

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

EMC CORPORATION,
Petitioner,

v.

INTELLECTUAL VENTURES II LLC,
Patent Owner.

Case IPR2016-01106
Patent 6,516,442 B1

Before JUSTIN T. ARBES, BRIAN J. McNAMARA, and MINN CHUNG,
Administrative Patent Judges.

CHUNG, *Administrative Patent Judge.*

DECISION
Denying Patent Owner's Request for Rehearing
37 C.F.R. § 42.71

I. INTRODUCTION

Intellectual Ventures II LLC (“Patent Owner”) filed a Request for Rehearing (Paper 37, “Req. Reh’g”) of our Final Written Decision (Paper 36, “Final Dec.”) determining claims 1, 5, 9, 10, 12, 24, 28, 32, 33, and 34 of U.S. Patent No. 6,516,442 B1 (Ex. 1001, “the ’442 patent”) to be unpatentable. Patent Owner’s Request for Rehearing is solely focused on the issues relating to full-duplex channels. Patent Owner points to two alleged defects in our Final Written Decision—namely, we misapprehended or overlooked (1) the alleged lack of evidence in the Petition that Reschke discloses a full-duplex channel (Req. Reh’g 11–12) and (2) Patent Owner’s argument in Patent Owner’s Sur-Reply (Paper 33, “PO Sur-Reply”) regarding the purported lack of inherent disclosure of full-duplex channels in Reschke (Req. Reh’g 12–14). In addition, Patent Owner repeats its assertion made in its Sur-Reply that it was deprived of due process because Patent Owner was not permitted to submit declaration evidence on “the lack of inherent disclosure [in Reschke] of full-duplex communications” after the oral hearing. *Id.* at 14–15; *see* PO Sur-Reply 6.

In view of these alleged oversights, Patent Owner requests that we (1) vacate the Final Written Decision and find that the challenged claims have not been shown to be unpatentable or, in the alternative, (2) “reopen the record” to allow Patent Owner to submit a declaration regarding the purported lack of inherent disclosure of a full-duplex channel in Reschke. Req. Reh’g 2, 15. For the reasons set forth below, Patent Owner’s Request for Rehearing is *denied*.

II. STANDARD OF REVIEW

A party requesting rehearing bears the burden of showing that the decision should be modified. 37 C.F.R. § 42.71(d). The challenging party “must specifically identify all matters the party believes the Board misapprehended or overlooked, and the place where each matter was previously addressed” in a paper of record. *Id.* With this in mind, we address the arguments presented by Patent Owner.

III. ANALYSIS

A. Alleged Lack of Evidence on Full-Duplex Communication in the Petition

Patent Owner asserts that the Petition contained no argument or evidence that Reschke discloses full-duplex communication. Req. Reh’g 11. Patent Owner further argues that our Institution Decision (Paper 9, “Inst. Dec.”) and Final Written Decision overlooked this lack of evidence in the Petition and erroneously determined that Petitioner met its burden at each stage. Req. Reh’g 12.

Patent Owner mischaracterizes our decisions as well as the record evidence underlying the decisions. As discussed in our Institution Decision and Final Written Decision, the Petition identified separate circuitries for forward and reverse communication pathways in Reschke’s channels and argued, based on this disclosure, that Reschke teaches bi-directional and full-duplex channels. *See* Pet. 38–41 (identifying separate circuitries for a “forward” pathway (in Fig. 4A) and “reverse” pathway (in Fig. 4B) of a channel in Reschke) (citing Ex. 1003, col. 11, ll. 37–40, col. 14, ll. 8–11,

Figs. 4A, 4B; Ex. 1002 ¶¶ 136–140); Inst. Dec. 28–30 (citing Pet. 38–41); Final Dec. 45 (citing Pet. 39–41), 47–48.

In our Institution Decision, noting that Patent Owner’s Preliminary Response did not address Petitioner’s argument and evidence regarding the “forward” and “reverse” pathways depicted in Reschke’s Figures 4A and 4B (Inst. Dec. 29–30), we invited the parties to address the “channels” limitation further in their papers, including whether the “forward” and “reverse” pathways in the data switching circuitry of Reschke identified by Petitioner “can operate at the same time to provide full-duplex transmission” (*id.* at 30). In its Patent Owner Response (Paper 15, “PO Resp.”), Patent Owner rejected our invitation as “improper burden shifting” and did not discuss the “forward” and “reverse” pathways of the data switching circuitries described in Figures 4A and 4B of Reschke and relied upon by Petitioner in the Petition. PO Resp. 50–51.

