

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICRON TECHNOLOGY, INC.
Petitioner,

v.

MLC INTELLECTUAL PROPERTY, LLC,
Patent Owner.

Case IPR2015-00504
Patent 5,764,571

Before KEVIN F. TURNER, DONNA M. PRAISS, and PETER P. CHEN,
Administrative Patent Judges.

TURNER, *Administrative Patent Judge.*

DECISION
Denying Request for Rehearing
37 C.F.R. §§ 42.71

I. INTRODUCTION

Micron Technology, Inc. (“Petitioner”) filed a Request for Rehearing (Paper 9, “Reh’g Req.”) of the decision denying institution (Paper 8, “Dec.”) in which the Board concluded that Petitioner was not reasonably likely to prevail in demonstrating that at least one of the challenged claims of U.S. Patent No. 5,764,571 (Ex. 1001, the “’571 Patent”) is not patentable, based on the Petition. Dec. 3. Specific to the instant rehearing request, we found that Petitioner did not demonstrate a reasonable likelihood of prevailing in establishing that challenged claims 1, 9, 10, 12, 30, 42, and 45 were unpatentable as obvious over Kitamura. *Id.* at 10–11.

In its request, Petitioner focuses on the Kitamura ground and contends that we made clearly erroneous factual findings, unsupported by the evidentiary record, resulting in an error of judgment. Reh’g Req. 1. Although we consider Petitioner’s arguments below, the Request for Rehearing is *denied*.

II. ANALYSIS

When rehearing a decision on institution, the Board will review the decision for an abuse of discretion. 37 C.F.R. § 42.71(c). An abuse of discretion may be determined if a decision is based on an erroneous interpretation of law, if a factual finding is not supported by substantial evidence, or if the decision represents an unreasonable judgment in weighing relevant factors. *Star Fruits S.N.C. v. U.S.*, 393 F.3d 1277, 1281 (Fed. Cir. 2005); *Arnold P’ship v. Dudas*, 362 F.3d 1338, 1340 (Fed. Cir. 2004); *In re Gartside*, 203 F.3d 1305, 1315–16 (Fed. Cir. 2000).

Petitioner argues that we erred in assessing the testimony of Dr. R. Jakob Baker, erred in determining the normal function of a “D/A converter,” mischaracterized what aspects Dr. Baker relied upon in making his assessment, failed to compare the structure disclosed in the ’571 Patent, implicated by a means-plus-function limitation, with the equivalent structure in Kitamura, and committed legal error by requiring an obviousness argument for each claim element. Reh’g Req. 2–15. We address each of these points in turn.

Petitioner argues that we erred in assessing the testimony of Dr. Baker, namely, in determining that “Dr. Baker also provides that the output of the D/A conversion circuit may be non-linear or random in the circuits employed by Kitamura,” (Dec. 9 (citing Ex. 1003 ¶ 76)), whereas Dr. Baker actually testified the D/A conversion *circuit* is characterized as being a linear, non-linear, or random *circuit*. Reh’g Req. 2–3. Petitioner also argues that this erroneous factual finding is significant, and that “[t]here is no record evidence supporting the Board’s finding that the voltage *output* of the D/A conversion circuit 10 can be random.” *Id.* at 3–4. Although we acknowledge the error, we are not persuaded that it was a fact finding, or that it was determinative as to whether Petitioner sufficiently demonstrated a reasonable likelihood of prevailing in establishing that challenged claims 1, 9, 10, 12, 30, 42, and 45 were unpatentable as obvious over Kitamura.

The section of the Decision relied upon in the Rehearing Request was characterizing the testimony of Dr. Baker. *See* Dec. 9. It is correct that Dr. Baker did not characterize the *output* as non-linear or random, but instead characterized the *circuits* as being a linear, non-linear, or random circuit. *See* Ex. 1003 ¶ 76. We acknowledge that as error. However, we did not characterize a D/A conversion

circuit as outputting a random voltage, as Petitioner alleges. Reh’g Req. 3. This was a mischaracterization of Dr. Baker’s testimony, not a finding of fact. At no point in the Decision do we rely on such erroneous assessment, so that it cannot be a basis for overturning our decision to not institute. As discussed below, we are cognizant of the function of a D/A conversion circuit, as would have been determined by one of ordinary skill in the art, and did not find that its output would be non-linear or random, irrespective of our mischaracterization of Dr. Baker’s testimony.

