

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

INFINEON TECHNOLOGIES AG,
Petitioner,
v.
AMATECH GROUP LIMITED,
Patent Owner.

IPR2022-00951
Patent 9,165,240 B2

Before STACEY G. WHITE, BRIAN D. RANGE, and
JULIET MITCHELL DIRBA, *Administrative Patent Judges*.

Opinion for the Board filed by *Administrative Patent Judge* WHITE with
Administrative Patent Judge RANGE joining the opinion.

Opinion Dissenting filed by *Administrative Patent Judge* DIRBA.

WHITE, *Administrative Patent Judge*.

DECISION
Granting Petitioner's Request on Rehearing
of the Final Written Decision
37 C.F.R. § 42.71(d)

I. INTRODUCTION

Infineon Technologies AG (“Petitioner”) seeks rehearing of our Final Written Decision (Paper 40, (“Decision” or “Dec.”)). Paper 41 (“Rehearing Request” or “Req. Reh’g”). In our Decision, we determined that Petitioner had demonstrated that claims 1, 2, 4–6, 8–10 of U.S. Patent No. 9,165,240 B2 (“the ’240 patent,” Ex. 1001) are unpatentable, but had not demonstrated that claims 3, 7, and 11 are unpatentable. In this Request for Rehearing, Petitioner limits its arguments to claim 3. Req. Reh’g 1. For the following reasons, Petitioner’s Request for Rehearing is granted.

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). Under 37 C.F.R. § 42.71(d), a party requesting rehearing of a decision must identify specifically all matters we misapprehended or overlooked, and the place where each matter was previously addressed. *Id.* When rehearing a decision on petition, the Board “review[s] the decision for an abuse of discretion.” 37 C.F.R. § 42.71(c) (2021). 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). A request for rehearing, therefore, is not an opportunity merely to disagree with the Board’s assessment of the arguments or weighing of the evidence, or to present new arguments or evidence. *See, e.g., Presidio Components, Inc. v. AVX Corp.*, IPR2015-01332, Paper 21 at 4 (PTAB Feb. 18, 2016).

III. ANALYSIS

In the Decision, we concluded, in relevant part, that Petitioner did not establish the unpatentability of claim 3 by a preponderance of the evidence. Dec. 41–42. As noted in the Request for Rehearing, there were three opinions issued in regards to claim 3, a majority, a concurrence, and a dissent. Req. Reh’g 1 (citing Dec. 1–46 (majority), 47–52 (concurrence), 53–58 (dissent)).

Claim 3 is a dependent claim which recites, in relevant part, “the inner end of the outer winding and the outer end of the inner winding are unconnected.” Ex. 1001, 26:19–21. We construed this phrase to mean that “the inner end of the outer winding and the outer end of the inner winding are open.” Dec. 23–26. “Petitioner disagrees with that construction and reserves the right to appeal that construction to the Federal Circuit,” but bases this rehearing request on its assertion that “the majority opinion misapprehended or overlooked that Petitioner proved claim 3 unpatentable even under the construction the Board adopted.” Req. Reh’g 1. Petitioner argued that, even under our construction, claim 3 was unpatentable because a person of ordinary skill in the art would have understood that an obvious and conventional way of manufacturing the card body of Eray-WO799¹ would have had unconnected ends. *Id.* In the Final Written Decision, we concluded that “Petitioner has not provided us with evidence that one of ordinary skill in the art, while experienced in researching and developing RFID antennas, would have education or experience relating [to] manufacturing processes.” Dec. 41. Thus, we review our bases for that

¹ Eray, WO 2010/066799 A2, published June 17, 2010 (Ex. 1006, “Eray-WO799”).

determination in light of Petitioner's arguments that we misapprehended or overlooked its evidence as to this issue.

