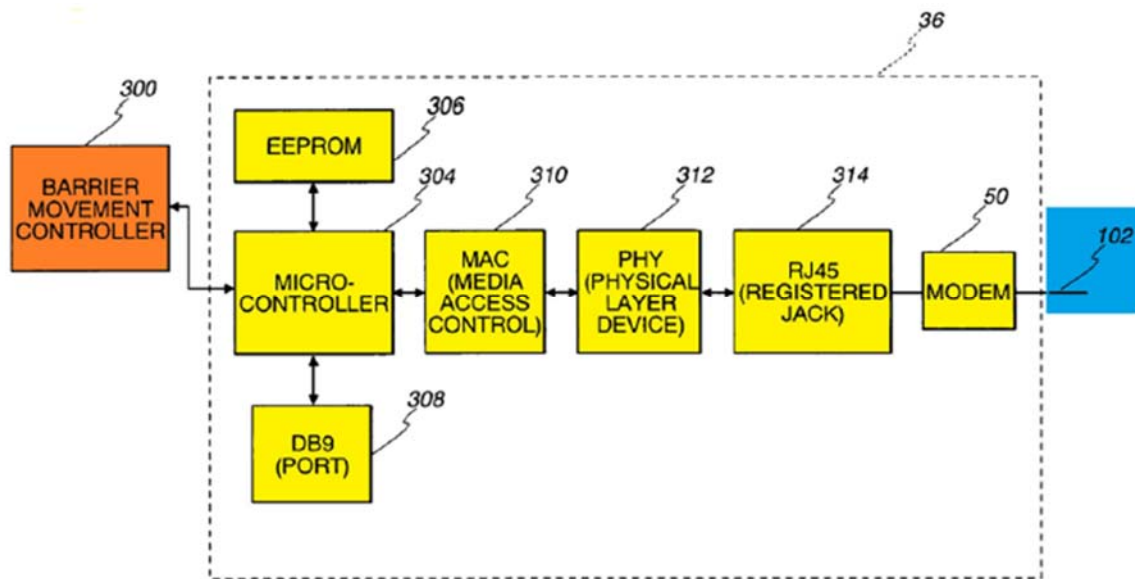


Figure 3 above illustrates a block diagram of a garage door operator connected to network 102. Ex. 1001, 3:36–43. Barrier movement controller 300 (in orange) controls the movement and/or position of the barrier (e.g., garage door). *Id.* at 3:9–12. Network interface 36 is connected to network 102 and coupled to controller 300, which provides network interface 36 with information regarding the status of the garage door operator, allowing an individual to receive the status of the garage door through network 102. *Id.*

at 3:20–35. Network interface 36 includes micro-controller 304, electrically erasable programmable read-only memory (EEPROM) 306, port 308, media access control layer 310, physical layer device 312, jack 314, and modem 50. *Id.* at 3:48–51, Fig. 3.

C. Illustrative Claims

Of the challenged claims, claims 1 and 22 are independent. Claims 2–11 depend, directly or indirectly, from claim 1, and claims 23–25 depend, ultimately, from claim 22. Claims 1 and 22 are illustrative:

1. An apparatus comprising:

a movable barrier operator including a controller for controlling movement of a movable barrier; and

a network interface electronically connected to the controller for connecting the controller to a network;

wherein the network interface responds to requests received on the network by sending a status of the movable barrier over the network and;

wherein the network interface receives a status change request from the network and the controller responds to the status change request by moving the barrier.

Ex. 1001, 5:5–15.

22. An apparatus comprising:

a barrier status monitor coupled to a movable barrier; and

a network interface electronically connecting the barrier status monitor to a network;

a controller coupled to the network interface and the moveable barrier;

wherein the network interface responds to network conveyed

requests by sending a status of the movable barrier over the network in response to a request for the status of the movable barrier; and

wherein the network interface receives a status change request from the network and the controller responds to the status change request by moving the barrier.

Id. at 6:27–39.

D. Prior Art Relied Upon

Petitioner relies upon the references listed below.

Menard	US 2002/0183008 A1	Dec. 5, 2002	(Ex. 1003)
--------	--------------------	--------------	------------

Lee	US 5,475,377	Dec. 12, 1995	(Ex. 1007)
-----	--------------	---------------	------------

Jacobs	US 5,467,266	Nov. 14, 1995	(Ex. 1010)
--------	--------------	---------------	------------

HOMERF SPECIFICATION REVISION 2.0 (HomeRF Working Group, Inc.) (May 7, 2001) (Ex. 1012, “the HomeRF v2.0 Specification”).

HOMERF SPECIFICATION REVISION 2.01 (HomeRF Working Group, Inc.) (July 1, 2002) (Ex. 1004, “the HomeRF v2.01 Specification”).¹

NETWORK DESIGN: PRINCIPLES AND APPLICATIONS, (Gilbert Held ed. 2000 CRC Press, LLC) (Ex. 1005, “Held”).²

¹ Petitioner refers to the two specifications together in its arguments. See Pet. 3, 71–74. We refer to the HomeRF v2.0 Specification and HomeRF v2.01 Specification collectively as “the HomeRF Specifications.”

² Citations to Held refer to the original page numbers, not the page numbers added by Petitioner.

*E. The HomeRF Specifications and Held are Prior Art
Printed Publication under § 102.*

Petitioner asserts that the HomeRF v2.01 Specification (Ex. 1004) is prior art under § 102(a) because it was published at least as early as on July 1, 2002. Pet. 3. Petitioner also avers that the HomeRF v2.0 Specification (Ex. 1012) is prior art under § 102(b) because it were published at least as early as May 7, 2001. Pet. 3. Each reference includes a revision date on its first page. Ex. 1004, 1; Ex. 1012, 1. Moreover, Petitioner proffers the Declaration of Wayne Caswell, who confirms the publicly-available dates of these references. Ex. 1011 ¶ 6. In addition, Petitioner asserts that Held (Ex. 1005) is prior art under § 102(b) because it was published on May 31, 2000 by CRC Press LLC, and it was publicly available in Stanford University's Engineering Library at least as early as October 26, 2000. Pet. 3. Petitioner proffers a copy of Held showing a date stamp of "OCT 26 2000" from Stanford University's Engineering Library. Ex. 1006, 4.

Patent Owner does not dispute Petitioner's assertions and supporting evidence regarding the publication dates of these references. *See generally* PO Resp. Based on the evidence before us, we find Petitioner has established that the HomeRF Specifications and Held are prior art printed publications under 35 U.S.C. § 102. *See* Pet. 3; Exs. 1006, 1011.

F. Grounds of Unpatentability

In our Decision on Institution, we originally instituted this trial based on only the following grounds of unpatentability (Dec. 28–29):

Claim(s)	Basis	Reference(s)
1–4, 6–11, and 22–25	§§ 102(a), 102(e)(1) ³	Menard
11 and 25	§ 103(a)	Menard and Lee
5	§ 103(a)	Menard and Held
3	§ 103(a)	Menard and the HomeRF Specifications

On April 24, 2018, the Supreme Court of the United States held that a decision to institute under 35 U.S.C. § 314 may not institute on less than all claims challenged in the petition. *SAS Institute Inc. v. Iancu*, 138 S.Ct. 1348, 1359–60 (2018). In light of the Guidance on the Impact of SAS on AIA Trial Proceedings⁴ posted on April 26, 2018, we modified our Institution Decision to institute on *all of the grounds* presented in the

³ Because the claims at issue have a filing date prior to March 16, 2013, the effective date of the Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“AIA”), we apply the pre-AIA versions of 35 U.S.C. §§ 102 and 103 in this Decision.

⁴ See <https://www.uspto.gov/patents-application-process/patent-trial-and-appeal-board/trials/guidance-impact-sas-aia-trial>.

Petition, namely adding one additional ground with respect to claim 3 based on Menard and Jacobs. Paper 17. Subsequently, the parties filed a Joint Motion to Limit the Petition to remove the additional ground from consideration, limiting the Petition to the aforementioned originally instituted grounds. Paper 22. Upon consideration, we granted the parties' Joint Motion. Paper 23.

II. DISCUSSION

A. Claim Construction

In an *inter partes* review, claim terms in an unexpired patent are given their broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b). “Under a broadest reasonable interpretation, words of the claim must be given their plain meaning, unless such meaning is inconsistent with the specification and prosecution history.” *Trivascular, Inc. v. Samuels*, 812 F.3d 1056, 1062 (Fed. Cir. 2016).

The parties propose constructions for several claim terms. Pet. 7–21; Prelim. Resp. 2–6. Upon review of the parties' contentions, we addressed three claim terms identified by the parties in our Institution Decision. Dec. 6–10. After institution, neither party challenges any aspect of our claim constructions. Based on the entire record presented during trial, we discern no reason to modify our analysis or claim constructions of those claims in this Final Written Decision. Our claim construction analysis from the Institution Decision is reproduced in substance below in Sections II.A.1–3.

1. “controller for controlling movement of a movable barrier”

Claim 1 recites “a controller for controlling movement of a movable barrier.” Ex. 1001, 5:6–7. Petitioner asserts that the term invokes § 112, ¶ 6, because the term “controller” fails to disclose sufficient structure for performing the claimed function. Pet. 8. Petitioner also argues that the Specification fails to disclose the corresponding structure for the recited function. *Id.* 8–11.

Patent Owner counters that the claim term does not use “means for” and, therefore, it is presumed not to invoke § 112, ¶ 6, and Petitioner fails to demonstrate that this presumption is overcome. Prelim. Resp. 4–5 (citing *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1349 (Fed. Cir. 2015) (*en banc*)).

We agree with Patent Owner. As stated by the United States Court of Appeals for the Federal Circuit, “[t]he 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.” *Williamson*, 792 F.3d at 1349. Petitioner does not account sufficiently for how the term “controller” is used in the context of the ’977 patent and the relevant art.

For example, as Patent Owner notes, the Specification of the ’977 patent “describes ‘a moveable barrier operator’ that includes a ‘power drive unit 20’ having a ‘controller 300 . . . which controls the motor of power drive 20 to control the movement and/or position of the barrier.’” Prelim. Resp. 4 (citing Ex. 1001, 2:47–49). The Specification also indicates that such moveable barrier operators were known in the art. *Id.* 2:49–53

(explaining “[i]t should be well understood that . . . any properly equipped system for controlling a moveable barrier can make use of the status identifying apparatus disclosed herein.”). Therefore, controllers were known in the art as components of existing barrier movement operators. *See also* Pet. 10–11 (acknowledging that controllers for “controlling movement of a movable barrier” were “well-known in the prior art”). Moreover, Petitioner does not explain why a person ordinarily skilled in the field of controlling and monitoring power doors would not have appreciated a “controller” to have a sufficiently definite meaning as the name for structure, in view of the prior art of record—for example, Menard discloses a system with a processor for controlling and managing a door opener remotely from a pager or a cellular telephone (Ex. 1003 ¶ 9, Fig. 2).