As discussed in our Final Written Decision, our invitation to both parties to discuss the implications of the data switching circuitry disclosed in Figures 4A and 4B of Reschke in no way shifts the burden of proof, which remained at all times on Petitioner. Final Dec. 64. More to the point for purposes of this Decision, the record shows that Patent Owner was aware of our discussion of the evidence in the Petition regarding Reschke’s teaching of full-duplex channels and in fact responded to our discussion, if only to reject our invitation to discuss the evidence presented in the Petition. Nonetheless, Patent Owner in its Request for Rehearing disregards the extensive discussion in our decisions (*see* Req. Reh’g 11 (citing Inst. Dec. 28–30, Final Dec. 43–44)) and contends we overlooked the purported lack of

evidence in the Petition. Patent Owner's argument is unpersuasive because it is based on a mischaracterization of our decisions and the underlying evidence of record.

Patent Owner further asserts that our Final Written Decision overlooked the testimony of Patent Owner's declarant, Donald Alpert, Ph.D., that "Reschke lacks simple disclosure of a processor that can read data from memory simultaneously with writing data to memory, which might evince simultaneous communications in both directions." Req. Reh'g 14 (citing *id.* § II.I); *see also id.* at 10 (citing Ex. 2020 ¶ 81), 7 (citing PO Resp. 51–53; Ex. 2020 ¶ 81).

Patent Owner again mischaracterizes our Final Written Decision and the evidence of record. In the cited portion of the Patent Owner Response, Patent Owner asserted that "[Reschke's] Figure 2, *like Figure 4*, shows data proceeding across a data bus *in one direction* at a time." PO Resp. 53 (first emphasis added) (citing Ex. 2020 ¶ 81). However, as discussed above, Patent Owner at the same time did not discuss, due to purported "improper burden shifting," Figures 4A and 4B of Reschke and whether the "forward" and "reverse" pathways of the data switching circuitries depicted in Figures 4A and 4B can operate simultaneously to provide full-duplex communication. *Id.* at 51. On the very same page of the Patent Owner Response, Patent Owner lumped Figures 4A, 4B, and 4C of Reschke together as "Figure 4" and asserted without adequate explanation that "Figure 4 only shows communications crossing the buses in *one direction at a time*, not simultaneously." *Id.* (citing Ex. 2020 ¶ 81).

In the cited paragraph of Dr. Alpert’s Declaration, Dr. Alpert similarly lumped Figures 4A, 4B, and 4C of Reschke together as “Figure 4” and opined that “Reschke’s *Figure 4* . . . does not show any bus communicating information in both directions at the same time” because “*there is no indication* [in Figure 4] that a *PU* can read data *from memory* simultaneously with writing data *to memory*.” Ex. 2020 ¶ 81 (emphases added). Petitioner, however, identified precisely those indications in Figures 4A and 4B that Dr. Alpert did not find in “Figure 4”—that is, the separate circuitries in Figures 4A and 4B comprising the “forward” and “reverse” communication pathways that may be used to transmit data in full-duplex mode “from the processors (purple) and memories (yellow) to respective switch interfaces” (Pet. 39–40 (underlined emphases added) (discussing the “forward” portions of Reschke’s channels described in Figure 4A)) and “*from* switch interfaces to the processors . . . and shared memory” (*id.* at 40–41 (underlined emphases added) (discussing the “reverse” portions described in Figure 4B)). Dr. Alpert simply disregarded this evidence presented in the Petition, as well as our invitation to discuss the significance of Petitioner’s evidence, and stated in a conclusory fashion and without adequate explanation that “there is no indication that a PU can read data from memory simultaneously with writing data to memory.” Ex. 2020 ¶ 81.

Hence, the record shows that Patent Owner and Dr. Alpert made only conclusory statements regarding “Figure 4” and did not address the circuitries described in the very same evidence, i.e., Figures 4A and 4B of Reschke. We did not misapprehend or overlook Patent Owner’s argument or Dr. Alpert’s testimony regarding “Figure 4”; we simply found them

unpersuasive, given Petitioner's arguments and evidence that Patent Owner and Dr. Alpert did not address.

