KeyCite Yellow Flag - Negative Treatment

Distinguished by Taiwan Semiconductor Manufacturing Company, Ltd. v. Godo Kaisha IP Bridge 1, Patent Tr. & App. Bd., March 12, 2018

818 F.3d 1293
United States Court of Appeals,
Federal Circuit.

DELL INC., Appellant

v.

ACCELERON, LLC, Cross–Appellant.

Nos. 2015–1513, 2015–1514.
|
March 15, 2016.

Synopsis
Background: Challenger filed petition for inter partes review of patent disclosing computer-network appliance containing several hardware modules that could be removed and replaced while the appliance remained on. The United States Patent and Trademark Office, Patent Trial and Appeal Board, 2014 WL 7326580, confirmed validity of some claims and determined that two claims were anticipated. Parties filed cross-appeals.

Holdings: The Court of Appeals, Taranto, Circuit Judge, held that:

[1] reference did not anticipate patent claim, and

[2] patent owner was denied procedural rights during inter partes review.

Affirmed in part, vacated in part, and remanded.

West Headnotes (8)

[1]   **Patents** ⬩ Novelty;anticipation

        Patents ⬩ Obviousness;lack of invention

        Court of Appeals reviews an anticipation determination and factual findings underlying a non-obviousness determination for substantial evidence, and reviews an ultimate determination of non-obviousness de novo.

        Cases that cite this headnote

[2]   **Patents** ⬩ Construction and Operation of **Patents**

        As to claim construction, when there is no dispute about findings or evidence of facts extrinsic to the patent, whether facts about outside-the-patent understandings of technical words or other facts, the Court of Appeals conducts a de novo review of the Patent Trial and Appeal Board's (PTAB) determination of the broadest reasonable interpretation of the claim language.

2 Cases that cite this headnote

[3] **Patents** Particular products or processes

Finding of **Patent** Trial and Appeal Board (PTAB), that reference describing network interface card that coordinated traffic between multiple web server processing cards over one or more networks did not disclose central-processing-unit (CPU) module required by claim in **patent** disclosing computer-network appliance containing several hardware modules that could be removed and replaced while the appliance remained on, and thus did not anticipate claim, was supported by substantial evidence; expert explained that, even if reference taught that CPU could boot from software located somewhere on network, there was no specific teaching or suggestion to boot web server cards from network attached storage (NAS) or to instruct NAS to locate an operating system from which to boot.

Cases that cite this headnote

[4] **Patents** Computers and Software

Claim requiring "a microcontroller module and a dedicated ethernet path, wherein the dedicated ethernet path is separate from a switched fast ethernet connection and provides the microcontroller module with a connection to remotely poll the CPU module, the power module and the ethernet switch module," in **patent** disclosing computer-network appliance containing several hardware modules that could be removed and replaced while the appliance remained on, could only be reasonably construed to require that microcontroller module actually be configured for remote polling, and thus it was not enough that there be an ethernet path that would provide connection for polling if microcontroller were configured for, and engaged in, remote polling of the three identified modules.

Cases that cite this headnote

[5] **Patents** Inter partes review

A **patent** owner is entitled to notice of and a fair opportunity to meet the grounds of rejection during inter partes review. 5 U.S.C.A. § 554(b)(3).

7 Cases that cite this headnote

[6] **Patents** Inter partes review

Patent owner was denied procedural rights during inter partes review of **patent** disclosing computer-network appliance containing several hardware modules that could be removed and replaced while appliance remained on, when **Patent** Trial and Appeal Board (PTAB) relied on factual assertion introduced into proceeding at oral argument, after **patent** owner could meaningfully respond; **patent** owner was given no prior notice of challenger's contention that mounting mechanisms in reference constituted caddy performing same function as caddies in **patent** claim, and oral argument presented no opportunity for **patent** owner to supply evidence in response, and PTAB relied on contention for essential part of anticipation ground of decision. 5 U.S.C.A. § 554(b)(3).