In light of the foregoing, we decline to adopt Petitioner’s proposed claim construction that interprets “a controller for controlling movement of a movable barrier” as a means-plus-function claim element invoking § 112, ¶ 6. Rather, we conclude that the term is not governed by § 112, ¶ 6, and that no further interpretation is necessary.

2. “*status of the movable barrier*”

Claim 1 recites “sending a status of the movable barrier over the network.” Ex. 1001, 5:11–12. Petitioner asserts that the term “status of the movable barrier” should be construed as the state of the moveable barrier (e.g., whether a door is open or closed). Pet. 11. Petitioner argues that the Specification supports this construction as it discloses that, “[i]n order to check the status of the movable barrier[,] the user would go look at the

movable barrier to see if it was open or closed.” *Id.* (citing Ex. 1001, 1:26–28) (emphasis omitted). Petitioner further notes claims 15 and 16 recite “wherein the status of the movable barrier is open,” and “wherein the status of the movable barrier is closed,” respectively. *Id.* at 11–12; Ex. 1001, 6:11–14.

Patent Owner does not dispute Petitioner’s proposed claim construction as to this term. *See generally* PO Resp. In light of the Specification including the dependent claims, we agree with and adopt Petitioner’s claim construction, construing “status of the movable barrier” as “the state of the moveable barrier (e.g., whether a door is open or closed).”

3. “*serial interface between the push button control unit and the network interface*”

Petitioner argues that the claim term—“serial interface between the push button control unit and the network interface”—in claim 3 is indefinite because it lacks written description support. Pet. 17–21. Alternatively, and without any supporting argument, Petitioner urges us to construe it as “a communication link capable of communicating using a serial protocol.” *Id.* at 20–21. Patent Owner counters that the term has adequate written description support because claim 3, including this term, was present at the time of filing in the application that issued as the ’977 patent. Prelim. Resp. 5–6. Figure 2 of the ’977 patent also shows push button control unit 32 connected to drive unit 20, which is connected to network interface 36.

We agree with Patent Owner. In light of the Specification, we construe the term “serial interface between the push button control unit and

the network interface” as “a communication link between the push button control unit and the network interface, using a serial protocol.”

4. “network”

Claim 1 recites “a network interface electronically connected to the controller for connecting the controller to *a network*,” “wherein the network interface responds to requests received *on the network* by sending a status of the movable barrier *over the network*.” Ex. 1001, 5:8–12 (emphases added). Claim 22 recites “a network interface electronically connecting the barrier status monitor to *a network*” and “sending a status of the movable barrier *over the network* in response to a request for the status of the movable barrier.” *Id.* at 6:33–37 (emphases added).

Although Patent Owner, in its Response discussing the construction of the terms, “submits that no construction is necessary for any claim term, and asks that the plain language of the claims be given its broadest reasonable interpretation,” Patent Owner nevertheless argues, in its Response discussing the prior art, that claims 1 and 22 “require that a status request be received *over a network*, and the status be sent *over the same network to the network client* in response to the status request.” *Compare* PO Resp. 3, 5, *with id.* at 14–16 (emphases in original).

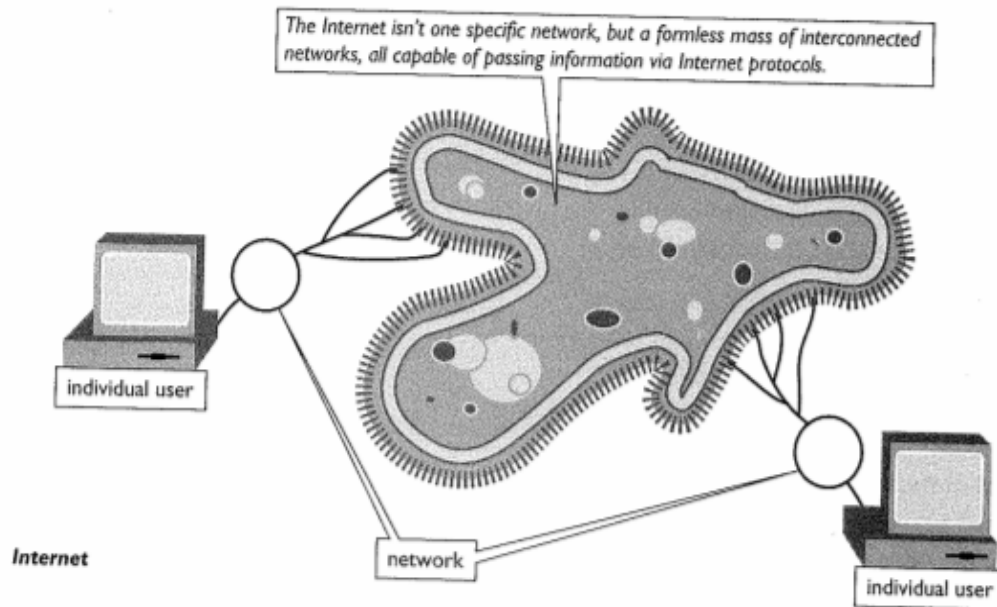
Petitioner counters that the claims do not require a single network, but rather permit multiple networks to be used. Reply 18–22. Petitioner also argues that, in any event, Menard discloses an example of a single network client on a single network requesting and receiving a garage door position status, and controlling the door. *Id.*

We agree with Petitioner that claims 1 and 22 do not require a single network. As the Federal Circuit has explained, “an indefinite article ‘a’ or ‘an’ in patent parlance carries the meaning of ‘one or more’ in open-ended claims containing the transitional phrase ‘comprising.’” *Baldwin Graphic Systems, Inc. v. Siebert*, 512 F.3d 1338, 1342 (Fed. Cir. 2008) (internal quotation marks and citations omitted). “The 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.” *Id.* An exception to this general rule “only arises where the language of the claims themselves, the specification, or the prosecution history necessitate[s] a departure from the rule.” *Id.* at 1342–43.

Here, the Specification of the ’977 patent discloses that “[t]he network interface 36 is connected to *a network 102, e.g., the internet*, which allows an individual to connect to the network interface 36 over the network 102 and receive the status of the garage door 12.” Ex. 1001, 3:26–30 (emphasis added). Petitioner notes that, as of the priority date of the ’977 patent, the term “Internet” encompassed a plurality of networks, citing to several dictionary definitions for support. Reply 20 n.12 (citing Ex. 1014 ¶¶ 50–51; Ex. 1021, 354; Ex. 1022, 579; Ex. 1026, 97⁵). For example, The Internet Dictionary (1995) defines the “Internet” as “[a]n international network of well over ten thousand networks linked using the TCP/IP protocols (see

⁵ The citations are referring to the original page numbers, not the page numbers added by Petitioner.

illustration, next page).” Ex. 1026, 97. The Illustration is reproduced below (*id.* at 98).



The Illustration shows that “[t]he Internet isn’t one specific network, but a formless mass of interconnected networks, all capable of passing information via Internet protocols.” *Id.* As another example, the Webster’s II New College Dictionary (1995) defines the “Internet” as “[a]n interconnected system of networks that connects computers around the world via the TCP/IP protocol.” Ex. 1022, 579.

At the oral hearing, both parties agreed that the claimed “network” can comprise multiple networks because, as disclosed in the ’977 patent, at the time of the invention, the Internet included many networks connected together. Tr. 26:3–12 (Petitioner noted “the ’977 patent . . . shows that the network interface is connected to multiple networks, not to a single network,” and “that it’s connected to a cable or DSL line which then in turn

is connected to the internet”), 48:15–25 (Patent Owner explained “you could use multiple networks in a bridging context, so one network bridges to another network that bridges to another network . . . [and] they collectively act as a network”). Patent Owner further clarified that the claimed “network” can comprise multiple networks connected together acting collectively as a single network, such as a cellular phone network connected to the Internet to establish a communication channel between a cellular phone and the system for the garage door opener. *Id.* at 49:8–51:6.

Upon consideration, in light of the Specification of the ’977 patent, we interpret a “network” as recited in claims 1 and 22 to mean “a single network or a plurality of networks connected together acting individually or collectively to allow communication between a communication device and a system.” We also agree with Patent Owner that the claim language in claims 1 and 22 requires that a status request be received over a network and the status be sent *over the same network* in response to the status request because the subsequent usages of definite article “the” refer back to the same “network.” See PO Resp. 3, 5, 14–16. To illustrate, as just one example, if “a network” were the Internet, “the network” would also refer to the Internet.

B. Principles of Law

To establish anticipation, each and every element in a claim, arranged as recited in the claim, must be found in a single prior art reference. *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1371 (Fed. Cir. 2008).

There is no requirement that the prior art must use the same words to describe a claim element in order to be deemed as teaching or disclosing that claim element. Identity of terminology is not required, for a claim element to be met directly by the prior art, without resort to obviousness. *See In re Gleave*, 560 F.3d 1331, 1334 (Fed. Cir. 2009); *In re Bond*, 910 F.2d 831, 832 (Fed. Cir. 1990). Even in a non-obviousness setting, it is proper to take into account not only the literal and specific teachings of the reference, but also the inferences which one skilled in the art would reasonably be expected to draw therefrom. *In re Preda*, 401 F.2d 825, 826 (CCPA 1968). For anticipation, the dispositive question is whether one skilled in the art would reasonably understand or infer from a prior art reference that every claim element is disclosed in that reference. *Eli Lilly v. Los Angeles Biomedical Res. Inst.*, 849 F.3d 1073, 1074–75 (Fed. Cir. 2017).

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 ordinary skill in the art; and (4) objective evidence of nonobviousness.⁶ *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

C. 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) (citation omitted). Mr. Lipoff testifies that a person with ordinary skill in the art “would have had at least an undergraduate degree in electrical engineering, or equivalent education, and one to two years of work experience in the fields of: (i) network communication systems; (ii) systems for access control or automated door systems; or (iii) equivalent work experience or training.” Ex. 1008 ¶ 30. Patent Owner does not dispute Mr. Lipoff’s assessment regarding the level of ordinary skill in the art. *See generally* PO Resp. Based on the record before us, we agree with and apply Mr. Lipoff’s assessment regarding the general knowledge of a person with ordinary skill in the art. We further note that the prior art of record in the instant proceeding reflects the appropriate level of ordinary skill in the art. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1354–55 (Fed. Cir. 2001) (“the prior art itself reflects an appropriate level” of ordinary skill in the art).

⁶ Neither party presents objective evidence of nonobviousness in this trial.

D. Anticipation by Menard

Petitioner asserts that claims 1–4, 6–11, and 22–25 are unpatentable under 35 U.S.C. §§ 102(a) and (e) as anticipated by Menard. Pet. 2–3, 19–56. As support, Petitioner cites to Mr. Lipoff’s Declaration. Ex. 1008. Patent Owner counters that Menard does not describe certain claim limitations, citing Declaration of Dr. Davis for support. PO Resp. 3–26.