B. Alleged Lack of Inherent Disclosure of Full-Duplex Channels in Reschke

Patent Owner contends that our Final Written Decision misapprehended the law on inherent disclosure and overlooked Patent Owner's argument that Reschke does not inherently disclose full-duplex channels. Req. Reh'g 12–14. Patent Owner's argument is not persuasive because Petitioner did not argue inherent disclosure of full-duplex channels in Reschke. Instead, Petitioner argued, and we agreed, that Reschke *discloses* a full-duplex channel *to a person of ordinary skill in the art*. See, e.g., Pet. 41 (“Reschke discloses . . . bi-directional, full-duplex, point-to-point channels that transfer packets.”); Paper 18 (“Pet. Reply”), 26 (“[A] *person of ordinary skill* would not believe Reschke to be a half-duplex system.” (emphasis added)); Paper 34 (“Pet. Sur-Sur-Reply”), 2 (“Petitioner's position is that *a person of ordinary skill in the art*, reading Reschke, would understand that the disclosed channels are capable of full-duplex communication and thus are full-duplex.” (emphasis added) (citing *In re Preda*, 401 F.2d 825, 826 (CCPA 1968)), 3 (“Reschke discloses to a [person of ordinary skill in the art] that its channels are full-duplex, not half-duplex.”); Final Dec. 45 (“We . . . are persuaded that *a person of ordinary skill in the art* would have understood that in Reschke's system, data can be transmitted separately on these separate pathways at the same time.” (emphasis added)).

As discussed above, Petitioner in the Petition identified separate circuitries for forward and reverse communication pathways in Reschke's

channels and argued that Reschke discloses bi-directional and full-duplex channels. *See* Pet. 38–41. In its Reply, Petitioner responded to Patent Owner’s arguments in Patent Owner Response, as well as our invitation to discuss whether the “forward” and “reverse” pathways of Reschke can operate at the same time to provide full-duplex transmission, and argued that Reschke’s channels are capable of full-duplex transmissions because nothing in Reschke prevents communications occurring simultaneously on both pathways. Pet. Reply 21.

More importantly, citing the testimony of its declarant, Douglas W. Clark, Ph.D., and the supporting evidence discussed in Dr. Clark’s Declaration, Petitioner further argued that, in architectures like Reschke’s with separate input and output ports (or separate “forward” and “reverse” pathways), a control mechanism is necessary for half-duplex operation to ensure and enforce that a channel is never used to transmit data on both directions at the same time, and that the lack of any such control or enforcement mechanism in Reschke shows that *a person of ordinary skill in the art* would *not* understand Reschke to disclose a half-duplex system, but, rather, would understand that Reschke’s channels are full-duplex channels. *Id.* at 26 (citing Ex. 1028 ¶¶ 63–66; Ex. 2003; Ex. 1036, 9). Dr. Clark further opined, citing supporting evidence in the record, that one of ordinary skill would not have contemplated incurring additional cost to *add* the extra control mechanism necessary for half-duplex transmission, just to *reduce* the performance in Reschke’s system, i.e., limit the transmission of data to one direction at a time. Ex. 1028 ¶¶ 62–66. Petitioner also highlighted these points during the oral hearing. *See* Paper 35 (“Tr.”), 9:14–26; 46:11–25.

Although Patent Owner was provided an opportunity to respond to Petitioner's argument and evidence after the oral hearing, Patent Owner's Sur-Reply did *not* address Petitioner's argument and evidence that a person of ordinary skill in the art would understand Reschke to disclose full-duplex channels because Reschke's data switches do not include additional controls that would be necessary for Reschke to perform half-duplex operation. See Final Dec. 47 (noting that Patent Owner did not address Petitioner's argument regarding the lack of additional controls in Reschke for enabling half-duplex communications). Instead, Patent Owner asserted Petitioner's argument must be an argument for inherent disclosure and argued that Petitioner failed to prove inherent disclosure of full-duplex channels in Reschke. PO Sur-Reply 3–4.

In its Sur-Sur-Reply, Petitioner emphasized that it does *not* rely on inherency¹ and reiterated that “Petitioner's position is that a person of ordinary skill in the art, reading Reschke, would understand that the disclosed channels are capable of full-duplex communication and thus are full-duplex.” Pet. Sur-Sur-Reply 2 (citing *Preda*, 401 F.2d at 826).

Although Reschke does not use the word “full-duplex” to describe its channels, it is well-settled that “the [prior art] reference need not satisfy an *ipsissimis verbis* test,” i.e., identity of terminology is not required, to

¹ Patent Owner in its Sur-Reply also asserted that Petitioner failed to prove yet another argument Petitioner did not make—namely, “*Petering*-type” anticipation. PO Sur-Reply 4–5 (citing *In re Petering*, 301 F.2d 676 (CCPA 1962)). Petitioner in its Sur-Sur-Reply similarly noted that Petitioner never relied on “*Petering*-type” anticipation. Pet. Sur-Sur-Reply 2. For the reasons discussed below, and because Petitioner never made these arguments, they have no bearing on the outcome of this case.