12 Cases that cite this headnote

[7] **Patents** In general;utility

US **Patent** 6,157,974, US **Patent** 6,757,748. Cited.

Cases that cite this headnote

[8]   **Patents** 🔑 In general;utility

US **Patent** 6,948,021. Construed and Valid in part.

Cases that cite this headnote

Attorneys and Law Firms

*1294 Paula Heyman, Baker Botts, LLP, Austin, TX, argued for appellant. Also represented by Kevin J. Meek, Catherine Garza, Brett J. Thompsen.

Norman Andrew Crain, Thomas Horstemeyer LLC, Atlanta, GA, argued for cross-appellant. Also represented by Robert Gravois, Kenneth Anthony Knox.

Before MOORE, TARANTO, and HUGHES, Circuit Judges.

Opinion

TARANTO, Circuit Judge.

Acceleron, LLC owns U.S. **Patent** No. 6,948,021, which discloses a computer-network appliance containing several hardware modules that can be removed and replaced while the appliance remains on. The **Patent** Trial and Appeal Board of the **Patent** and Trademark Office instituted inter partes review of the #021 **patent** based on Dell Inc.'s petition under 35 U.S.C. § 311 *et seq.* After conducting the review, the Board confirmed the validity of claims 14–17 and 34–36. Dell appeals those rulings, primarily challenging the Board's finding that the key prior-art reference fails to disclose a particular claim element. Acceleron, for its part, appeals the Board's cancellation of claims 3 and 20 as anticipated. As to claim 20, Acceleron challenges the Board's claim construction, ***1295** and as to claim 3, Acceleron challenges as procedurally improper the Board's reliance on a basis first raised during the oral argument before the Board.

We affirm the Board's confirmation of claims 14–17 and 34–36. We vacate the Board's cancellation of claim 20 and remand for reconsideration of anticipation under the correct claim construction. We vacate the cancellation of claim 3 and remand for reconsideration of anticipation as appropriate.