For the reasons provided below, we determine that Petitioner has demonstrated by a preponderance of the evidence that claims 1–4, 6–11, and 22–25 are anticipated by Menard. We begin our discussion with a brief summary of Menard, and then we address the relevant contentions advanced by the parties in turn.

Menard

Menard describes a wireless system for controlling and monitoring a power door. Ex. 1003 ¶ 1. Figure 1 of Menard illustrates a garage door opener, and is reproduced below.

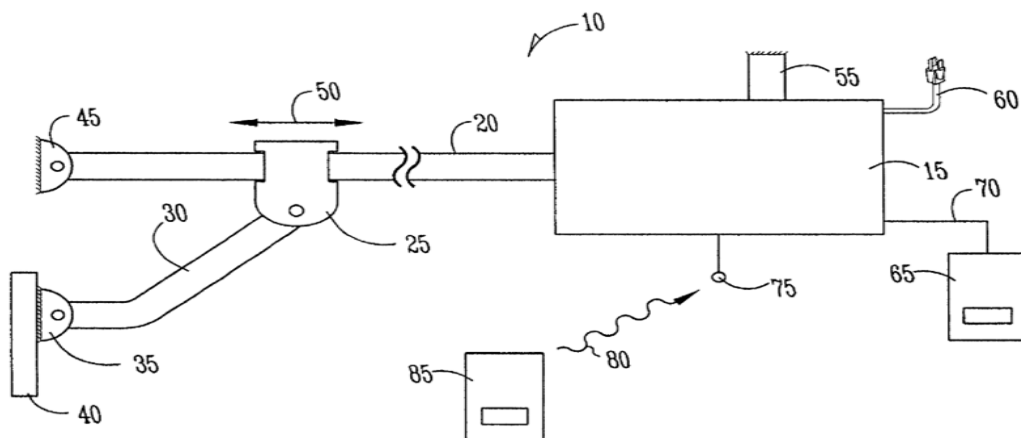


Fig. 1

Figure 1 of Menard shows garage door opener system 10 that includes power unit 15 that has an electric motor to open and close garage door 40. Ex. 1003 ¶¶ 4, 5. Power unit 15 can be operated by using switch 65 or remote control 85. *Id.* ¶¶ 6–7.

Menard discloses a system and a method that allow remote control and management of a single door opener or multiple door openers using a wired or wireless communication device, including a cellular telephone, a pager, a personal digital assistant, a computer, or other device that communicates using a network. *Id.* ¶ 9. The door opener system includes a processor executing programming, a position sensor, and a wireless transceiver that communicates using both a long range communication protocol and a short range communication protocol, allowing a user to control and manage the door opener remotely. *Id.* ¶ 10. The door opener receives commands and transmits status information using either or both of the long range and short range protocols. *Id.* The communication link provides a channel for communicating information from the door opener to the device and for communicating instructions from the device to the door opener. *Id.* For example, the long distance network may include a two-way pager network, “enabling bidirectional communication” with a user controlled pager.” *Id.* ¶ 44.

Figure 2 of Menard is reproduced below.

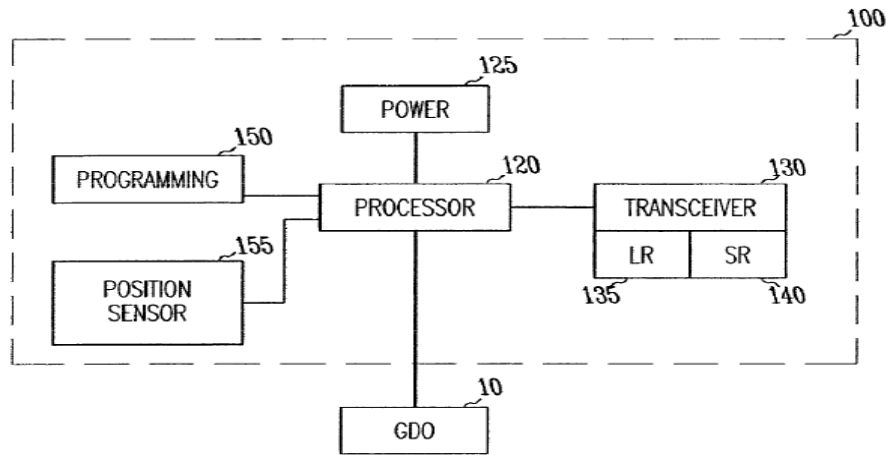


Figure 2 of Menard “illustrates a block diagram of one embodiment of the present system.” *Id.* ¶ 13. As shown in Figure 2 of Menard, system 100 is connected to garage door opener (“GDO”) 10. System 100 includes processor 120, programming 150, position sensor 155, and transceiver 130. *Id.* ¶¶ 21–26. Processor 120 may include a microprocessor and memory to perform the programmed functions and to retain settings and configuration information. *Id.* ¶ 23. Position sensor 155 is coupled to processor 120, and provides an electrical signal corresponding to the position of the door. *Id.* ¶¶ 30, 69 (disclosing that “sensor 155 provides the position information to processor 120”).

Transceiver 130 may be compatible with more than two communication protocols. *Id.* ¶ 47. For example, transceiver 130 may be compatible with three protocols, such as a cellular telephone communication protocol, a two-way pager communication protocol, and Bluetooth protocol. *Id.* In such a case, the garage door opener may be operable using a cellular telephone, a two-way pager, or a device compatible with Bluetooth. *Id.*

Figure 7 of Menard “illustrates one embodiment of programming in accordance with one embodiment of the present system” and is reproduced below. *Id.* ¶ 18.

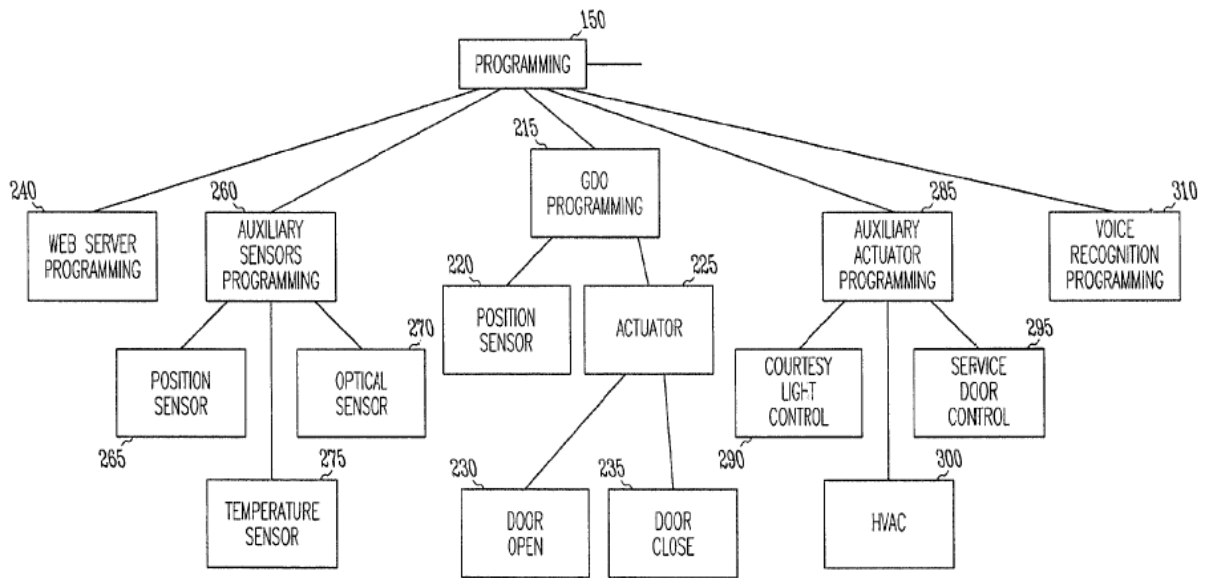


Fig. 7

As shown in Figure 7 of Menard, programming 150 has various features: web server programming 240, auxiliary sensors programming 260, GDO programming 215, auxiliary actuator programming 285, and voice recognition programming 310. *Id.* ¶ 58. For example, web server programming 240 provides an interface to allow remote control of system 100. *Id.* ¶ 59. The wireless application protocol (WAP) server of web server programming 240 is coupled to a communication network to allow a user to operate, program, and monitor system 100. *Id.* The WAP server generates data that can be accessed using an Internet browser. *Id.*

Auxiliary sensors programming 260 includes position sensor programming 265 that receives and interprets position information derived from door position sensor 165. *Id.* ¶ 60. GDO programming 215 includes position sensor programming 220 and actuator programming 225 that includes door open programming 230 and door close programming 235 for opening or closing garage door 40 in response to commands received by processor 120. *Id.* ¶ 61.

Claims 1 and 22

1. Network interface connecting a controller to a network and responding to a status request

Claims 1 and 22 require a network interface connecting a controller to a network and responding to a status request. In particular, claim 1 recites an apparatus comprising “a movable barrier operator including a *controller* for controlling movement of a movable barrier,” and “a *network interface* electronically connected to the controller for connecting the controller to a network.” Ex. 1001, 5:5–9 (emphases added). Claim 22 recites an apparatus comprising (1) “a barrier status monitor coupled to a movable barrier,” (2) “a *network interface* electronically connecting the barrier status monitor to a *network*,” and (3) “a *controller* coupled to the network interface and the moveable barrier.” *Id.* at 6:27–32 (emphases added).

Further, claim 1 recites “wherein the network interface *responds to requests* received on the network by sending a *status* of the movable barrier *over the network*.” Ex. 1001, 5:10–12 (emphases added). Claim 22 recites that “the network interface responds to network conveyed requests by

sending a *status* of the movable barrier over the network *in response to a request* for the status of the movable barrier.” *Id.* at 6:33–36 (emphases added).

Petitioner’s contentions

Petitioner explains in detail how Menard discloses each of these limitations, citing Mr. Lipoff’s Declaration for support. Pet. 22–28, 47–56. We are persuaded by Petitioner’s showing.

In particular, to account for the claimed “moveable barrier operator” and “movable barrier” in claims 1 and 22, Petitioner first notes that Menard discloses a system “which allows remote control and management of single or multiple door openers using a wired or wireless communication device.” *Id.* at 22 (citing Ex. 1003 ¶ 9, Fig. 1). According to Menard, the communication “device may be a cellular telephone, a pager, a personal digital assistant, a computer or other device that communicates using a network.” Ex. 1003 ¶ 9. Figure 1 of Menard illustrates a garage door opener system 10 that includes power unit 15 for opening and closing the garage door. *Id.* ¶ 4. Having reviewed Petitioner’s explanation and supporting evidence, we find that Petitioner has established that Menard discloses a “movable barrier” (garage door) and “movable barrier operator,” as recited in claims 1 and 22.

As to the claimed “barrier status monitor” in claim 22, Petitioner directs our attention to Figures 1 and 2 of Menard, which illustrate garage door 40 coupled to a networked garage door opening system that contains a position sensor (barrier status monitor). Pet. 48–50 (citing Ex. 1003, Figs.

