

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ERICSSON INC. and
TELEFONAKTIEBOLAGET LM ERICSSON,
Petitioner,

v.

INTELLECTUAL VENTURES I LLC,
Patent Owner.

Case IPR2014-00963
Patent 6,952,408 B2

Before JOSIAH C. COCKS, WILLIAM A. CAPP, and
DAVID C. McKONE, *Administrative Patent Judges*.

McKONE, *Administrative Patent Judge*.

DECISION
ON REQUEST FOR REHEARING
37 C.F.R. § 42.71

I. INTRODUCTION

A. Background

Ericsson Inc. and Telefonaktiebolaget LM Ericsson (collectively “Petitioner”) filed a Corrected Petition (Paper 6, “Pet.”) to institute *inter partes* review of claims 1–16 of U.S. Patent No. 6,952,408 B2 (Ex. 1001, “the ’408 patent”). Intellectual Ventures I LLC (“Patent Owner”) filed a Patent Owner Response (Paper 16, “PO Resp.”) and Petitioner filed a Reply to the Patent Owner Response (Paper 18, “Reply”). An oral hearing was held on August 26, 2015. Paper 28 (“Tr.”). In a Final Written Decision (Paper 29, “Dec.”), we held that Petitioner failed to show, by a preponderance of the evidence, that any challenged claim was unpatentable as obvious over U.S. Patent No. 5,592,480 (Ex. 1006, “the ’480 patent”), alone or in combination with GSM 05.02¹ (Ex. 1012) and U.S. Patent No. 5,537,435 (Ex. 1007, “the ’435 patent”).

Petitioner relies on the testimony of Wayne Stark, Ph.D. (Ex. 1003, “Stark Decl.”; Ex. 1022, “Stark Reply Decl.”) in support of its contentions. Patent Owner relies on the testimony of Jonathon Wells, Ph.D. (Ex. 2007, “Wells Decl.”) in support of its contentions.

In a Request for Rehearing (Paper 30, “Req.”), Petitioner contends that we misapprehended the disclosure of the ’480 patent in our anticipation ruling; that we overlooked or misapprehended portions of Dr. Stark’s testimony in our obviousness ruling; and that we misapplied the law in

¹ *Recommendation GSM 05.02, Radio Sub-system Link Control*, EUROPEAN TELECOMMUNICATIONS STANDARDS INSTITUTE, v. 3.8.0 (Dec. 1995).

declining to consider a second obviousness theory presented in the Reply.
Req. 1–2.

II. ANALYSIS

The burden of showing that the Decision should be modified is on Petitioner, the party challenging the Decision. *See* 37 C.F.R. § 42.71(d). In addition, “[t]he request must specifically identify all matters the party believes the Board misapprehended or overlooked, and the place where each matter was previously addressed in a motion, an opposition, or a reply.” *Id.*

A. Petitioner’s Challenge to Our Finding that the ’480 Patent Does Not Disclose Frequency Hopping

In a discussion of the modulation of RF carrier signals over voice and data channels, the ’480 patent states that “[t]he particular modulation in used [sic]” may include “frequency hopping standards such as” GSM. Ex. 1006, 5:6–16. In our Decision, we found that this is an explicit reference to the use of GSM’s modulation scheme in the ’480 patent’s system, but that the reference to GSM’s modulation scheme does not mean that the system can implement other, optional, portions of GSM, such as frequency hopping. Dec. 17–18. Thus, we found that the ’480 patent does not anticipate the challenged claims. *Id.*

As part of our analysis, we found that frequency hopping is not a modulation scheme, relying in part on admissions Petitioner’s counsel made during the oral hearing. Dec. 17–18. Petitioner now argues that it made no such admission. Req. 6. The record is clear that Petitioner admitted that GSM supports both frequency hopping and non-frequency hopping and that,

in either instance, the modulation is the same. Tr. 62:11–63:23. In other words, one can implement the modulation scheme of GSM without implementing frequency hopping. The import of this admission is that the ’480 patent’s description of the use of the “particular modulation” scheme of GSM (Ex. 1006, 5:9–17) is not necessarily a disclosure of the implementation of other aspects of GSM, including frequency hopping.