BACKGROUND

The #021 **patent** discloses a computer-network appliance containing a number of hot-swappable components, meaning that those components can be removed and replaced without turning off or resetting the computer system as a whole. #021 **patent**, col. 1, lines 13–16, 26–28. Figure 1 is illustrative:
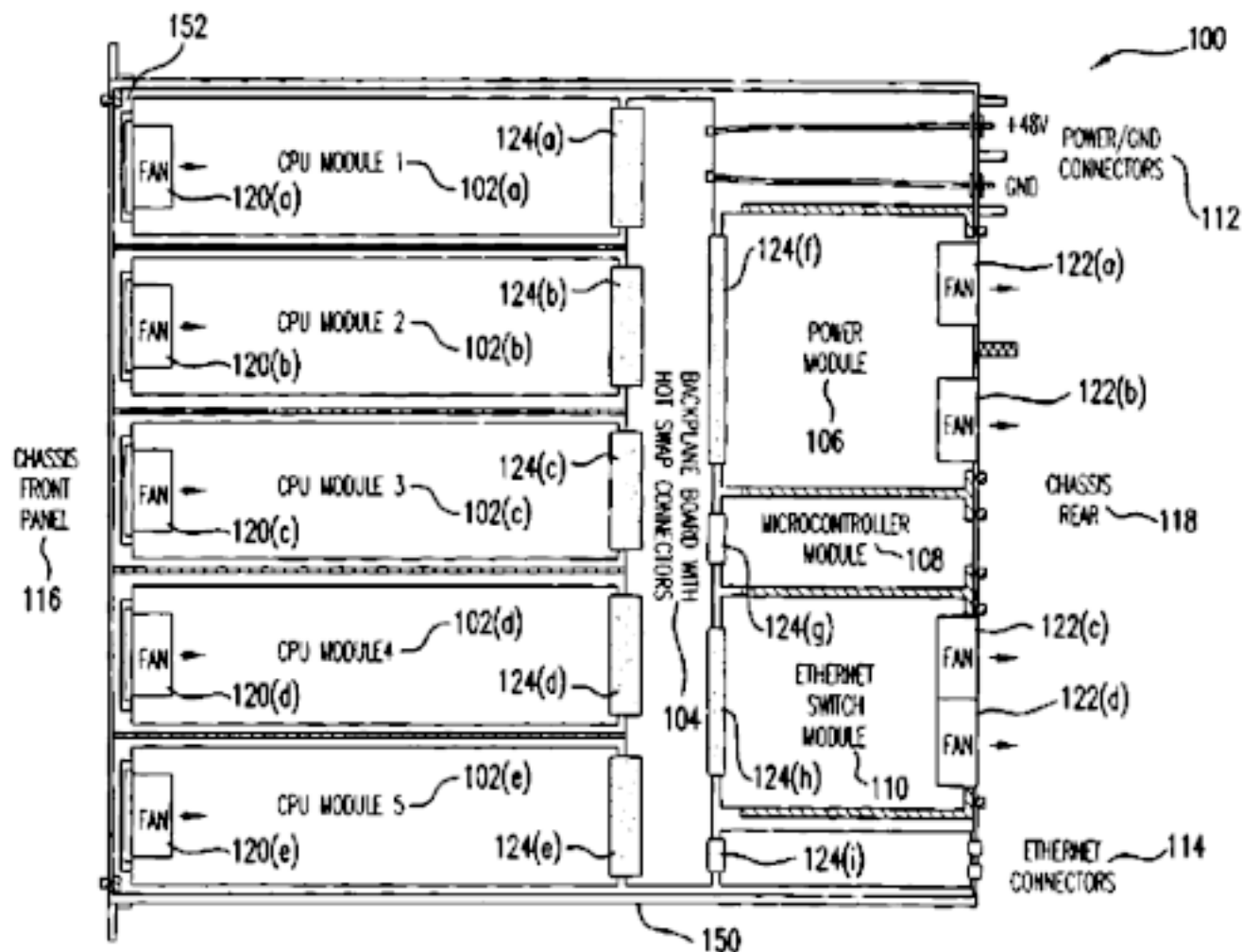
FIG. 1 ('021 PATENT)

As shown in Figure 1, the hot-swappable components disclosed in the #021 patent include central-processing-unit (CPU) modules 102(a)-(e), a power module 106, a microcontroller module 108, and an ethernet switch module 110. Each of those modules is connected to a common backplane board 104. A chassis 150 encloses the board and collection of modules. The chassis may also contain caddies 152 that hold the modules while providing air flow from the front to the rear of the chassis. *Id.,* col. 2, lines 5–6; *id.,* col. 3, lines 32–34.

Claim 20, one of the claims at issue here, reads:

20. A computer network appliance comprising:

a hot-swappable CPU module;

a hot-swappable power module;

a hot-swappable ethernet switch module; and

a backplane board having a plurality of hot swap mating connectors; and

a microcontroller module and a dedicated ethernet path, wherein the dedicated ethernet path is separate from a switched fast ethernet connection and provides the microcontroller module with a connection to remotely poll the ***1296** CPU module, the power module and the ethernet switch module;

wherein each of the CPU module, the power module and the ethernet switch module includes a hot swap connector for connecting with a specific hot swap mating connector of the backplane board.

Id., col. 10, lines 18–33.

Claim 1, which is not itself at issue here, is similar to claim 20 in all ways relevant to this appeal (though it does not require a microcontroller module). *Id.,* col. 9, lines 2–15. Claim 3, which is at issue here, depends indirectly (via claim 2) on claim 1 and adds:

wherein the chassis comprises caddies providing air flow from the front to the rear of the chassis.

Id., col. 9, lines 20–22.