disclose a claim limitation. *In re Gleave*, 560 F.3d 1331, 1334 (Fed. Cir. 2009). Moreover, the prior art reference is read from the perspective of one with ordinary skill in the art. *See Star Scientific, Inc. v. R.J. Reynolds Tobacco Co.*, 655 F.3d 1364, 1374 (Fed. Cir. 2011) (“Whether prior art invalidates a patent claim as obvious is determined from the perspective of one of ordinary skill in the art.”); *Wasica Fin. GmbH v. Cont’l Auto. Sys., Inc.*, 853 F.3d 1272, 1284 (Fed. Cir. 2017) (“Anticipation is an inquiry viewed from the perspective of one skilled in the art.”) (citing *Dayco Prods., Inc. v. Total Containment, Inc.*, 329 F.3d 1358, 1368 (Fed. Cir. 2003) (“[T]he dispositive question regarding anticipation is 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.”)); *Scripps Clinic & Research Foundation v. Genentech, Inc.*, 927 F.2d 1565, 1576 (Fed. Cir. 1991) (“[Anticipation requires that there be] no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the art in the field of the invention.”), *overruled in part on other grounds by Abbott Labs. v. Sandoz, Inc.*, 566 F.3d 1282, 1293 (Fed. Cir. 2009). As discussed above, Petitioner’s position has been consistently that Reschke discloses a full-duplex channel to a person of ordinary skill in the art. *See* Pet. 41; Pet. Reply 21, 26; Pet. Sur-Sur-Reply 2–3. Hence, Patent Owner’s assertion that, because Reschke does not expressly describe the buses as “full-duplex,” Petitioner’s argument must be an argument for inherent disclosure (PO Sur-Reply 3–4; Req. Reh’g 12–13) misunderstands or mischaracterizes Petitioner’s argument and evidence.

Similarly, Patent Owner's assertion in its Request for Rehearing that our Final Written Decision misapprehended the law on inherent disclosure and overlooked the purported lack of inherent disclosure of full-duplex channels in Reschke misunderstands or mischaracterizes the Final Written Decision. As discussed above, we determined that, based on the complete record, Petitioner had shown sufficiently that Reschke discloses to a person of ordinary skill in the art that Reschke's channels are capable of full-duplex communication. Final Dec. 43–48. Having determined that Reschke discloses full-duplex channels, it was not necessary for us to also determine whether Reschke inherently discloses full-duplex channels to reach a decision in this proceeding. Hence, we did not overlook Patent Owner's argument on inherent disclosure (or lack thereof) Patent Owner made in its Sur-Reply, but, rather, declined to address the inherency issue that has no bearing on the outcome of this case. Also, we could not have misapprehended the law on inherent disclosure because our Final Written Decision did not include any consideration of any legal issue relating to inherent disclosure.

C. Due Process

Patent Owner asserts that it was deprived of due process because, although Patent Owner was allowed to file a Sur-Reply after the oral hearing, Patent Owner was not permitted to submit declaration evidence on “the lack of inherent disclosure [in Reschke] of full-duplex communications” with its Sur-Reply. *Id.* at 14–15. Patent Owner's arguments in its Request for Rehearing essentially repeat the same due

process arguments Patent Owner made in its Sur-Reply. *See* PO Sur-Reply 6.

In our Final Written Decision, we addressed Patent Owner's due process arguments and determined that Patent Owner had sufficient notice and opportunity to be heard. Final Dec. 63–65. Patent Owner's Request for Rehearing does not identify specifically what Patent Owner believes we misapprehended or overlooked in the Final Written Decision. Hence, Patent Owner's Request for Rehearing appears to simply disagree with our Final Written Decision. Mere disagreement with a decision is not a proper basis for rehearing when a party's arguments were considered and addressed in the decision.

More importantly, the declaration evidence Patent Owner wishes to submit relates to the purported “lack of inherent anticipation by Reschke” (Req. Reh'g 2) or “the lack of inherent disclosure [in Reschke] of full-duplex communications” (*id.* at 15). Any additional evidence on the purported lack of inherent disclosure in Reschke of full-duplex communications would not have affected our Final Written Decision because the issue of inherent disclosure has no bearing on the outcome of this case, for the reasons explained above.

For the reasons discussed in our Final Written Decision, Patent Owner had sufficient notice and opportunity to be heard and, therefore, was not deprived of its due process rights in this proceeding. *See* Final Dec. 63–65.

IV. CONCLUSION

For the foregoing reasons, we decline to modify our Final Written Decision. We also decline to reopen the record to allow Patent Owner to submit a declaration regarding the purported lack of inherent disclosure of a full-duplex channel in Reschke.

V. ORDER

Accordingly, it is ORDERED that Patent Owner's Request for Rehearing is *denied*.

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Patent 6,516,442 B1

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