Although the ’480 patent explicitly references modulation, Petitioner argues that “no evidence supports that a POSA would have viewed the subject disclosure to be limited just to modulation.” Req. 4. We considered, and rejected, this argument in the Decision. Dec. 18.

Petitioner also contends that the ’480 patent uses the term “modulation” to refer to the standards themselves, thus, equating “modulation” to “any one” of the standards, including GSM in its entirety. Dec. 5–6. According to Patent Owner, “the actual ‘modulation scheme’ employed by GSM is ‘Gaussian minimum shift keying (GMSK),’” and “that the ’480 patent calls out the GSM standard and not GMSK further confirms that it equated ‘modulation’ to the listed air interface standards.” Req. 5–6 n.1. Petitioner does not indicate where in the Petition or Reply it made these arguments. Thus, we could not have misapprehended or overlooked them. In any case, we explained in detail why the passage from the ’480 patent on which Petitioner relies (Ex. 1006, 5:4–17) is directed to modulation, rather than other aspects of the various standards listed. Dec. 17. We are not persuaded by Petitioner’s new argument that the ’480 patent used the word “modulation” to sweep in the entirety of several mobile access standards.

Petitioner further argues that Dr. Wells admitted in deposition that the ’480 patent discloses the performance of GSM in its entirety, including

frequency hopping. Req. 4–5 (citing Ex. 1023, 33:6–13, 34:3–14, 43:12–44:1). Petitioner did not make this argument in the Reply. Indeed, Petitioner made the opposite argument—criticizing the same testimony for stating that the ’480 patent does not disclose implementing the optional frequency hopping portion of GSM. Reply 5–6. We find that Dr. Wells has testified consistently that the portion of the ’480 patent quoted above “actually means . . . that it can support GSM, and then it characterizes GSM as a frequency hopping standard. It doesn’t say that it supports frequency hopping.” Ex. 1023, 34:10–14; *accord* Ex. 2007 ¶ 78. We continue to credit Dr. Wells’s testimony.

In sum, we are not persuaded that we misapprehended or overlooked Petitioner’s arguments as to anticipation.

B. Petitioner’s Challenge that We Misapprehended Dr. Stark’s Testimony Regarding DP RAM Enable 202

In its obviousness contentions, Petitioner contends that a skilled artisan would have modified the ’480 patent’s system to perform frequency hopping by reprogramming that system according to algorithms described in GSM 05.02. Pet. 20, 24, 36. In the Decision, we characterized Petitioner’s theory of how the references would have been combined:

[T]he theory advanced in the Petition is that the data programmed into DP RAM Enable 202 provide a mapping between particular channels and particular TDM time slots, thereby switching data associated with a particular RF channel to a DSP corresponding to a particular logical channel. According to Petitioner, by reprogramming DP RAM Enable 202, according to the frequency hopping schedule, each time there is a new frame, DP RAM Enable 202 would remap TDM bus 16 to switch time slots to different DSPs such that the same

RF channel appearing in a different time slot nevertheless would be switched to the same DSP corresponding to the logical channel.

Dec. 25.

In the Request, Petitioner argues that this misapprehends its argument and the testimony of Dr. Stark. Req. 7–12. Specifically, Petitioner argues that we overlooked its argument that DP RAM enable 202 of Figure 6 of the '480 patent also would have been reprogrammed. Req. 11 (“Because the focus was on Figure 3, the Board overlooked that routing data off the TDM bus to the DSPs was accomplished by the basestation controller likewise asserting maps to the DP RAM 202 in Figure 6 every TDMA frame.”), and 12 (“Dr. Stark, however, consistently pointed to Figure 6 and its similar DP RAM Enable 202 structure as providing that function.”).