Petitioner continues that we erred in determining the normal function of a “D/A converter,” arguing that we failed to cite any evidence of record “to support its erroneous finding.” Reh’g Req. 4–5. Petitioner also argues that we limited the converter to a single function, that the D/A converter in Kitamura is not a generic converter, and that Dr. Baker’s testimony explains how the selection occurs and what is selected to achieve the converted analog signal output. *Id.* at 5–8. We do not agree.

In contrast to Petitioner’s assertions, we did not limit the function of a “D/A converter” to a single function. Rather, we stated that “[t]he normal function of a D/A converter is not to select between reference voltages, but to render the digital input into analog form.” Dec. 10. Petitioner acknowledges that Kitamura’s D/A conversion circuit “performs what may be described as a ‘conversion’ function—namely, a digital input is rendered as corresponding analog output.” Reh’g Req. 7. As such, we do not agree that the finding was erroneous, because denominating a circuit as a D/A converter would require that circuit to convert digital signals to analog signals. In many respects, this is little more than determining the meanings

of words recited in the claims, and pronouncing that they mean what they say. Petitioner cannot state simply that a “D/A converter” would *not* perform such a function. Our statement in the Decision merely means that the recitation of “D/A converter” in a reference, such as Kitamura, implies a circuit that performs the conversion function, and other functions performed by the circuit that are not readily apparent from its perfunctory recitation. As such, we disagree that we limited a “D/A converter” to a single function; rather, we discussed a single function that such a recitation conveys.

The Decision referred to all of the recitations of “D/A converter” in Kitamura (Dec. 10); Petitioner’s Petition and the Request for Rehearing do not refer to others. All of the other discussions of a “D/A converter” in the Request for Rehearing refer to the testimony of Dr. Baker (Reh’g Req. 5–8), and no additional recitations in Kitamura. Other than Dr. Baker’s testimony, Petitioner has not pointed to aspects of Kitamura that would teach or suggest that the D/A conversion circuit is other than a generic D/A converter. As we discussed in the Decision, we were not persuaded that the D/A conversion circuit in Kitamura necessarily would function as described by Dr. Baker. *See* Dec. 10.

From a review of Dr. Baker’s testimony, he provides that:

It is advantageous (and would have been well known to a POSITA at the effective filing date of the ’571 patent) to configure the output values of the D/A conversion circuit 10 (e.g., reference voltage signals) to be towards the middle of these ranges used to read the current state of the memory cell to reduce false reads by increasing the margining error between true and false reads.

Ex. 1003 ¶ 74 (citing Exhibit 1004 at 21:27-31). We were not persuaded that Dr. Baker is testifying as to how the circuit must perform, only how it could perform.

Dr. Baker goes on to further interpret Kitamura (*id.* at ¶¶ 75–79), citing additional references (Exs. 1012, 1013), but those additional references do not form part of the obviousness ground, and are not cited in the Petition. We further note Petitioner may rely on expert testimony to interpret patents and printed publications, but may not rely on such testimony as a substitute for a patent or printed publication. *See* 35 U.S.C. § 311(b). We remain persuaded that Dr. Baker does not interpret Kitamura’s D/A conversion circuit as requiring the selection of an analog signal, but rather indicates that only as a possible interpretation of Kitamura. As we stated in the Decision, Dr. Baker’s discussion makes clear how the output voltages could be set, but he does not testify that it must employ his discussed methods. Dec. 10.

Petitioner also argues that we mischaracterized what aspects Dr. Baker relied upon in making his assessment. Reh’g Req. 8–9. Petitioner continues that Dr. Baker cites to Kitamura’s explicit disclosure, as well as corroborating his explanation with citations to textbook knowledge, but that we failed to credit the same. *Id.* at 8. We do not agree. We fully reviewed all of Dr. Baker’s testimony and corroborating citations, but we were not persuaded that Kitamura’s D/A conversion circuit must function as Dr. Baker suggests it could function. In other words, we do not doubt Dr. Baker’s facts; we are only unpersuaded that Dr. Baker’s testimony states sufficiently that Kitamura’s D/A conversion circuit must select among specific analog reference voltages.