The other claims at issue here involve the #021 **patent**'s disclosure of interactions between the claimed computer-network appliance and other devices on the network to which the appliance is connected. In particular, the **patent** describes a CPU module that includes a basic input/output system (BIOS) for, among other things, instructing a "network attached storage (NAS)" to locate an operating system from which to boot the CPU module remotely. *Id.,* col. 2, lines 23–29. Claim 14, the key NAS claim at issue here, depends on claim 1 and adds:

wherein a CPU module comprises hardware BIOS for configuring the CPU module and instructing a network attached storage (NAS) to locate an operating system (OS) from which to boot.

Id., col. 9, lines 63–67. Claims 15–17 are similar to claim 14 in that they involve "a CPU module [ ] configured to boot remotely from an OS located in an NAS," *id.,* col. 10, lines 1–11, as are claims 34–36, which involve "locating an OS in an NAS to boot the CPU module," *id.,* col. 12, lines 24–38.

Dell petitioned for inter partes review of the #021 **patent** under 35 U.S.C. § 311(a). As relevant here, Dell argued that U.S. **Patent** No. 6,757,748 to Hipp anticipates claims 3, 14–17, and 20 and that claims 34–36 would have been obvious over Hipp in view of U.S. **Patent** No. 6,157,974 to Gasparik. Gasparik's teachings are not at issue in this appeal.

The primary reference, Hipp, describes a network interface card that coordinates traffic between multiple web server processing cards over one or more networks. #748 **patent**, col. 2, lines 21–23. Each web server processing card is a single-board computer, *id.,* col. 7, line 58, and includes a BIOS with instructions for sending information from a program to a hardware device, *id.,* col. 10, lines 47–51. Hipp also discloses a storage server providing "network attached storage (NAS)," *id.,* col. 5, lines 35–36, chip sets on the web server processing cards capable of booting from a local-area network, *id.,* col. 9, lines 61–62, and web server processing cards capable of running on different operating systems, *id.,* col. 8, lines 23–30.

Hipp's Figure 12 shows a chassis encasing web server processing cards 132–42 and 32 and power supplies 280:
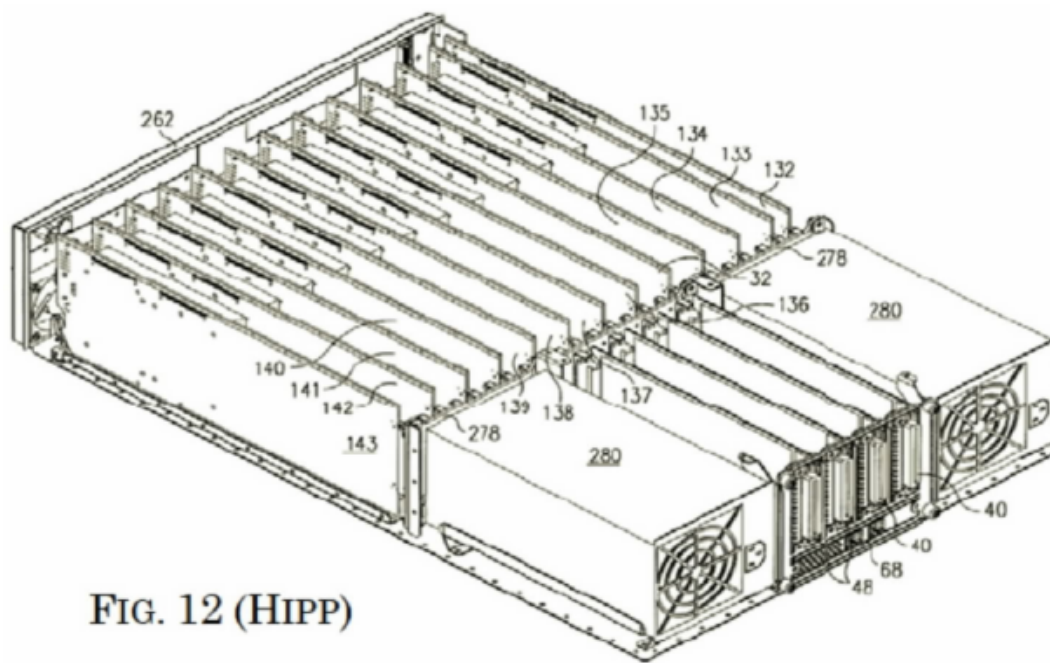
FIG. 12 (HIPP)