1–2). Menard discloses that “[a] door position sensor coupled to the module [that] provides information to the user over a wireless communication channel.” Ex. 1003, Abstract, ¶ 30. Menard’s “sensor 155 includes a first magnetic switch to detect door 40 in an open position and second magnetic switch to detect door 40 in a closed position.” *Id.* Based on our review of Menard, we agree with Petitioner that Menard discloses “a barrier status monitor coupled to a movable barrier,” as recited in claim 22.

As to the claimed “controller” in claims 1 and 22, Petitioner also points out that Menard’s system has a *processor* (controller) which includes “a microprocessor as well as memory to perform the programmed functions and to retain settings and configuration information” and “a driver circuit to provide an electrical signal at a level sufficient *to operate the garage door opener.*” Pet. 23–24, 53–55 (citing Ex. 1003 ¶ 23, Figs. 1–2) (emphasis added). As shown in Figure 2 of Menard, processor 120 is “coupled to, and executes, programming 150,” and is coupled to transceiver 130 (network interface) and garage door opener 10. Ex. 1003 ¶¶ 21–22, Fig. 2. Further, as shown in Figure 7 of Menard, programming 150 includes door open programming 230 and door close programming 235 for raising or lowering door 40 in response to commands received by processor 120. *Id.* ¶ 61.

Upon consideration of the evidence in this entire trial record, we find that Petitioner has demonstrated that Menard discloses “a movable barrier operator including a controller for controlling movement of a movable barrier,” as recited in claim 1, and “a controller coupled to the network interface and the moveable barrier,” as recited in claim 22.

With respect to the claimed “network interface,” Petitioner notes that, as shown in Figure 2 of Menard, position sensor 155 is coupled to processor 120, which in turn is coupled to *transceiver* 130 (network interface). Pet. 25–27, 51–53 (citing Ex. 1003 ¶ 21, Fig. 2). Transceiver 130 “represents a wireless receiver and transmitter” and is capable of both long-range and short range communication. Ex. 1003 ¶¶ 26–28, Figs. 3–4. For example, the long distance network may include a telephone network using an intranet or the Internet. *Id.* ¶ 44.

Mr. Lipoff testifies that, as Figures 3 and 4 of Menard illustrate exemplary networks the transceivers may be coupled to, a person of ordinary skill in the art would have understood that Menard’s transceiver is a “network interface” because it couples system 100, in particular processor 120, to one or more networks. Ex. 1008 ¶¶ 100–104. Mr. Lipoff’s testimony is consistent with Menard’s disclosure. As shown in Figure 2 of Menard, “transceiver 130 communicates, using a short range protocol, with a second transceiver that communicates using a long range protocol.” Ex. 1003 ¶ 27. A “user may communicate with system 100 using a telephone coupled to the public switched telephone network (PSTN), a cellular telephone, a pager (either one way or two way), a personal communication device (such as a personal digital assistant, PDA), a computer, or other wired or wireless communication device.” *Id.* ¶ 29.

Furthermore, Petitioner contends that an ordinarily skilled artisan would have understood the transmitter of transceiver 130 to be operably coupled to the processor. Pet. 26 (citing Ex. 1003 ¶¶ 10, 30, 50, Fig. 2).

Petitioner's contention is supported by Menard. Notably, Menard discloses that the "communication link, whether long range or short range, provides a channel for communicating information from the door opener to the device and for communicating instructions from the device to the door opener."

Ex. 1003 ¶ 10. Menard also discloses that "[u]sing a two way pager, the user may operate the door opener, or operate an actuator, using the reply communication channel of the pager," and that "[t]he outbound signal (e.g., indicating the door position) may be transmitted to the pager on a predetermined schedule, or upon inquiry, or upon a change of position of the door (or actuator) at any time." *Id.* ¶ 50.

Petitioner further contends that an ordinarily skilled artisan would have understood the receiver of transceiver 130 to be operably coupled to the processor because Menard's processor controls the receiver to receive status change requests from the network. Pet. 26–27 (citing Ex. 1003 ¶ 69). That contention also is supported by Menard's disclosure. As shown in Figure 8 of Menard, method 350 describes operation of system 100 for receiving door position information and for controlling the door remotely from a wireless device capable of communicating with transceiver 130. Ex. 1003 ¶¶ 68–69. At step 375 of Menard's method 350, "the user is presented with one or more options to control system 100" and "[i]n the case that door 40 is open, options may include partially, or fully, closing the door"; at step 380, "the user indicates a selection using the portable wireless device"; and at step 390, "the message is transmitted to system 100 . . . on wired or wireless communication networks." *Id.*

Upon consideration of the evidence in this entire trial record, we find Petitioner has shown sufficiently that Menard discloses “a network interface electronically connected to the controller for connecting the controller to a network,” as recited in claim 1, and “a network interface electronically connecting the barrier status monitor to a network,” as recited in claim 22.

With respect to the claimed “status request” and responding to the status request as required by claims 1 and 22, Petitioner incorporates its analysis for the claimed “controller” and “network interface,” which we discussed above, and additionally notes Menard discloses that the garage door opener “receives commands and transmits status information using either or both of the long range and short range protocols,” and that the “outbound signal (e.g., indicating the door position) may be transmitted . . . upon inquiry.” Pet. 22–27, 55–56 (citing Ex. 1003 ¶¶ 10, 50). Mr. Lipoff testifies that an ordinarily skilled artisan would have understood that Menard discloses sending the door position status over the network in response to status inquiry. Ex. 1008 ¶¶ 108–110. We credit Mr. Lipoff’s testimony (*id.*), as it is consistent with Menard’s disclosure (Ex. 1003 ¶¶ 9–11, 29, 50, 69). As illustrated in Figure 8 of Menard, at step 370, the user, using a wireless device capable of communicating with transceiver 130, receives notification of the door position information, and “[t]he door position may be indicated by a pair of lights on a pager . . . , by a graphical image on a screen, a recognizable audio tone, a recognizable vibration, or any other means of indicating position to a user.” *Id.* ¶ 69.

Having considered Petitioner’s contentions and supporting evidence, we determine Petitioner has demonstrated that Menard discloses “wherein the network interface responds to requests received on the network by sending a status of the movable barrier over the network,” as recited in claim 1, and “sending a status of the movable barrier over the network in response to a request for the status of the movable barrier,” as recited in claim 22.

Patent Owner’s contentions

Patent Owner counters that Menard does not disclose expressly or inherently “a status request received from a *network client* over the network,” citing Dr. Davis’ Declaration for support. PO Resp. 3–16 (citing Ex. 2001 ¶¶ 25–36) (emphasis added). To support its position, Patent Owner advances several arguments. We address each of Patent Owner’s arguments below.

At the outset, unlike claims 12–21, which are challenged in Case IPR2017-01132, none of the challenged claims in this proceeding recites a “network client” or requires a specific type of wireless communication device. Nevertheless, according to Patent Owner, claims 1 and 22 “require that a status request be received *over a network*, and the status be sent *over the same network to the network client* in response to the status request.” *Id.* at 5, 14–16 (emphases in original). As discussed in our claim construction analysis above, we interpret a “network,” in light of the Specification of the ’977 patent, to mean “a single network or a plurality of networks connected

together acting individually or collectively to allow communication between a communication device and a system.”

There is no dispute that Menard discloses a network interface sending the door position status over a network. Patent Owner’s main dispute centers on whether Menard’s status inquiry and status are sent over *the same network*.

Although we agree with Patent Owner that the claim language in claims 1 and 22 requires that a status request be received over a network or plurality of networks and the status be sent *over the same network* or plurality of networks in response to the status request, we are not persuaded by Patent Owner’s arguments and supporting evidence that Menard fails to disclose the limitations. Rather, we determine Petitioner has established that an ordinarily skilled artisan would have understood Menard to disclose a user using a *two-way* communication device to request and receive the door position status *over the same network* or *networks*. Ex. 1008 ¶¶ 108–110; Ex. 1014 ¶ 25.

First, Patent Owner opposes Petitioner’s assertion that Menard’s signal indicating the door position status sent “upon inquiry” discloses “the status request is received over a network.” PO Resp. 5. Patent Owner argues that Menard does not disclose the source of the status inquiry, and that the status inquiry is not received over a network. *Id.* at 3–16. In Patent Owner’s view, the status inquiry could be sent from the system itself to the door position sensor, not from the user’s communication device over a network. *Id.* Patent Owner contends that Figure 8 of Menard supports its

argument that the status inquiry is not a request over the network because the flowchart in Figure 8 does not show the communication device transmitting any type of “inquiry” over the network. *Id.* at 6–8.

Patent Owner’s argument and Dr. Davis’ supporting testimony (Ex. 2001 ¶¶ 25–38), however, are based on an unduly narrow interpretation of Menard’s teachings. Anticipation is not an *ipsissimis verbis* test. See *Gleave*, 560 F.3d at 1334; *Bond*, 910 F.2d at 832. It is well established that “the 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.” *Dayco Prods., Inc. v. Total Containment, Inc.*, 329 F.3d 1358, 1368 (Fed. Cir. 2003) (citation and emphasis omitted).

Significantly, Patent Owner conflates Menard’s disclosures regarding a *one-way pager*, which can only receive messages, not transmit them, with a *two-way pager*, which can receive and transmit messages. Menard explains that the user, using a *one-way pager*, “may operate the door opener . . . using *another communication channel*, including for example, a cellular telephone or a personal communication device.” Ex. 1003 ¶ 50 (emphasis added). In contrast, Menard discloses “[u]sing a *two way pager*, the user may operate the door opener, or operate an actuator, using *the reply communication channel of the pager*.” *Id.* (emphasis added). In the very next sentence, Menard states that “[t]he outbound signal (e.g., indicating the door position) may be transmitted to *the pager . . . upon inquiry*.” *Id.* (emphases added). As Mr. Lipoff explains, “the” before “pager” refers to

the two-way pager from the immediately preceding sentence, which uses a communication channel and “reply” communication channel. Ex. 1014 ¶ 26. The “upon inquiry” wording in paragraph 50 cannot be read in isolation; rather, a person of ordinary skill in the art would have read it in context with the surrounding disclosure in Menard. Mr. Lipoff testifies that such an artisan would have understood from Menard’s full disclosure that the user uses the same two-way pager to request and receive the door position status over the same network. Ex. 1008 ¶¶ 106–110; Ex. 1014 ¶¶ 23–25. Again, we credit Mr. Lipoff’s testimony as it is consistent with Menard’s disclosure (Ex. 1003 ¶¶ 9–11, 29, 44, 50, 69).