In addition, contrary to Petitioner’s assertion we are requiring that “the ‘explicit disclosure’ of the structure for performing a function be described in **words**—as opposed to **drawings**—in the specification” (*id.* at 9), we are not

persuaded that what is illustrated in the drawings should be expanded beyond what it would normally convey to ordinarily skilled artisans. Petitioner's arguments are a tacit admission that Kitamura's disclosure of the D/A conversion circuit comes largely from the drawings, and we are not persuaded that Kitamura's disclosure should be expanded to encompass more than a circuit that converts a digital signal into an analog signal.

Petitioner also alleges that we failed to compare the structure disclosed in the '571 Patent, implicated by a means-plus-function limitation, with the equivalent structure in Kitamura. *Id.* at 9–14. Petitioner continues that if we had done so, we “would have concluded that the structure of Kitamura's D/A conversion circuit 10 is the same as or equivalent to the '571 Patent's Verify Reference Select 222 structure.” *Id.* at 10. We do not agree. The Decision made clear the equivalent structure of the reference voltage selecting means, and also provided analysis of the structures disclosed in Kitamura. Dec. 6–7, 8–9. Although the selection of one of the analog reference voltages is clear in the disclosure of the '571 Patent, we are not persuaded that Kitamura discloses the same or equivalent selection.

Petitioner also charges, that based on Patent Owner's arguments, we focused solely on the name of the structure in Kitamura, rather than addressing the range of functions that structure performs. Reh'g Req. 11. However, as discussed above, we are not persuaded that the structure in Kitamura would have a range of functions, nor are we persuaded that Dr. Baker's testimony requires that range of functions necessarily to be present in the Kitamura structure. Further, we are unpersuaded that Dr. Baker's “conclusion is inescapable” (*id.* at 12), because we

are unpersuaded that Dr. Baker's conclusion is that Kitamura's D/A conversion circuit *must* perform a selection. In addition, we disagree we held Kitamura's disclosure to a higher disclosure standard (*id.* at 13), because we viewed the disclosures of both the '571 Patent and Kitamura and determined what each would have taught or suggested to one of ordinary skill in the art.

Turning to Petitioner's last contention, Petitioner alleges that we committed legal error in applying an erroneous obviousness standard requiring an obviousness argument for each claim element. Reh'g Req. 14–15. Petitioner continues that the proper analysis involves comparing the equivalent structures and we cannot require Petitioner to argue the obviousness of specific claim elements instead of the claim as a whole. *Id.* We did not require Petitioner to demonstrate the obviousness of specific elements, and we did compare structures disclosed in the '571 Patent and Kitamura, as discussed above. The cited comment in the Decision (“[i]n addition, the Petitions fail to provide any rationale for why Kitamura's disclosure of D/A conversion renders the selection of a reference voltage or signal obvious,” Dec. 10; Reh'g Req. 15) was made to note that Petitioner was relying on the same or equivalent structures in both, and was not relying on the obviousness of one over the other. One example of this would have been if Petitioner had cited a structure in Kitamura, acknowledged that it was not the same, but argued that the equivalent structure disclosed in the '571 Patent would have been obvious in view of the structure in Kitamura; i.e., pointing out that one would have been an obvious variation of the other. Petitioner had not done this, as we merely noted. As such, we were not attempting to apply or misapply a different, legal standard to the

ground found in Petitioner's Petition, but, rather, pointing out the limits of the arguments found in that Petition.

For the foregoing reasons, Petitioner has not shown that the Board's findings are not supported by substantial evidence, nor that the Board abused its discretion in determining that Petitioner failed to demonstrate that at least one of the challenged claims of the '571 Patent is unpatentable.

III. CONCLUSION

Insofar as we have addressed above the assertions set forth in Petitioner's Request for Rehearing (Paper 9), the Request is *granted*. In all other respects, the Request is *denied*.

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