*1297 *Id.,* fig. 12; *id.,* col. 16, lines 6–13, 62–64. The chassis also includes power-supply mounting mechanisms 278. *Id.,* col. 16, lines 62–64. An articulating door 262 is connected to the front of the chassis. *Id.,* col. 16, lines 10–15. In its petition, Dell argued that Hipp's articulating door 262 performs the same function as the caddies in claim 3 of the #021 patent.

The Board, exercising authority delegated by the PTO Director, 37 C.F.R. § 42.4(a), instituted review of the claims listed above (among others). The Board then conducted the review under 35 U.S.C. §§ 6(b)(4), 316(c). Acceleron submitted its post-institution "patent owner response," as expressly authorized by 37 C.F.R. § 42.120, arguing the validity of the claims at issue. Dell submitted a reply maintaining its invalidity position, as implicitly authorized by 37 C.F.R. § 42.24(c)(1). In that reply, Dell argued that the caddies required by claim 3 are found not only in Hipp's articulating door 262 (previously argued) but also in Hipp's power-supply mounting mechanisms 278 (newly argued). Acceleron requested a conference call with the Board to address invalidity arguments newly raised in Dell's reply and to seek authorization to move to strike those arguments or, in the alternative, permission to file a sur-reply. The Board refused to hold a conference call and denied Acceleron authorization to move to strike.

The Board heard oral argument, as authorized by 35 U.S.C. § 316(a)(10) and 37 C.F.R. § 42.70. During the oral argument, Dell continued to rely on Hipp's articulating door 262 and power supply mounting mechanisms 278 as caddies, but it also added a new argument. For the first time it contended that Hipp's Figure 12 shows (unlabeled) "slides" located below the power supplies 280 and that such slides also constitute caddies. Acceleron disagreed with that contention on its merits and also objected on the procedural ground that Dell had never before identified the alleged slides as caddies.

In its final written decision under 35 U.S.C. § 318(a), the Board determined, among other things, that claims 14–17 survived Dell's anticipation challenge and claims 34–36 survived Dell's obviousness challenge, but that claims 3 and 20 are anticipated by Hipp. *Dell Inc. v. Acceleron, LLC,* IPR2013–440, 2014 WL 7326580, at *14 (PTAB Dec. 22, 2014). As to the upheld claims: The Board found that Hipp does not meet the claim requirement of a BIOS programmed to instruct "a network ***1298** attached storage (NAS)" to locate an operating system from which to boot a CPU module. On that basis the Board upheld claim 14. Finding that Dell made no materially different arguments for claims 15–17 and 34–36, the Board upheld those claims too.

The Board found that claim 20 is anticipated by Hipp. The Board concluded that claim 20 does not require the microcontroller module to be programmed for remote polling, but requires only that the claimed dedicated ethernet path

would allow remote polling if the microcontroller module were so programmed. Under that construction, the Board found that Hipp meets the claim element involving polling because Hipp's disclosed 12C bus could be used for polling.

The Board found that claim 3 is anticipated by Hipp. The Board relied exclusively on its agreement with Dell's contention that Hipp Figure 12 shows "slides"—the Board used a plural—that are caddies as required by claim 3. *Dell,* 2014 WL 7326580, at *6. It concluded that Dell had pointed to that structure in Figure 12 in its reply and therefore rejected Acceleron's argument that Dell's contention was improperly presented for the first time at oral argument and therefore should be disregarded.

