

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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DELL INC.,  
Petitioner,

v.

ACCELERON, LLC,  
Patent Owner.

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Case IPR2013-00440  
Patent 6,948,021 B2

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Before THOMAS L. GIANNETTI, TRENTON A. WARD, and  
JEREMY M. PLENZLER, *Administrative Patent Judges*.

PLENZLER, *Administrative Patent Judge*.

DECISION ON REMAND  
*35 U.S.C. § 144 and 37 C.F.R. § 42.5(a)*

## I. INTRODUCTION

### A. Background

Dell Inc. (“Petitioner”) filed a Petition to institute an *inter partes* review of claims 1–4, 6–20, 22–24, 30, and 34–36 of U.S. Patent No. 6,948,021 B2 (Ex. 1001, “the ’021 patent”). Paper 7 (“Pet.”). We instituted trial on the following grounds: (1) anticipation of claims 1–4, 6–9, and 13–20 by Hipp;<sup>1</sup> and (2) obviousness of claims 10–12, 30, and 34–36 over Hipp and Gasparik.<sup>2</sup> Paper 10 (“Dec. on Inst.”). Trial was not instituted for claims 22–24. Dec. on Inst. 3, 11–13, 17. During trial, Patent Owner filed a Patent Owner Response (Paper 23, “PO Resp.”), and Petitioner filed a Reply to the Patent Owner Response (Paper 28, “Pet. Reply”). Oral argument was held on September 4, 2014, and a transcript of the hearing is in the record. Paper 40 (“Tr.”).

On December 22, 2014, the Board issued a Final Decision in accordance with 37 C.F.R. § 42.73. Paper 41 (“Final Dec.”). The Board concluded that Petitioner had established, by a preponderance of the evidence, that claims 1–4, 6–9, 13, and 18–20 of the ’021 patent are unpatentable as anticipated by Hipp and claims 10–12 and 30 are unpatentable as obvious over the combination of Hipp and Gasparik. Final Dec. 26. The Board further concluded that Petitioner had failed to establish, by a preponderance of the evidence, that claims 14–17 and 34–36 of the ’021 patent are unpatentable. *Id.* at 14–18, 23–24. Both parties appealed the decision to the United States Court of Appeals for the Federal Circuit.

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<sup>1</sup> U.S. Patent No. 6,757,748 B1, issued June 29, 2004 (Ex. 1004, “Hipp”).

<sup>2</sup> U.S. Patent No. 6,157,974, issued Dec. 5, 2000 (Ex. 1007, “Gasparik”).

Claims 3, 14–17, 20, and 34–36 were the only claims involved in the appeals.

On March 15, 2016, the Federal Circuit issued a decision affirming-in-part and vacating-in-part the Board’s decision, and remanding the case to the Board. *Dell, Inc. v. Accelaron, LLC*, 818 F.3d 1293 (Fed. Cir. 2016). The Federal Circuit affirmed the Board’s determination that claims 14–17 and 34–36 are not unpatentable over Hipp or Hipp and Gasparik. *Id.* at 1298–99. The Federal Circuit vacated the Board’s decision that claims 3 and 20 are unpatentable over Hipp and remanded for reconsideration of those claims. *Id.* at 1299–1301.

On May 26, 2016, and at the request of the parties, we granted additional briefing to permit the parties to address how the Federal Circuit’s decision affects this proceeding. Paper 46 (“Remand Order”). Petitioner and Patent Owner each filed the authorized briefing.<sup>3</sup> Paper 47 (“Pet. Remand Br.”); Paper 48 (“PO Remand Br.”).

In view of the guidance from the Federal Circuit, and for the reasons set forth below, we determine that Petitioner has failed to establish by a preponderance of the evidence that claims 3 and 20 are unpatentable.