Patent Owner also conflates a two-way pager with a one-way pager by assuming erroneously that the status inquiry is not sent from the two-way pager, but is sent from another communication channel. PO Resp. 3–16; Ex. 2001 ¶¶ 25–38. An ordinarily skilled artisan would have appreciated that there is no need for the user to use another communication channel when using a two-way pager because, unlike a one-way pager, a two-way pager can request and receive the status over the same network, as disclosed in Menard. Ex. 1014 ¶¶ 23–25; Ex. 1003 ¶¶ 10, 44 (disclosing “the pager network is a two-way pager network enabling *bidirectional communication* between a BLUETOOTH®-enabled sensor, or device, and a user controlled pager” (emphasis added)).

In addition, we do not agree with Patent Owner’s characterization that the status inquiry and the door position status are not sent over the same network (PO Resp. 3–16; Ex. 2001 ¶¶ 25–38). Such a characterization is

not consistent with Menard's disclosure. *See, e.g.*, Ex. 1003 ¶¶ 9–11, 29, 44, 49, 50, 69. As Mr. Lipoff testifies, Menard teaches multiple types of communication devices that may be used to send the inquiries requesting the status. Ex. 1008 ¶ 40. Indeed, Menard makes clear that its system “allows remote control and management of single or multiple door openers using a wired or wireless communication device,” including “a cellular telephone, a pager, a personal digital assistant, a computer or other device that *communicates using a network.*” Ex. 1003 ¶ 9 (emphasis added).

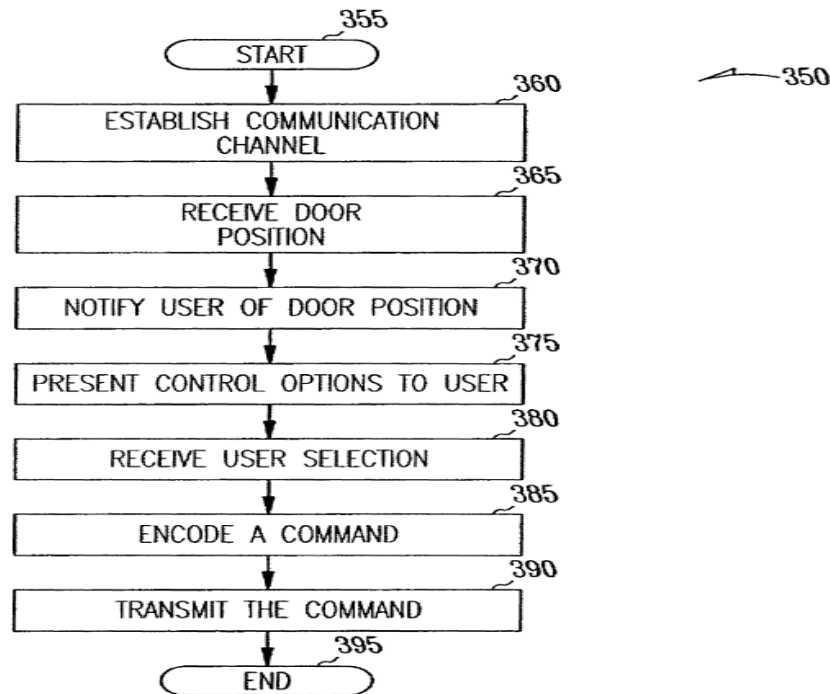
More importantly, as Menard describes, its “invention includes a processor executing programming and coupled to a door opener, a position sensor, and a wireless transceiver that communicates using both a long range communication protocol and a short range communication protocol.” *Id.* ¶ 10. “A user need not specify the communication protocol to be used in *controlling or managing the opener*” because the “opener *receives commands and transmits status information* using either or both of the long range and short range protocols.” *Id.* (emphases added).

As discussed above, we interpret a “network” as recited in claims 1 and 22 to mean “a single network or a plurality of networks connected together acting individually or collectively to allow communication between a communication device and a system.” Menard discloses both a single network and a plurality of networks connected together acting individually or collectively to allow communications between the user's communication device and a door opener. *Id.* ¶¶ 9–11. For example, Menard explains that the “communication link, whether long range or short range, provides a

channel . . . for *communicating instructions from the device to the door opener*,” and “[p]osition *information is transmitted to the device* by a transceiver coupled to the processor.” *Id.* ¶¶ 10–11, 29, 44 (emphases added). Therefore, Patent Owner’s characterization that the status inquiry is not sent from the user’s communication device over a network is not consistent with Menard’s disclosure.

For these reasons, we are not persuaded by Patent Owner’s argument that Menard does not disclose the source of the status inquiry, and that the status inquiry is not transmitted over a network. PO Resp. 3–16; Ex. 2001 ¶¶ 25–38. Instead, we agree with Petitioner and Mr. Lipoff that an ordinarily skilled artisan would have recognized that the status inquiry and the door position status are sent over the same network or networks. *See In re Baxter Travenol Labs.*, 952 F.2d 388, 390 (Fed. Cir. 1991) (holding that “the dispositive question regarding anticipation [is] whether one skilled in the art would reasonably understand or infer” from the prior art reference that the reference discloses all of the limitations of the claim).

Patent Owner’s reliance on Figure 8 of Menard to support its argument that the “inquiry” is not a request over the network (PO Resp. 6–8) is misplaced. Figure 8 of Menard is reproduced below.



As shown in Figure 8 of Menard, method 350 describes the operation of system 100 for receiving door position information and for controlling the door from a remote location. Ex. 1003 ¶¶ 68–69. The method starts at step 355 in which “the user has a wireless device capable of communicating with transceiver 130” of system 100. *Id.* ¶ 69. At step 360, “the user and system 100 establish a link on a communication channel.” *Id.* At step 365, door position information is received by the user. *Id.* At step 370, “the user receives notification of the door position information.” *Id.* At step 375, “the user is presented with one or more options to control system 100.” *Id.* In the case that the door is open, options may include partially, or fully, closing the door. *Id.* At step 380, “the user indicates a selection using the portable wireless device.” *Id.* At step 385, “the wireless device encodes a message for transmission to system 100 including instructions to operate the door

according to the user selection.” *Id.* At step 390, “the message is transmitted to system 100.” *Id.* “The message may be routed to system 100 on wired or wireless communication networks.” *Id.*

Patent Owner concedes that Menard discloses at least three triggers, each of which results in sending the door position status to the user: (1) “on a predetermined schedule,” (2) “upon inquiry,” or (3) “upon a change of position of the door.” PO Resp. 8 (citing Ex. 1003 ¶ 50). During cross-examination, Dr. Davis conceded that, although none of these triggers is depicted in the flow chart shown in Menard’s Figure 8, “[t]hey would result in this flow chart being exercised.” Ex. 1015, 153:10–154:4. Moreover, Mr. Lipoff testifies that “[n]one of these triggers are discussed in relation to Figure 8,” but nevertheless “each of these triggers would result in the steps of Figure 8 being performed,” including the steps of notifying the user of door position and then presenting control options to the user. Ex. 1014 ¶¶ 28–29. As Mr. Lipoff explains, an ordinarily skilled artisan would not have expected the status “inquiry” to be shown in Figure 8 anymore than the other triggers to be shown. *Id.* Therefore, the mere fact that Figure 8 of Menard does not show a status inquiry does not support Patent Owner’s argument that the status “inquiry” referenced in paragraph 50 of Menard is not a request over the network.

Second, Patent Owner argues that it would not make sense for the user to prompt the system for the door position status since the status is sent on a predetermined schedule or upon a change of the door position. PO Resp. 8–9; Ex. 2001 ¶ 29. Patent Owner fails to appreciate that the triggers in

Menard are alternative ways for a user to receive the status that are not necessarily used altogether at the same time. Ex. 1003 ¶ 50 (“The outbound signal (e.g., indicating the door position) may be transmitted to the pager on a predetermined schedule, *or upon inquiry*, or upon a change of position of the door (or actuator) at any time.” (emphasis added)). For example, when an out-of-view user does not remember whether he or she had closed the garage door, the user can remotely send a status inquiry and receive the door position status immediately using a two-way communication device, without waiting for the predetermined schedule or a change of position of the door. Therefore, Patent Owner’s argument that it does not make sense for the user to prompt the system for the door position status is not consistent with Menard’s disclosure.

Third, Patent Owner argues that Menard merely addresses opening and closing the door, not making a status inquiry. PO Resp. 9–11 (citing 1003 ¶ 50); Ex. 2001 ¶¶ 30–31. Patent Owner’s reading of Menard’s disclosure is again unduly narrow. During cross-examination concerning the flow chart shown in Figure 8 of Menard, Dr. Davis conceded that each of the three triggers described in paragraph 50 of Menard, including the status inquiry, “would result in this flow chart being exercised.” Ex. 1015, 153:10–154:4. Mr. Lipoff also testifies that “each of these triggers would result in the steps of Figure 8 being performed.” Ex. 1014 ¶¶ 27–29. Figure 8 of Menard makes clear that the user, using a communication device, is notified of the door position status in step 370, *before* the user is presented with the options to control system 100 (close or open the door) in

step 375. Ex. 1003 ¶ 69. An ordinarily skilled artisan would have understood that requesting and receiving the door position status are basic initial steps for operating the door opener remotely. *Id.* ¶¶ 50, 69, Fig. 8; Ex. 1014 ¶¶ 28–30. Therefore, Patent Owner’s argument that Menard merely addresses opening and closing the door, not making a status inquiry, is unavailing.

In addition, Patent Owner’s reliance on the “automatic” example to support its argument is misplaced. PO Resp. 9–10 (citing Ex. 1003 ¶ 74). In Menard’s “automatic” example, there is no need for the user to send any commands to operate the door opener, much less requesting and receiving the door position status, because the system *automatically* opens the door if the door is closed, or closes the door if the door is open. Ex. 1003 ¶ 74. Accordingly, the “automatic” example does not support Patent Owner’s argument that Menard merely addresses opening and closing the door, not making a status inquiry.

Other portions of Menard (Ex. 1003 ¶¶ 7, 23, 65, 73) cited by Patent Owner also do not support its argument. PO Resp. 9–11. Notably, paragraph 7 of Menard in the Background section describes a basic residential garage door opener, not Menard’s disclosed system and method. Ex. 1003 ¶¶ 4–8. Other portions of Menard cited by Patent Owner teach different aspects of Menard’s invention. *Id.* ¶¶ 23 (“Processor 120 may also include a driver circuit to provide an electrical signal at a level sufficient to operate the garage door opener.”), 65 (“Programming 150 may also include software routines or modules to address prioritization matters.”), 73 (“it will

be noted that other doors may be controlled and operated using a suitable power opener”). Menard is not required to disclose repeatedly in every discussion the basic initial steps (e.g., requesting and receiving the door position status) for controlling and managing the door opener. For the reasons discussed above, Patent Owner’s argument that Menard merely addresses opening and closing the door, not making a status inquiry (PO Resp. 9–11; Ex. 2001 ¶¶ 30–31), is not supported by Menard’s disclosure.