Dell appeals under 35 U.S.C. § 319, challenging the Board's confirmation of claims 14–17 and 34–36. Acceleron cross-appeals the cancellation of claim 20 and claim 3. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

DISCUSSION

 [1]   **[2]**   We review an anticipation determination and factual findings underlying a non-obviousness determination for substantial evidence, and we review an ultimate determination of non-obviousness de novo. *Belden Inc. v. Berk–Tek LLC,* 805 F.3d 1064, 1073 (Fed.Cir.2015); *In re Gleave,* 560 F.3d 1331, 1334–35 (Fed.Cir.2009). As to claim construction, "[t]here being no dispute here about findings or evidence of facts extrinsic to the patent, whether facts about outside-the-patent understandings of technical words or other facts, we conduct a de novo review of the Board's determination of the broadest reasonable interpretation of the claim language." *Straight Path IP Grp., Inc. v. Sipnet EU S.R.O.,* 806 F.3d 1356, 1360 (Fed.Cir.2015). We review the Board's procedures for compliance with the Administrative Procedure Act, 5 U.S.C. § 551 *et seq. See Belden,* 805 F.3d at 1080.

We first consider the Board's finding as to the teaching of Hipp relevant to claims 14–17 and 34–36. We then review the Board's rulings on claim 20 and claim 3.

A

 [3]   The Board found that Hipp does not disclose a CPU module that includes a BIOS for instructing a "network attached storage" to locate an operating system from which to boot the CPU module, as required by claim 14. That finding is supported by substantial evidence, and we therefore affirm the Board's non-anticipation ruling as to claim 14 and claims 15–17 and its non-obviousness ruling as to claims 34–36.

We begin with claim 14. The Board accepted Dell's contention that Hipp discloses (a) a CPU module ("web server processing card") that includes a BIOS, can run on different operating systems, and can boot from a local-area network and (b) a server 54 that "provides network attached storage (NAS)" among the devices on the network. *See Dell,* 2014 WL 7326580, at *8 (citing Hipp, col. 5, lines 35–38; *id.,* col. 8, lines 26–30; *id.,* col. 9, lines 61–62). But the Board had ample evidence to find those facts not to be enough ***1299** to meet the key claim 14 requirement at issue.

Acceleron's expert, Mr. Putnam, explained that, even if Hipp teaches that the CPU can boot from software located somewhere on the network, "there is no specific teaching or suggestion [in Hipp] to boot the web server cards *from the NAS* or to instruct *the NAS* to locate an operating system from which to boot." J.A. 1768, ¶ 60 (emphases added). No evidence required the Board to reject Mr. Putnam's reading of Hipp. Dell's expert, Dr. Horst, did not establish the contrary. Indeed, he observed that devices on the Hipp network other than the NAS—a non-volatile storage device, legacy system, and application server—each could store software for the booting. And Dell agrees that a skilled artisan would understand "network attached storage" in Hipp (as in the #021 patent) to refer to a specific kind of storage device, not to cover any device on the network that stores information. Oral Arg. at 1:30–2:06.

Thus, the Board could properly find that Hipp does not explicitly or implicitly describe its web server processing cards as programmed to be capable of remotely booting from the NAS. For anticipation purposes, the absence of such a teaching makes it immaterial whether, as Dell contends, a user of the Hipp system could modify the system to activate such remote booting. *See Nazomi Commc'ns, Inc. v. Nokia Corp.,* 739 F.3d 1339, 1345–47 (Fed.Cir.2014); *Typhoon Touch Techs., Inc. v. Dell, Inc.,* 659 F.3d 1376, 1380–81 (Fed.Cir.2011); *Finjan, Inc. v. Secure Computing Corp.,* 626 F.3d 1197, 1204–05 (Fed.Cir.2010); *Fantasy Sports Props., Inc. v. Sportsline.com, Inc.,* 287 F.3d 1108, 1118–19 (Fed.Cir.2002). We affirm the Board's finding that Hipp does not anticipate claim 14.