Figure 6 is reproduced below:

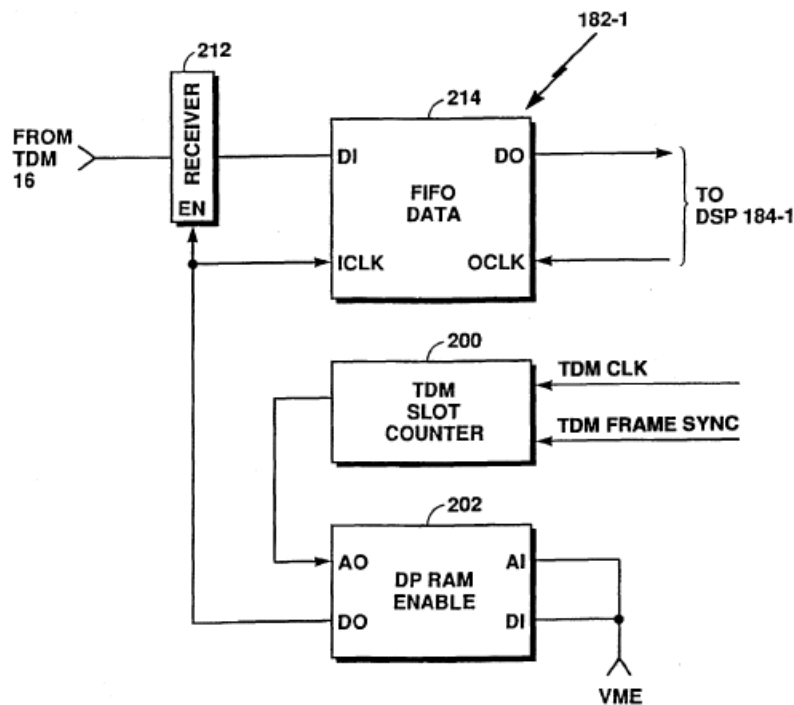


Fig. 6

Figure 6 is a detailed diagram of a TDM FIFO receiver. Ex. 1006, 10:34–35. “The TDM slot counter 200 and enable DP-RAM 202 operate as for the TDM FIFO driver 180-1 shown in FIG. 5,² to identify when the receiver 212 is to be active.” *Id.* at 10:36–39. When DP RAM Enable 202 of Figure 3 (or Figure 5) enables driver 208 to permit DP RAM Data 204 to assert data at a particular slot, the corresponding DP RAM Enable 202 of Figure 6 enables receiver 212 to remove data from the bus at the same time slot. *Id.* at 10:36–43. As with the DP RAM Enable 202 of Figure 3, the DP RAM Enable 202 of Figure 6 does not determine which slot is associated with which DSP. It simply allows data to pass through during an enabled time slot to FIFO Data 214, which clocks data into the DSP associated with the enabled time slot. *Id.*

In the Decision, we found that “Petitioner and Dr. Stark do not explain persuasively how simply reprogramming DP RAM Enable 202 would provide a different mapping between the data stored in DP RAM Data 204 and the DSPs.” Dec. 27. Simply reprogramming the corresponding DP RAM Enable 202 of Figure 6 to coincide with the mapping of DP RAM Enable 202 of Figure 3 does not address this deficiency. The Decision did not discuss Figure 6 explicitly. Nevertheless, because Petitioner’s proposed re-programming of its DP RAM Enable 202 mirrored that of Figure 3’s DP RAM Enable 202, we implicitly rejected Petitioner’s arguments regarding

² For our purposes, Figure 5 is the same as Figure 3. As to Figure 5, the ’480 patent states “TDM slot counter 200, enable DP-RAM 202 and driver 208 operate in the same way as for the embodiment of FIG. 3. The only difference is in the connection of the clock signals to the FIFO 210.” Ex. 1006, 10:26–29.

Figure 6. We find Petitioner’s arguments as to Figure 6 unpersuasive, and Dr. Stark’s testimony in support thereof lacking in credibility, for the same reasons stated in the Decision (at 27–31) for Figure 3.

In sum, we are not persuaded that we misapprehended or overlooked Petitioner’s arguments as to obviousness.