Fourth, Patent Owner argues that Menard describes other ways of communicating with the garage door opener that do not involve communicating over a network, such as a user interacting with a physical interface of Menard’s system (using a “wired button”) or interacting with the system using their voice. PO Resp. 8–16; Ex. 2001 ¶¶ 34, 36. However, the mere fact that Menard additionally discloses other features does not undermine Petitioner’s anticipation showing that Menard discloses a system and a method that allow a user using a two-way communication device to request and receive a door position status over a network. *See Perricone v. Medicis Pharm. Corp.*, 432 F.3d 1368, 1376 (Fed. Cir. 2005) (rejecting the notion that an ingredient “cannot anticipate because it appears without special emphasis in a longer list”); *Hewlett-Packard v. Mustek Sys., Inc.*, 340 F.3d 1314, 1324 n.6 (Fed. Cir. 2003) (“The anticipation analysis asks solely whether the prior art reference discloses and enables the claimed invention, and not how the prior art characterizes that disclosure or whether alternatives are also disclosed.”).

Furthermore, Patent Owner does not explain, nor can we discern, why a user would use the wired button or audio transducer to request the door position status when the user can physically see whether the door is open or closed. Both the wired button and audio transducer are located near the garage. Ex. 1003 ¶¶ 2, 57. As Mr. Lipoff testifies, a user would not need to request the door position status if the user physically could see whether the door is open or closed. Ex. 1014 ¶¶ 34–36, 39. We credit Mr. Lipoff’s testimony, as it is consistent with one of Menard’s stated goals—solving the problem of the lack of feedback to indicate the position of the door to the user when the user has driven out of view. Ex. 1003 ¶ 3. Accordingly, we are not persuaded by Patent Owner’s argument that Menard describes other ways of communicating with the garage door opener that do not involve communicating over a network. PO Resp. 8–16; Ex. 2001 ¶¶ 34, 36.

For the foregoing reasons, we determine that Petitioner has established that Menard describes “wherein the network interface *responds to requests* received on the network by sending a *status* of the movable barrier *over the network*,” as recited in claim 1, and “the network interface responds to network conveyed requests by sending a *status* of the movable barrier over the network *in response to a request* for the status of the movable barrier,” as recited in claim 22.

2. *Status change request*

Claim 1 further recites “wherein the network interface receives a *status change request* from the network and the controller *responds to the*

status change request by moving the barrier.” Ex. 1001, 5:13–15 (emphases added). Claim 22 also recites a similar limitation. *Id.* at 6:37–39.

Petitioner’s contentions

Petitioner explains in detail how Menard describes these limitations, citing Mr. Lipoff’s Declaration for support. Pet. 28–32, 56 (citing Ex. 1008). Petitioner first directs our attention to Figure 8 of Menard, which shows a method that describes the operation of system 100 for receiving door position information and for controlling the door from a remote location. *Id.* (citing Ex. 1003 ¶¶ 1, 69, Fig. 8; Ex. 1008 ¶¶ 111–112). In particular, Menard discloses the following: at step 375, after the user receives notification of the door position status, “the user is presented with one or more options to control system 100” and “[i]n the case that door 40 is open, options may include partially, or fully, closing the door”; at step 380, “the user indicates a selection using the portable wireless device”; at step 385, “the wireless device encodes a message for transmission to system 100 including instructions to operate the door according to the user selection”; and at step 390, “the message is transmitted to system 100,” and “[t]he message may be routed to system 100 on wired or wireless communication networks.” Ex. 1003 ¶ 69, Fig. 8.

Mr. Lipoff testifies “Menard also teaches that when the status change instruction is received from the device on the network that the networked movable barrier operator (e.g., a garage door opener) will ‘caus[e] processor 120 to actuate a particular control.” Ex. 1008 ¶ 115 (emphasis omitted). Mr. Lipoff’s testimony is consistent with Menard’s disclosure. Notably,

Figure 7 of Menard illustrates a block diagram of the functions performed by the programming executing on processor 120 (controller). Ex. 1003 ¶ 58.

“Door programming may include position sensor programming 220 and actuator programming 225,” which “may include door open programming 230 and door close programming 235,” that raise or lower door 40 in response to commands received by processor 120. *Id.* ¶ 61. As Petitioner notes (Pet. 31), “[b]oth door open programming 230 and door close programming 235 may also include programming that executes instructions in accordance with user specified, or predetermined, configurations.” Ex. 1003 ¶ 61.

Having reviewed Petitioner’s explanations and supporting evidence, we are persuaded that Menard discloses “wherein the network interface receives a status change request from the network and the controller responds to the status change request by moving the barrier,” as recited in claims 1 and 22.

Patent Owner’s contentions

Patent Owner counters that Petitioner improperly combines features of different devices or mixes disclosure from multiple distinct embodiments in addressing the limitations of claims 1 and 22. PO Resp. 16–21. In particular, Patent Owner argues that Petitioner relies upon a *pager* embodiment to teach a status request, and relies upon a *cellular telephone* embodiment to teach a status change request. *Id.* Patent Owner avers that “Menard does not teach that the functionality of each of these different devices are interchangeable across all devices” because Menard acknowledges the different capabilities of the different devices, specifically

a *one-way pager* having “no provision for outgoing communications with which to operate the door opener.” *Id.* at 17–18. Patent Owner also contends that features from distinct embodiments cannot be combined to demonstrate anticipation of a claim merely because such a combination would have been “at once envisaged” by a person of ordinary skill in the art, citing *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co. Ltd.*, 851 F.3d 1270, 1274 (Fed. Cir. 2017). PO Resp. 19–21.

We are not persuaded by Patent Owner’s argument that Petitioner improperly combines features of different devices or mixes disclosure from multiple distinct embodiments in addressing claims 1 and 22. Patent Owner’s arguments erroneously rest upon the premise that each of the user communication devices disclosed in Menard (e.g., a two-way pager and a cellular phone) constitutes a separate, distinct embodiment. See PO Resp. 16–21; Ex. 2001 ¶¶ 42, 45.

As described in the Summary of the Invention section of Menard, a cellular telephone, pager, personal digital assistant, and computer are *examples* of communication devices that a user can use for controlling and managing a single door opener or multiple door openers remotely. Ex. 1003 ¶¶ 9–11; see PO Resp. 18 (acknowledging that “Menard describes multiple different devices that can interact with its garage door opener (e.g., the pager and cellular telephone)”). Menard makes clear that the system for controlling and managing *a single door opener* is one embodiment, whereas the “Other Embodiments” are directed to the system for controlling managing *multiple door openers*. Ex. 1003 ¶¶ 13, 18, 19, 70–72.

Notably, Menard discloses, in a single embodiment, a system and a method that allow remote control and management of a door opener using a wired or wireless communication device, which may be “a cellular telephone, a pager, a personal digital assistant, a computer or other device that communicates using a network.” *Id.* ¶¶ 9–11, 13 (“FIG. 2 illustrates a block diagram of one embodiment of the present system”), 18 (“FIG. 7 illustrates one embodiment of programming in accordance with one embodiment of the present system”), 19 (“FIG. 8 illustrates one embodiment of a method in accordance with one embodiment of the present system”).

Menard makes clear that a “user need not specify the communication protocol to be used in *controlling or managing the opener*” because the “opener *receives commands and transmits status information* using either or both of the long range and short range protocols.” *Id.* ¶ 10 (emphases added). “The communication link, whether long range or short range, provides a channel . . . for communicating *instructions from the device to the door opener*,” and “[p]osition *information is transmitted to the device* by a transceiver coupled to the processor.” *Id.* ¶¶ 10–11 (emphases added). Menard thus discloses a number of exemplary communication devices, and then proceeds to describe the capabilities of the disclosed system with respect to such a “device.”

Menard also specifically discloses that transceiver 130 of system 100 is compatible with a plurality of communication protocols, such that system 100 communicates with a cellular telephone, a two-way pager, a PDA, a computer, or other wired or wireless communication device. *Id.* ¶¶ 29, 31,

44, 47. Significantly, Menard discloses that “[o]ther long range and short range communication protocols are also contemplated and *the foregoing examples* are not to be construed as limitations but *merely as examples*.” *Id.* ¶ 46 (emphases added); *see also id.* ¶ 66 (disclosing that processor 120 can transmit information “using all modes of communication”).

Paragraph 50 of Menard similarly describes *examples* of how a one-way pager (in connection with another device, such as a cellular telephone), and a two-way pager (like other two-way communication devices that can receive and transmit messages), request and receive the door position status and operate a *single door opener*. *Id.* ¶ 50. Menard’s “Other Embodiments,” by contrast, disclose how the communication devices communicate with the system when “system 100 is coupled to *multiple door openers*.” *Id.* ¶¶ 70–71 (emphasis added).

To account for each limitation of claims 1 and 22, Petitioner likewise describes examples from Menard of two-way communication devices for controlling and managing a door opener remotely. Pet. 21–32, 47–56. Petitioner did not combine features of different devices. Nor does Petitioner need to combine features of different devices to establish that the challenged claims are anticipated by Menard. For these reasons, we are not persuaded by Patent Owner’s argument that Petitioner improperly combines features of different devices or mixes disclosure from multiple distinct embodiments in addressing claims 1 and 22.

In addition, Patent Owner’s argument that Petitioner relies upon a *pager* to teach a status request and relies upon a *cellular telephone* to teach a

status change request is inapposite. The challenged claims do not require a network client, much less the same network client to send both the status request and the status change request. As discussed above, a two-way pager and a cellular phone are merely *examples* of a wireless communication device that communicates with the system to control and manage a door opener. Ex. 1003 ¶¶ 9–11. We agree with Petitioner and Mr. Lipoff that an ordinarily skilled artisan would have recognized that Menard’s system allows a two-way communication device to request and receive the door position status, and then send a change request over the same network. Pet. 27–32; Reply 2–5; Ex. 1003 ¶¶ 9–11, 44, 50, 69, Fig. 8; Ex. 1014 ¶ 25.

With respect to the “status change request” limitation, Petitioner relies upon Figure 8 of Menard, which teaches how *multiple types of communication “device[s]”* can receive door position information and control the door remotely, not just the cellular telephone, as Patent Owner argues. Pet. 28–32 (citing Ex. 1003 ¶ 69, Fig. 8). Indeed, Menard explains: “the user has a wireless device capable of communicating with transceiver 130”; “the user and system 100 establish a link on a communication channel”; “the user receives notification of the door position information”; and the “door position may be indicated by a pair of lights on a pager,” a “graphical image on a screen, a recognizable audio tone, a recognizable vibration, or any other means of indicating position to a user,” and the user indicates a control selection (e.g., closing the door) using the portable wireless device. Ex. 1003 ¶ 69.