The Board determined that Hipp does not anticipate claims 15–17 for essentially the same reasons. *Dell,* 2014 WL 7326580, at *10. We affirm that determination, because Dell did not meaningfully present a challenge to claim 15 separate from its claim 14 challenge. Although Dell now contends that textual differences between claims 14 and 15 required the Board to conduct independent analyses, Dell did not, in its petition to the Board, seek different constructions for those two claims or identify how any differences mattered for purposes of the anticipation analysis. Nor, after institution, did Dell argue anticipation separately for claims 14 and 15. Because Dell presented claims 14 and 15 as rising and falling together before the Board, the Board did not err in analyzing them together and drawing the same conclusion for claim 15 as for claim 14. And because claims 16 and 17 depend on claim 15, they too are not anticipated.

The Board likewise determined that claims 34–36 would not have been obvious over Hipp and Gasparik for the same reasons that Hipp did not anticipate claim 14. Before the Board, Dell did not develop an argument for the invalidity of claims 34–36 separate from its arguments concerning claims 14–17. *See* Oral Arg. at 7:48–8:36. For that reason, we also affirm the Board's conclusion that those claims would not have been obvious over Hipp and Gasparik.

B

 [4]   Claim 20 requires "a microcontroller module and a dedicated ethernet path, wherein the dedicated ethernet path is separate from a switched fast ethernet connection and provides the microcontroller module with a connection *to remotely poll* the CPU module, the power module and the ethernet switch module." #021 **patent**, col. 10, lines 24–29 (emphasis added). As Dell and Acceleron agree, the dedicated ethernet path itself is merely a ***1300** conduit: it does not remotely poll but instead provides a connection for the microcontroller module to remotely poll. Acceleron contends that claim 20 can only be reasonably construed to require that the microcontroller module actually be configured for remote polling. Dell contends, and the Board concluded, that it is enough that there be an ethernet path that would provide a connection for polling if the microcontroller were configured for, and engaged in, remote polling of the three identified modules. We agree with Acceleron.

The Board's construction runs counter to the claim-construction principle that meaning should be given to all of a claim's terms. *Bicon, Inc. v. Straumann Co.,* 441 F.3d 945, 950 (Fed.Cir.2006); *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.,* 381 F.3d 1111, 1119 (Fed.Cir.2004). As Dell has conceded, the Board's reading of claim 20 denies any substantial meaning to "remotely poll." Oral Arg. at 18:30–19:00. The Board's construction treats the claim as if it said simply that the ethernet path "provides the microcontroller module with a connection to the CPU module, the power module and the ethernet switch module." Such a connection could be used for a wide range of communications, including remote polling. But the claim calls out one specific kind of communication. It is unreasonable to deny effect to the "remotely poll" language, which naturally indicates that the microcontroller module is actually configured to communicate in that way.

Claim 22, which depends on claim 20, supports (without unambiguously demanding) the requirement that the microcontroller module be configured for remote polling. Claim 22 adds that "the microcontroller module *polls* the CPU module *on the status of an OS.*" #021 **patent**, col. 10, lines 36–38 (emphases added). That the microcontroller module

in claim 22 actually polls the CPU module suggests that the microcontroller module in claim 20 also polls—and thus is configured for polling—the modules listed in that claim. Claim 22's narrowing of claim 20 is naturally understood as specifying the subject of the polling: the status of an operating system.

The specification is significant, too. It states that "[t]he microcontroller module *uses* a dedicated ethernet path ... to remotely poll the health of the power module 106, the ethernet switch module 108 and the CPU modules 102(a)–102(e)." *Id.,* col. 7, lines 62–65 (emphasis added). That the specification's most direct support for the claim 20 limitation speaks of the microcontroller actually engaging in remote polling supports reading the claim language to require that the controller be configured for such remote polling. Further support along similar lines comes from other passages. *Id.,* col. 7, line 65, through col. 8, line 2 ("The microcontroller module communicates with other modules using an I2C bus that gathers status information, logs the results and provides the log to the management software either actively (should a failure is [sic] detected) or as part of a routine poll."); *id.,* col. 8, lines 2–5 ("The microcontroller module 108 also gathers information relating to the voltage levels, CPU temperatures, fan RPMs and CPU module OS stability.").