*B. The ’021 Patent*

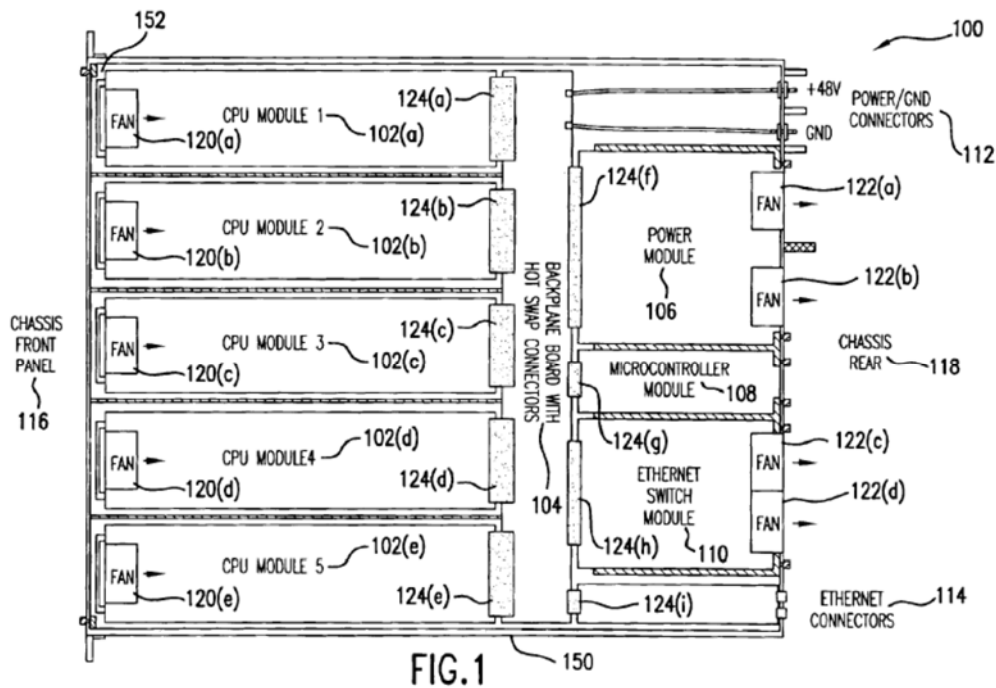
The ’021 patent is titled “Cluster Component Network Appliance System and Method for Enhancing Fault Tolerance and Hot-Swapping” and

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<sup>3</sup> Petitioner’s Remand Brief urges us to consider the argument presented at oral hearing for claim 3 that the Federal Circuit found objectionable. *See* Pet. Remand Br. 6–7. That suggestion goes beyond the scope of our Remand Order, which limited the post-remand briefing for claim 3 to arguments presented in Petitioner’s prior written submissions. Remand Order 3. Accordingly, we do not consider that argument.

generally relates to a computer network appliance including CPU modules, a power module, and an Ethernet switch module having hot-swappable connectors corresponding to mating hot swap connectors on a backplane board. Ex. 1001, 3:18–23. The '021 patent describes a computer network appliance that allows replacement of the various modules via hot swap connectors in order to reduce the mean time to repair the computer network appliance. *Id.* at 5:53–59.

Figure 1 of the '021 patent, reproduced below, is a schematic illustration of computer network appliance 100.



As shown above in Figure 1, computer network appliance 100 includes CPU modules 102(a)–(e), power module 106, microcontroller module 108, and Ethernet switch module 110 connected to the backplane 104 via hot swap connectors. *Id.* at 3:18–23, 32–37. A chassis 150 encloses backplane 104

and contains caddies 152 that hold the modules while providing air flow from the front to the rear of the chassis. *Id.* at 2:5–6, 3:32–34.

*C. Relevant Claims*

Claims 3 and 20 are the only claims at issue in this decision. Claim 3 ultimately depends from claim 1 (by dependency from claim 2), and claim 20 is independent. Each of those claims is reproduced below.

1. A computer network appliance, comprising:
  - a plurality of hot-swappable CPU modules, wherein each CPU module is a stand-alone independently-functioning computer;
  - a hot-swappable power module;
  - a hot-swappable ethernet switch module; and
  - a backplane board having a plurality of hot swap mating connectors, wherein the at least one backplane board interconnects each of the CPU modules with the at least one power module and the at least one ethernet switch module, such that the at least one power module and the at least one ethernet switch module can be used as a shared resource by the plurality of CPU modules.