According to Menard, Figure 8 “illustrates *one embodiment* of a method in accordance with *one embodiment* of the present system.” Ex. 1003 ¶ 19 (emphases added). Significantly, during cross-examination regarding the flow chart shown in Figure 8, Dr. Davis conceded that each of the three triggers disclosed in paragraph 50 of Menard, including the *status inquiry*, “would result in this flow chart being exercised.” Ex. 1015, 153:10–154:4. Moreover, Mr. Lipoff testifies that “each of these triggers would result in the steps of Figure 8 being performed.” Ex. 1014 ¶¶ 27–29. Mr. Lipoff also testifies that a person of ordinary skill in the art would have recognized that Menard discloses the same two-way communication device requests and receives a door position status, and then makes a request to change the door position over the same network. *Id.* ¶ 25. Thus, we do not agree with Patent Owner’s argument that Petitioner relies upon a *pager* to teach a status request, and relies upon a *cellular telephone* to teach a status change request.

Furthermore, we are not persuaded by Patent Owner’s argument that “Menard does not teach that the functionality of each of these different devices are interchangeable across all devices” because Menard acknowledges the different capabilities of the different devices, specifically a *one-way pager* having “no provision for outgoing communications with which to operate the door opener.” PO Resp. 17–18 (citing Ex. 1003 ¶ 50). In paragraph 50, Menard merely points out the differences between a one-way pager and a two-way pager: a *one-way pager* can only receive messages, not transmit them, and thus requires “another communication

channel,” such as a “cellular telephone,” to operate the door opener, whereas a *two-way pager* can both receive and transmit messages (similar to other two-way communication devices). Ex. 1003 ¶ 50. Patent Owner conflates a one-way pager with a two-way pager, improperly concluding that a two-way pager cannot send a status inquiry and a status change request. See PO Resp. 17–18.

Mr. Lipoff testifies that an ordinarily skilled artisan would have recognized that Menard discloses the same *two-way* communication device requests and receives a door position status, and then makes a request to change the door position. Ex. 1014 ¶ 25. Such an artisan would have understood that a two-way pager is similar to other two-way communication devices (e.g., a cellular telephone, computer, or PDA). Ex. 1003 ¶¶ 9–11, 29, 44, 50, 69. Menard explains that “a two-way pager network enabl[es] bidirectional communication” and “[u]sing a two way pager, the user may operate the door opener, or operate an actuator, using the reply communication channel of the pager.” *Id.* ¶¶ 44, 50. In fact, Patent Owner concedes that Menard “expressly addresses using the two way pager in opening/closing the door.” PO Resp. 9; Ex 2001 ¶ 30. Accordingly, we are not persuaded by Patent Owner’s argument that “Menard does not teach that the functionality of each of these different devices are interchangeable across all devices” because a *one-way pager* “has no provision for outgoing communications with which to operate the door opener.” See PO Resp. 17–18.

Patent Owner's reliance on *Nidec Motor* also is misplaced. PO Resp. 27–29 (citing *Nidec Motor*, 851 F.3d at 1274 (holding that *Kennametal, Inc. v. Ingersoll Cutting Tool Co.*, 780 F.3d 1376, 1381 (Fed. Cir. 2015) “does not stand for the proposition that a reference missing a limitation can anticipate a claim if a skilled artisan viewing the reference would ‘at once envisage’ the missing limitation”)). As discussed above, a person of ordinary skill in the art would have understood that Menard discloses every claim limitation recited in claims 1 and 22. We do not agree with Patent Owner's argument that there is a “missing limitation.” Again, Menard discloses, in a single embodiment, a system that allows the user to make a status request and receive the status in response using a communication device, and provides multiple *examples* of types of such devices.

For the reasons discussed above, we also do not agree with Patent Owner that it is necessary to combine a two-way pager with a cellular telephone in order for Petitioner to show that Menard discloses each limitation recited in claims 1 and 22.

Even assuming such a combination were necessary, though, Menard expressly discloses that “it will be appreciated that each of the aforementioned devices, namely a cellular telephone, a two-way pager, and a device compatible with BLUETOOTH®, may be combined in a single portable housing.” Ex. 1003 ¶ 47. Similarly, transceiver 130 of system 100 may communicate with devices “on more than one protocol.” *Id.* ¶ 48. Patent Owner's and Dr. Davis' characterization that Menard's disclosure is “much the same as carrying a pager and a cellular telephone inside a

backpack” is speculative and conclusory. PO Resp. 18–19; Ex. 2001 ¶ 42 (emphasis added). Menard never mentions “a backpack,” but instead provides detailed explanations how transceiver 130 of system 100 supports long distance network and short distance network communication, with specific examples of network protocols and network devices, and clearly discloses that device functionality for communicating with the transceiver may be combined. *See, e.g.*, Ex. 1003 ¶ 47.

To the extent Patent Owner is arguing that Menard is non-enabling for such a device, we note that prior art publications and patents are presumed to be enabled. *See In re Antor Media Corp.*, 689 F.3d 1282, 1287–88 (Fed. Cir. 2012); *Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1355 (Fed. Cir. 2003). Patent Owner does not proffer persuasive evidence to show why one of ordinary skill in the art could not have combined the functionalities of a cellular telephone and a two-way pager into “a single portable housing” for controlling the movement of a garage door, as taught by Menard. *See* Ex. 1003 ¶ 47. Nor does Patent Owner explain adequately the basis for such a non-enablement assertion.

Upon consideration of parties’ contentions and supporting evidence, we find that Petitioner has shown sufficiently that Menard discloses “wherein the network interface receives a status change request from the network and the controller responds to the status change request by moving the barrier,” as recited in claims 1 and 22.

3. Conclusion on Anticipation Regarding Claims 1 and 22

In light of the foregoing, we determine that Petitioner has demonstrated by a preponderance of the evidence that claims 1 and 22 are anticipated by Menard.

Dependent Claim 9

Claim 9 depends from claim 1, and further recites “wherein the network interface is a TCP/IP network interface.” Ex. 1001, 5:31–32. In this regard, Petitioner notes that Menard discloses transceiver 130 (network interface) is coupled to processor 120 and to short range and long range networks, including the Internet. Pet. 25–27, 37–39, 42–44 (incorporating its analysis in connection with the “network interface” limitations of claims 1 and 4) (citing Ex. 1003 ¶¶ 39, 44, 59, Figs. 2–4, claims 13 and 25; Ex. 1008 ¶¶ 167, 169–173). Menard discloses that its “processor includes programming having instructions for generating a web page accessible from the Internet.” Ex. 1003, claim 13. Menard further discloses “a WAP server generates data that can be accessed using an Internet browser.” *Id.* ¶ 59. Mr. Lipoff testifies that a person of ordinary skill in the art would have understood that “data that can be accessed using an Internet browser is sent over TCP/IP.” Ex. 1008 ¶ 170.

Based on the evidence in this entire trial record, we find Petitioner has demonstrated that Menard discloses “wherein the network interface is a TCP/IP network interface,” as recited in claim 9.

Patent Owner argues that Menard’s disclosure of “communicating using web pages over the Internet” does not necessarily require TCP/IP

because it is possible that either TCP/IP or UDP/IP could have been used. PO Resp. 21–26 (Ex. 2001 ¶¶ 49–55; Ex. 2002).

There is no dispute that Menard discloses that transceiver 130 (network interface) coupled to processor 120, among other things, has the capability of communicating over the Internet. Ex. 1003 ¶ 44, Fig. 2. And Menard discloses “the processor includes programming having instructions for generating a web page accessible from the Internet” (*id.* at claim 13), and that “a WAP server generates data that can be accessed using an Internet browser” (*id.* ¶ 59). Mr. Lipoff provides expert testimony as to how a person of ordinary skill in the art at the time of the invention would have understood these disclosures in Menard.

Specifically, Mr. Lipoff testifies that “the use of TCP/IP as a means to connect a device to the Internet was common knowledge years before the filing of the ’977 patent.” Ex. 1008 ¶ 169. Mr. Lipoff also testifies that a person of ordinary skill in the art would have understood that “the Internet uses the TCP and IP protocols, commonly referred to as ‘TCP/IP,’” and that a person of ordinary skill in the art would have recognized that “Menard’s teaching of connecting to the Internet as disclosing the use of the TCP and IP protocols, and thus, ‘TCP/IP.’” *Id.* ¶ 167. Mr. Lipoff further testifies that such an artisan would have understood that “data that can be accessed using an Internet browser is sent over TCP/IP.” *Id.* ¶ 170.

Additionally, Mr. Lipoff testifies that web pages traveling over the Internet using TCP/IP was known in the art, and HTTP uses “port 80,” a TCP/IP port. Ex. 1014 ¶ 54. Mr. Lipoff also testifies that “there were no

Internet web servers in use [at the time of the invention] that did not support and use TCP” because, while a user before 2003 “could have changed the default port 80 by modifying the URL, provided that the web server supported those ports, the new ports (*e.g.*, 8080 or 888 for non-admin UNIX web servers, or 443 for HTTPS) were also all TCP ports, and the traffic would thus necessarily flow over TCP/IP.” *Id.* ¶ 55.

We credit Mr. Lipoff’s testimony (Ex. 1008 ¶¶ 167, 169, 170; Ex. 1014 ¶¶ 54–55), as it is consistent with the evidence of record. *See, e.g.*, Ex. 1019, 263; Ex. 1020, 361; Ex. 1021, 354; Ex. 1022, 579; Ex. 1023, 915; Ex. 1026, 97.⁷ Further, Dr. Davis approved a 1997 thesis that teaches “[t]he Browser System will need access to the internet in order to retrieve the requested web pages,” and “the Browser must be able to support TCP/IP to establish connections with web servers on the internet.” Ex. 1024 § 2.2.2. As the evidence of record also shows, by definition, the Internet includes a plurality of networks linked together using the TCP/IP protocols and TCP/IP is the standard for transmitting information over the Internet. For example, the Internet Dictionary (1995) defines the “Internet” as “[a]n international network of well over ten thousand networks linked *using the TCP/IP protocols.*” Ex. 1026, 97 (emphasis added). The Webster’s II New College Dictionary (1995) also defines the “Internet” as “[a]n interconnected system of networks that connects computers around the world *via the TCP/IP*

⁷ The citations refer to the original page numbers, not the page numbers added by Petitioner.

protocol.” Ex. 1022, 579 (emphasis added). The IBM Dictionary of Computing (1994) further defines the “Internet” as “[a] wide area network connecting thousands of disparate networks in industry, education, government, and research. *The Internet network uses TCP/IP as the standard for transmitting information.*” Ex. 1021, 354 (emphasis added).

Based on the evidence before us, we agree with Mr. Lipoff that a person of ordinary skill in the art would have understood that Menard discloses a TCP/IP network interface. Ex. 1008 ¶¶ 167, 169, 170; Ex. 1014 ¶¶ 54–55. For the foregoing reasons, we find Petitioner has demonstrated by a preponderance of the evidence that Menard anticipates claim 9.