C. Petitioner’s Argument that We Misapplied the Law Regarding the Scope of a Reply

In the Reply, Petitioner argued:

[T]he ’480 Patent’s basestation could adjust its internal synchronization—including number of slots per frame as well as frame and slot duration—to accommodate different air interface standards. This could accommodate frequency hopping in one of two ways. First, the basestation controller could update the hopping sequence in DP RAM enable 202 (Fig. 3) every frame. These maps would then be synchronized for assertion to the TDM bus by the TDM Clk. Alternatively, the DSPs could be directly programed with the hopping sequence.

Reply 13 (internal citations omitted). In the Decision, we determined that this constituted two separate arguments: (1) “First, the basestation controller could update the hopping sequence in DP RAM enable 202 (Fig. 3) every frame”; and (2) “Alternatively, the DSPs could be directly programed with the hopping sequence.” See Dec. 31–32. We determined that the first argument was raised in the Petition and that the second was raised for the first time in the Reply. *Id.* We declined to consider the second argument. *Id.*

Petitioner argues in the Request that our refusal to consider the second argument violated the Federal Circuit’s directive in *Belden Inc. v. Berk-Tek*

LLC, 805 F.3d 1064 (Fed. Cir. 2015). Req. 2, 13–15. *Belden* addressed the Board’s denial of a motion to exclude reply expert testimony as beyond the proper scope of a reply, as informed by our Office Patent Trial Practice Guide.³ 805 F.3d at 1077–78. In upholding the Board’s denial, the Federal Circuit noted that “[e]vidence admitted in rebuttal to respond to the patent owner’s criticisms will commonly confirm the *prima facie* case. That does not make it necessary to the *prima facie* case.” *Id.* at 1079.

Petitioner argues that it should have been permitted to present responsive evidence confirming the *prima facie* case it presented in the Petition. Req. 13–14. Petitioner’s second theory for combining the ’480 patent and GSM 05.02, however, is not designed to support or confirm the *prima facie* case it presented in the Petition. As explained above (taking into account Petitioner’s Figure 6 argument), and in the Decision (at 25), the *prima facie* case presented in the Petition was that a skilled artisan would have modified the ’480 patent simply by reprogramming the DP RAM Enable 202 mappings. Petitioner’s second Reply argument was that a skilled artisan would have modified different components of the ’480 patent “without any modification to the memory (DP RAM Enable) mapping

³ “While replies can help crystalize issues for decision, a reply that raises a new issue or belatedly presents evidence will not be considered and may be returned. The Board will not attempt to sort proper from improper portions of the reply. Examples of indications that a new issue has been raised in a reply include new evidence necessary to make out a *prima facie* case for the patentability or unpatentability of an original or proposed substitute claim, and new evidence that could have been presented in a prior filing.” Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,767 (Aug. 14, 2012).

used.” Req. 14 (quoting Ex. 1022 (Stark Reply Decl.) ¶ 43).⁴ This is an attempt to argue an entirely new *prima facie* case. Thus, our refusal to consider Petitioner’s second reply argument was consistent with *Belden* and the Office Trial Practice Guide.

Petitioner argues that it should not have had to predict every possible operability argument and address each in the Petition. Req. 14–15. This argument misses the point. Petitioner’s second theory is not evidence designed to show that the *prima facie* case it presented in the Petition was in fact operable. Rather, it is an alternative *prima facie* case presented in case we found the first *prima facie* case inoperable (which we did).

We are not persuaded that we misapplied the law or misapprehended Petitioner’s second theory.

III.CONCLUSION

Petitioner has not shown that we misapprehended or overlooked any of its arguments or evidence, or that we misapplied the law. Accordingly, we decline to change our Decision.

⁴ Petitioner argues that we incorrectly stated that Petitioner raised this second argument for the first time in the Reply; rather, Petitioner argues that Dr. Stark first explained this second theory during his deposition prior to the Patent Owner Response. Req. 14 (citing Ex. 2001, 150:9–153:14). Petitioner did not raise this deposition testimony in its Reply. Thus, we could not have overlooked or misapprehended it. Nevertheless, Petitioner’s argument confirms that this second theory was not presented in the Petition.

IV. ORDER

Petitioner's Request for Rehearing is denied.

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