In context, we conclude, the Board's construction of claim 20 is unreasonable. Because the Board did not find that Hipp anticipates claim 20 under the correct construction, we vacate the Board's cancellation of claim 20 and remand for reconsideration under that construction.

C

The Board found claim 3 to be anticipated by Hipp. For the required "caddies" element, the Board relied exclusively on what it found to be "slides" shown (without separate numbering) in Figure 12 of Hipp ***1301** as lying beneath the power supplies 280. That structure was first identified as meeting the "caddies" claim limitation during the oral argument before the Board. We vacate the Board's ruling, holding that the Board denied Acceleron notice and a fair opportunity to respond to this basis of cancellation.

[5] "A patent owner in [Acceleron's] position is undoubtedly entitled to notice of and a fair opportunity to meet the grounds of rejection." *Belden,* 805 F.3d at 1080. For a formal adjudication like the inter partes review considered here, the APA imposes particular requirements on the PTO. The agency must "timely inform[ ]" the patent owner of "the matters of fact and law asserted," 5 U.S.C. § 554(b)(3), must provide "all interested parties opportunity for the submission and consideration of facts [and] arguments ... [and] hearing and decision on notice," *id.* § 554(c), and must allow "a party ... to submit rebuttal evidence ... as may be required for a full and true disclosure of the facts," *id.* § 556(d). Reflecting those fundamental requirements, the PTO has advised participants in its Board proceedings that, at oral argument, "[a] party ... may only present arguments relied upon in the papers previously submitted. No new evidence or arguments may be presented at the oral argument." Office Patent Trial Practice Guide, 77 Fed.Reg. 48,756, 48,768 (Aug. 14, 2012).

[6] In this case, the Board denied Acceleron its procedural rights by relying in its decision on a factual assertion introduced into the proceeding only at oral argument, after Acceleron could meaningfully respond. In its petition, Dell argued that the articulating door 262 in Hipp's Figure 12 performs the same function as claim 3's caddies. In its post-institution reply, Dell added that the mounting mechanisms 278 in Hipp's Figure 12 constitute a caddy. It was only at oral argument before the Board that Dell pointed to the structure on which power supplies 280 rest in Hipp's Figure 12 as meeting the "caddies" requirement of claim 3. Acceleron was given no prior notice of that contention. The oral argument presented no opportunity for Acceleron to supply evidence, whether expert or lay or documentary evidence, about what the Hipp Figure 12 "slides" are (even if there is more than one) and whether they meet all the claim requirements, including the requirement that they allow air flow from the front of the chassis to the rear. Yet the Board relied on that basis alone for an essential part of its anticipation ground of decision.

In its final written decision, the Board dismissed Acceleron's procedural objection (made at oral argument), concluding that Dell had pointed to the "slides" in its reply. We need not address under what circumstances a cancellation may rely on a key factual assertion made for the first time in a petitioner's reply. In this case, contrary to the Board's conclusion, the key factual assertion was not in fact made in Dell's reply, but only at oral argument. Acceleron has not had the required opportunity to present evidence on whether the Hipp "slides" meet the claim's requirements. Because Dell has not shown in this court that there can be no genuine factual dispute on that issue, we vacate the Board's cancellation of claim 3 and remand for further proceedings on anticipation of claim 3. *See Ariosa Diagnostics v. Verinata Health, Inc., 805 F.3d 1359, 1367 (Fed.Cir.2015).*

CONCLUSION

For the foregoing reasons, we affirm the Board's upholding of claims 14–17 and 34–36; vacate the Board's cancellation of claim 20 and remand for consideration of that claim under the proper construction; and vacate the Board's cancellation of ***1302** claim 3 and remand for appropriate proceedings on that claim.

Costs awarded to Acceleron.

AFFIRMED IN PART, VACATED IN PART, AND REMANDED

All Citations

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