Other Claims—Dependent Claims 2–4, 6–8, 10, 11, and 23–25

Claims 2–4 and 6–8, 10, and 11 depend from claim 1, and claims 23–25 depend from claim 22. Petitioner has accounted for the limitations further recited in each of these claims. Pet. 32–59. For example, Petitioner asserts that Menard discloses a push button control unit (push button switch 65) for the movable barrier operator (garage door opener 10), as required by claim 2. *Id.* at 32–34 (citing Ex. 1003 ¶¶ 2, 6, Fig. 1). Petitioner also explains that one of ordinary skill in the art would have understood “Menard discloses a serial interface between the push button control unit and the garage door opener,” as required by claim 3. *Id.* at 35–37 (citing Ex. 1003, Fig. 1; Ex. 1008 ¶ 134).

As to claims 4, 6–8, 10, and 24, Petitioner notes that Menard’s transceiver 130 is capable of connecting processor 120 to short distance networks (e.g., HomeRF and IEEE 802.11 WAN) and long distance

networks, including a telephone network. *Id.* at 37–44, 57–58 (citing Ex. 1003 ¶¶ 28, 39, 40, 44, 59, Figs. 2–3). The telephone network may include communication using an intranet or the Internet, which was known to use TCP/IP protocol, and coupling to such a network may be accomplished using a digital subscriber line (DSL) and a modem. *Id.* (citing Ex. 1008 ¶¶ 144–177). Mr. Lipoff testifies that one with ordinary skill in the art would have understood that, in order to couple to the DSL line, Menard’s modem must necessarily be a DSL modem, as required by claims 4, 6, and 24, and that Menard’s transceiver 130 is connected to a home digital network (HomeRF or WiFi), as required by claims 7 and 8. Ex. 1008 ¶¶ 144–162. Mr. Lipoff further testifies that Menard discloses transceiver 130 includes a network interface connecting processor 120 to the Internet, as required by claim 10. *Id.* ¶¶ 174–177.

With respect to claims 11 and 25, Petitioner notes that Menard teaches that “typical garage door openers” utilize access codes to “prevent operation of the door by an unauthorized person,” and Menard’s system 100 includes security functions or authorization systems “to ensure that any detected compatible device is authorized to exercise control over system 100.” Pet. 45–46, 58–59 (citing Ex. 1003 ¶¶ 3, 72–74). Mr. Lipoff testifies that Menard discloses an arrangement for establishing authorization (security functions or authorization systems) for received status change requests (e.g., open/close commands) and requested status, as required claims 11 and 25. Ex. 1008 ¶¶ 178–88, 226–30.

Patent Owner does not address the limitations expressly recited in dependent claims 2–4, 6–8, 10, 11, and 23–25 with separate, specific arguments, but rather relies upon its arguments in connection with independent claims 1 and 22. We have addressed those arguments in our analysis above, and determine those arguments are unavailing here for the same reasons discussed above.

Based on the evidence in this entire trial record, we are not persuaded by Patent Owner’s argument for parent claims 1 and 22 that Petitioner relies upon multiple distinct systems. Rather, we find that Petitioner has shown sufficiently that Menard describes every limitation in claims 2–4, 6–11, and 23–25.

In light of the foregoing, we determine that Petitioner has demonstrated by a preponderance of the evidence that independent claims 1 and 22, as well as dependent claims 2–4, 6–11, and 23–25, are anticipated by Menard.

E. Obviousness over Menard and Lee

Petitioner additionally asserts that claims 11 and 25 are unpatentable under § 103(a) as obvious over Menard and Lee. Pet. 59–67. Claim 11 recites “an arrangement for establishing authorization for received status change requests,” and claim 25 recites “an arrangement for establishing authorization for requested status.” Ex. 1001, 5:35–37, 6:44–45.

In this regard, Petitioner argues that Menard discloses “[s]ecurity systems or authorization systems [that] are included in system 100 to ensure

that any detected compatible device is authorized to exercise control over system 100” and to “configure the authority of multiple inferior users over multiple door openers 10, each coupled to processor 120, using system 100.” Pet. 59–60 (incorporating Petitioner’s analysis in connection with the anticipation ground) (citing Ex. 1003 ¶¶ 72, 74). Petitioner also argues that, although Menard discloses the basics of authorization and security using an access code to access barrier movement operators, Lee describes various barrier movement operator authentication systems in more detail. *Id.* at 60–67 (citing Ex. 1003 ¶ 3; Ex. 1007). Petitioner contends that Lee teaches restricting access to movable barrier operators through both access codes identifying the device and passwords identifying the user of the device. *Id.* (citing Ex. 1007, 3:28–37, 6:13–17, 11:33–35, 41–46, 12:27–28, Fig. 12; Ex. 1008 ¶ 234). As support, Mr. Lipoff testifies that Lee discloses “validation of the user’s password on the remote device before sending ‘the identification signal’ to the barrier movement operator,” and an ordinarily skilled artisan would have understood that “the barrier movement operator verifies the password prior to permitting access.” Ex. 1008 ¶ 235 (emphasis omitted). Mr. Lipoff further testifies that such an artisan would have implemented Lee’s security features in Menard’s system providing a higher level of security against unauthorized entry. *Id.* ¶ 239.

Patent Owner does not challenge Petitioner’s assertions or Mr. Lipoff’s testimony regarding this obviousness ground. *See generally* PO Resp. We credit Mr. Lipoff’s un rebutted testimony (*id.* ¶¶ 234–235, 239) as Mr. Lipoff has provided reasoned explanations and citations to the

prior art of record that support his testimony. *See, e.g.*, Ex. 1003 ¶¶ 3, 72, 74; Ex. 1007, 3:28–37, 6:13–17, 11:33–35, 41–46, 12:27–28, Fig. 12.

Based on the evidence in this entire trial record, we find Petitioner has established that the combination of Menard and Lee teaches “an arrangement for establishing authorization for received status change requests,” as recited in claim 11, and “an arrangement for establishing authorization for requested status,” as recited in claim 25. We also find Petitioner has articulated a sufficient reason to combine the teachings of Menard and Lee.

In light of the foregoing, we determine that Petitioner has demonstrated by a preponderance of the evidence that claims 11 and 25 are unpatentable under § 103(a) as obvious over Menard and Lee.

F. Obviousness over Menard and Held

Petitioner asserts that claim 5 is unpatentable under 35 U.S.C. § 103(a) as obvious over Menard and Held. Pet. 25–27, 37–39, 67–71 (incorporating its analysis in connection with the “network interface” and “modem” limitations of claims 1 and 4). Claim 5 depends from claim 4, and further recites “wherein the modem is a *cable* modem.” Ex. 1001, 5:23–24 (emphasis added).

Petitioner avers that Menard discloses transceiver 130 connecting processor 120 to the Internet, and “[c]oupling to such a network may be accomplished, for example, using . . . a T-1, an ISDN, a DSL line, or other high speed broadband connection, or . . . a dial-up connection using a

modem.” Ex. 1003 ¶ 44, Figs 2–4; see Pet. 67–71. Petitioner contends that, although Menard does not explicitly list a cable modem, cable modems were widely known. *Id.* at 70. Petitioner notes that Held discloses “as a means of ‘looking for an additional source of revenue, several cable television (CATV) companies initiated broadband access trials to the Internet during 1995. Each of these trials involved the use of cable modems, which enable a personal computer (PC) to access the Internet via a common CATV coaxial cable at operating rates up to tens of millions of bits per second.’” *Id.* (citing Ex. 1005, 761) (emphases omitted). Citing to Mr. Lipoff’s testimony (Ex. 1008 ¶¶ 254–261), Petitioner argues that, in view of Held (Ex. 1005, 761), a person with ordinary skill in the art would have replaced an expensive ISDN or DSL line, or upgraded their slow “dial-up modem” connection, with *cable modems*, which were well established means of providing a high speed broadband connection. Pet. 67–71.

Based on the evidence in this entire trial record, we find Petitioner has established that the combination of Menard and Held teaches “wherein the modem is a cable modem,” as recited in claim 5. We also find Petitioner has articulated a sufficient reason to combine the teachings of Menard and Held. Patent Owner does not challenge Petitioner’s assertions regarding this obviousness ground. *See generally* PO Resp.

In light of the foregoing, we determine that Petitioner has demonstrated by a preponderance of the evidence that claim 5 is unpatentable under § 103(a) as obvious over Menard and Held.

G. Obviousness over Menard and the HomeRF Specifications

Petitioner asserts that claim 3 is unpatentable under 35 U.S.C. § 103(a) as obvious over the combination of Menard and the HomeRF Specifications. Pet. 71–74. Claim 3 depends from claim 1, and further recites “a serial interface between the push button control unit and the network interface.” Ex. 1001, 5:18–20. Petitioner notes that Menard explicitly incorporates either HomeRF Specification by reference,⁸ and that Menard repeatedly lists “HomeRF” as one of the supported network protocols. Pet. 71 (citing Ex. 1003 ¶¶ 28, 40, 45). Petitioner further points out that the HomeRF v2.01 Specification explains that “the data is transmitted on-air serially.” *Id.* at 73 (citing Ex. 1004 ¶ 669) (emphasis omitted). Mr. Lipoff testifies that an ordinarily skilled artisan would have understood that transmitting the data “on-air serially” discloses a wireless serial interface between the remote control transmitter and the network interface. Ex. 1008 ¶ 269. Mr. Lipoff also explains that such an artisan would have appreciated that the combination of Menard and the HomeRF Specifications teaches a serial interface between the push button control unit and the network interface. *Id.* ¶ 271.

⁸ Petitioner argues that Menard’s reference to “specification 2.1” “was a typographical error, and was intended to either incorporate v2.0 or v2.01.” Pet. 71 & n.13 (citing Ex. 1003 ¶ 45). According to Petitioner, both Specifications “have identical relevant disclosures.” *Id.*

Based on the evidence in this entire trial record, we find Petitioner has established that the combination of Menard and the HomeRF Specifications teaches “a serial interface between the push button control unit and the network interface,” as recited in claim 3. We also find Petitioner has articulated a sufficient reason to combine the teachings of Menard and the HomeRF Specifications. Patent Owner does not challenge Petitioner’s assertions regarding this obviousness ground. *See generally* PO Resp.

In light of the foregoing, we determine that Petitioner has demonstrated by a preponderance of the evidence that claim 3 is unpatentable under § 103(a) as obvious over Menard and the HomeRF Specifications.

III. CONCLUSION

For the foregoing reasons, we determine that Petitioner has demonstrated by a preponderance of the evidence that claims 1–11 and 22–25 of the ’977 patent are unpatentable.

IV. ORDER

For the foregoing reasons, it is
ORDERED that claims 1–11 and 22–25 of the ’977 patent are 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.

IPR2017-01137
Patent 6,998,977 B2

For PETITIONER:

Dion Bregman
Jason White
Michael Lyons

MORGAN, LEWIS & BOKIUS LLP
TechtronicIPRs@morganlewis.com

For PATENT OWNER:

W. Karl Renner
Joshua A. Griswold
Jeremy J. Monaldo
Dan Smith

FISH & RICHARDSON P.C.
IPR39907-000151P1@fr.com
PTABInbound@fr.com