*Id.* at 9:2–15.

2. The computer network appliance of claim 1, further comprising a chassis providing physical support for a CPU module, the power module, the ethernet switch module and the backplane board.

*Id.* at 9:16–19.

3. The computer network appliance of claim 2, wherein the chassis comprises caddies providing air flow from the front to the rear of the chassis.

*Id.* at 9:20–22.

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 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.* at 10:18–33.

## II. DISCUSSION

### A. Claim 3

#### 1. *The Federal Circuit Decision*

The Federal Circuit determined that, in our Final Decision, we improperly considered arguments presented by Petitioner for the first time at oral hearing. *Dell*, 818 F.3d at 1300–1301. In view of the guidance from the Federal Circuit, on remand, we consider Petitioner’s anticipation challenge to claim 3 based on the disclosure from Hipp cited in the Petition. We do not consider the arguments presented in the Petitioner’s Reply because those arguments are new and non-responsive to the Patent Owner Response, as explained below.

#### 2. *Analysis*

There is no dispute between the parties as to the construction of the term “caddy.” Both parties agree that term means “a carrier for a module.”

Tr. 17:16–18:5; PO Resp. 12. The dispute centers instead on the identification of the claimed caddies in Hipp, and whether the structure identified as a caddy in Hipp is a carrier for a module.

The Petition identifies Hipp’s articulating door 262, which supports box fans 264–269, as corresponding to the caddies recited in claim 3. *See* Pet. 17 (“The articulating door [262] performs the same function as the caddies of the ’021 Patent.”). In response, Patent Owner notes that “the claim recites that the single chassis comprises multiple caddies” and contends that Hipp “includes only a single articulating door 262.” PO Resp. 26. Patent Owner additionally contends that Hipp “fails to disclose any structure that is a carrier for a module.” *Id.* at 24.

The issue of whether Hipp discloses caddies is addressed again in Petitioner’s Reply. There, Petitioner contends that “the mounting hardware for these box fans are ‘caddies,’ in the sense that they are carriers for the fans” and that “[t]he fan hardware are not the only caddies taught by Hipp” because “Hipp also discloses ‘two power supply mounting mechanisms 278.’” Pet. Reply 5 (emphasis omitted). On remand, Patent Owner contends this is a new argument not properly raised in a Reply and should not be considered. PO Remand Br. 3–5. We agree.

Petitioner’s Remand Brief includes only a footnote addressing why the argument that the fan mounting hardware elements are “caddies” is not new or non-responsive and therefore should be considered. *See* Pet. Remand Br. 3–4. Petitioner contends that a changed claim construction justified the inclusion of the argument in the Reply: “[Patent Owner] first proposed a construction for ‘caddy’ in its patent owner response. As such, [Petitioner] first addressed anticipation under that proposed construction in its reply as

allowed by 37 C.F.R. § 42.23(b) ('A reply may only respond to argument raised in the corresponding opposition or patent owner response.').” Pet. Remand Br. 3 n.2.

We are not persuaded by this argument. The “new” construction that Petitioner references is that a “caddy” means “a carrier for a module.” *See* PO Resp. 12. The difference between the arguments in the Petition and the Reply noted above is not about what is considered the module in Hipp, but about what is considered the carrier. Thus, the Petition identifies articulating door 262 in Hipp as carriers for box fans 264–269, while the Reply identifies the fan mounting hardware as the carrier. Pet. 17, Pet. Reply 5. Regardless of whether Petitioner refers to Hipp’s articulating door 262 or Hipp’s fan mounting hardware as the carrier, however, Petitioner still refers to box fans 264–269 as the modules. Pet. 17; Pet. Reply 5. Accordingly, the “new” construction for “caddy” referring to “modules” could not have necessitated Petitioner’s change in position because Petitioner does not refer to a different “module” being carried by Hipp’s articulating door 262 or fan mounting hardware. We conclude, therefore, that the new argument inserted into Petitioner’s Reply was not responsive to a new claim construction from Patent Owner as Petitioner alleges.

Petitioner’s new argument that Hipp’s fan mounting hardware corresponds to the claimed caddies was based on Patent Owner’s identification of deficiencies in Petitioner’s original position, namely, that the claim requires *multiple* “caddies,” rather than any new claim construction from Patent Owner. Petitioner offers no other credible basis for its new argument (i.e., that Hipp’s fan mounting hardware are “caddies”) being responsive to arguments made in Patent Owner’s Response. *See* Pet.



Remand Br. 3–4. Therefore, we determine that Petitioner’s new argument in its Reply was improper because, as the Federal Circuit instructed on remand, the agency “must allow ‘a party . . . to submit rebuttal evidence . . . as may be required for a full and true disclosure of the facts.’” *Dell*, 818 F.3d at 1301 (quoting 5 U.S.C. § 556(d)).

In addition, Petitioner offers no explanation as to why the arguments directed to power supply mounting mechanisms 278 presented in its Reply are not new or non-responsive and therefore should be considered. *See* Pet. Remand Br. 4–6 (explaining only why power supply mounting mechanisms 278 allegedly are “caddies”). Finally, as noted *supra*, in light of the Federal Circuit’s decision, we are not considering the argument first presented at the oral hearing that the slides in Figure 12 of Hipp are the carriers.

Having considered the arguments presented in light of the guidance provided from the Federal Circuit, we determine that the new arguments presented in Petitioner’s Reply identifying the fan mounting hardware in Hipp as the “caddies” in claim 3 should not be given weight. We consider instead the Petition’s identification of Hipp’s articulating door 262 as the “caddies” recited in claim 3. For the reasons that follow, we are not persuaded that Petitioner has established, by a preponderance of the evidence, that Hipp anticipates claim 3.

Initially, we note that even if Hipp’s single articulating door 262 could properly be considered a “caddy,” neither the Petition nor the Petitioner’s Reply offers any explanation as to how articulating door 262 satisfies the requirement in claim 3 of multiple caddies. Petitioner’s challenge fails for this reason alone. Moreover, even if only one caddy were sufficient, we are not persuaded that Hipp’s articulating door 262 meets that requirement. The

Petition focuses on how articulating door 262 allegedly “provid[es] air flow from the front to the rear of the chassis” as recited in claim 3. It does not explain how Hipp’s articulating door 262 provides the structural requirements of a caddy (i.e., a carrier for a module), stating only that articulating door 262 carries box fans 264–269. Pet. 17. In particular, neither the Petition nor the Reply offers any explanation as to why Hipp’s box fans 264–269 are modules.

Based on the record before us, we are not persuaded that one skilled in the art would consider Hipp’s box fans 264–269 modules in view of how “module” is used in the ’021 patent. *See, e.g.*, Ex. 1001, 3:17–34 (discussing “CPU modules 102(a)-102(e) . . . a power module 106, a microcontroller module 108, an ethernet switch module 110” where “[e]ach module resides in a caddy 152 of the chassis such that when the module is inserted into the chassis the caddy ensures that the hot swap connectors are aligned”). Furthermore, the ’021 patent clearly distinguishes its modules from fans. *See id.* at 3:48–57 (“Heat generated by active elements in each of the modules is dissipated using forced air flow” with “[f]ans 120(a)-120(e) . . . to push outside air through the chassis” and “fans 122(a)-122(d) to draw heated air out of the chassis.”). Accordingly, we are not persuaded that Hipp’s articulating door 262 is a caddy (i.e., a carrier for a module). Even if we were to consider Petitioner’s arguments regarding the fan mounting hardware being caddies, those arguments would be unpersuasive because they, too, rely on box fans 264–269 being modules. As discussed *supra*, we have determined they are not.

### 3. Conclusion

For these reasons, Petitioner has failed to establish by a preponderance of the evidence that claim 3 is anticipated by Hipp.

#### B. Claim 20

##### 1. The Federal Circuit Decision

Claim 20 recites

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.

Ex. 1001, 10:24–29. The Federal Circuit determined that this limitation requires a microcontroller module configured for remote polling. *Dell*, 818 F.3d at 1299–1300. In view of the guidance from the Federal Circuit, we consider Petitioner’s anticipation challenge to claim 20 based on the disclosure from Hipp cited in the Petition.

##### 2. Analysis

As Patent Owner notes (PO Remand Br. 9), the Petition proposes that “[t]he term ‘poll’ should be given its ordinary meaning in the art, which is ‘sends routine, periodic requests for health or status information to the other components in the system’” (Pet. 10 (citing Ex. 1018 ¶ 35)). Patent Owner “does not dispute [that] construction for purposes of the IPR.” PO Remand Br. 9 (citing PO Resp. 11–15).

The Petition cites single board computer 160 in Hipp as corresponding to the microcontroller module recited in claim 20. Pet. 26 (citing Ex. 1004, 13:50–53); *see also* Pet. Remand Br. 8 (confirming that “in its petition . . . single board computer 160 on management network interface 49 in *Hipp* corresponds to the microcontroller module recited in claim 20”). The

Petition explains that because single board computer 160 detects a CPU that is about to fail, single board computer 160 actively polls the modules. *Id.* at 27. Patent Owner responds that Hipp “does not disclose, either explicitly or inherently, that the detection is done using polling.” PO Resp. 44. More specifically, Patent Owner contends that “web server processing card 32 merely transferring information is not the same as the single board computer 160 polling the web server processing card 32.” *Id.* at 45 (citing Ex. 2001 ¶ 75).

We are not persuaded by Petitioner’s argument. As Patent Owner notes (PO Remand Br. 10), Petitioner responds by applying a different construction of “polling” than that proposed in the Petition (Pet. Reply 14–15). For the first time, in its Reply, and again in its Remand Briefing, Petitioner applies a construction of “polling” different than that proposed in the Petition. *Compare* Pet. 10 (“The term ‘poll’ should be given its ordinary meaning in the art, which is ‘sends routine, periodic requests for health or status information to the other components in the system.’”) with Pet. Reply 15 (“a microcontroller module that gathers information about the web server processing cards . . . discloses ‘polling’”) and Pet. Remand Br. 9–10 (“polling in claim 20 means to ‘gather information.’”). Petitioner changes its construction without explanation, other than alleging that in a separate proceeding Patent Owner had proposed the broader construction. Pet. Reply. 14–15; Pet. Remand Br. 9–10. Based on the record before us, we do not see sufficient reason to depart from the construction proposed in the Petition and accepted by Patent Owner in its Patent Owner Response.

We now apply that original construction from the Petition in analyzing Hipp. Hipp explains that single board computer 160 may detect a

CPU that is about to fail by analyzing information from CPU 84, which is transferred to network interface card 68 by web server processing card 32, and captured and stored within single board computer 160. Ex. 1004, 20:16–36. Applying Petitioner’s own construction of “polling” (i.e., sending requests for information to other components of the system), we determine that Petitioner has failed to identify anything in Hipp that sufficiently discloses single board computer 160 polling. Although Hipp discusses collecting data (*see, e.g.*, Ex. 1004, 14:46–49, 15:24–30, 20:30–36), Petitioner fails to explain persuasively why one skilled in the art would understand that discussion in Hipp as disclosing sending *requests* for information, rather than simply receiving the information from web server processing card 32 without sending a request. Accordingly, we are not persuaded that Hipp expressly discloses that single board computer 160 is configured to remotely poll as required by claim 20. The Petition does not set forth argument regarding the recited polling being inherent in single board computer 160.

### *3. Conclusion*

For these reasons, we conclude that Petitioner has failed to establish by a preponderance of the evidence that Hipp anticipates claim 20.

### III. ORDER

It is

ORDERED that Petitioner has failed to establish that claims 3 and 20 of U.S. Patent 6,948,021 are unpatentable; and

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

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