Petitioner alleged that claim 3 and its base claims 1 and 2 each were unpatentable as obvious over Eray-WO799. Paper 2 ("Pet.") at 3. We found claims 1 and 2 obvious over Eray-WO799. Dec. 29–36. Petitioner had several alternative arguments regarding the unpatentability of claim 3. Pet. 34–41. We were not persuaded by any of Petitioner's arguments (Dec. 36–42), but only one serves as the basis for this Rehearing Request, that is that it would have been obvious to manufacture Eray-WO799's card body in a manner that would have created an intermediate manufacturing product in which the ends of Eray-WO799's wires would have been unconnected (Req. Reh'g 1–2). In order to explore whether we misapprehended or overlooked evidence or arguments as to this argument we will review our findings as to the person of ordinary skill in the art and the evidence adduced as to the person of ordinary skill in the art's knowledge of the manufacturing of Eray-WO799's card body.

As stated in our Final Written Decision, we adopted Petitioner's definition of the person of ordinary skill in the art and found that the person of ordinary skill in the art would have possessed "a Bachelor's degree in electrical engineering or a similar field, and 1–2 years of experience researching and developing antennas used in RFID applications." Dec. 6–7 (citing Pet. 8; PO Resp. 18). Petitioner's declarant, Dr. Daniel van der Weide, supported Petitioner's definition, which was adopted for this proceeding. Ex. 1003 ¶ 25. Dr. van der Weide defined himself as "a person of more than ordinary skill in the art during the relevant timeframe" because "[b]y 2010, [he] held a Ph.D. in electrical engineering, and [he] had at least

seven years of experience developing, researching, and supervising graduate students researching antennas used in RFID applications.” *Id.* ¶ 26.

Petitioner argues that we misapprehended the breadth of the term “developing” as used by Petitioner and Dr. van der Weide in defining the person of ordinary skill in the art. Req. Reh’g 7–8. Petitioner directs us to several paragraphs from Dr. van der Weide’s declaration that Petitioner asserts to show that Dr. van der Weide’s usage of the term “developing” was broad enough to encompass manufacturing. *Id.* at 8 (citing Ex. 1003 ¶¶ 22–26, 149).

Paragraph 22 notes Dr. van der Weide’s understanding of the term “person of ordinary skill in the art.” Ex. 1003 ¶ 22. Paragraph 23 discusses his understanding as to the technology at issue, which he describes as “smart cards operating in at least a contactless mode” as that field was understood in August 2010. *Id.* ¶ 23. Paragraph 24 discusses the possibility of a critical date prior to August 2010. *Id.* ¶ 24. Paragraph 25 states Dr. van der Weide’s definition of the person of ordinary skill in the art, which is the same as the definition we adopted, without any elaboration as to the term “developing.” *Id.* ¶ 25. Finally, paragraph 26 relays Dr. van der Weide’s understanding that he is more than a person of ordinary skill in the art, but that he has experience working with people that fit the description he proffered. *Id.* ¶ 26.

Paragraph 26 leads us to consider Dr. van der Weide’s work experience so that we may ascertain more about the experience of those he worked with that fit this description. Dr. van der Weide states that he is a “Full Professor in the Department of Electrical and Computer Engineering at the University of Wisconsin-Madison” with expertise “perform[ing] research on RFID antennas and sensors.” *Id.* ¶¶ 3–4. Dr. van der Weide notes that he

has worked in industry “designing and developing antennas for geolocation and buried asset marking” as well as “designing and developing RFID antennas for low-temperature reagent and medical sample storage.” *Id.* ¶ 6. Finally, Dr. van der Weide notes his peer-reviewed publications and notes that “[s]ome representative publications related to performance of planar antennas and means of fabrication.” *Id.* ¶ 7. This evidence lends credence to Petitioner’s argument that we may have misapprehended the breadth of experience of people that Dr. van der Weide has worked with and supports the argument that the term “developing” as recited in the definition of a person of ordinary skill in the art would have included manufacturing.

Petitioner further asserts that we overlooked or misapprehended “***unrebutted*** expert testimony corroborated by two prior art patents describing RFID smart cards” and that this evidence “demonstrated that a conventional and obvious way to manufacture Eray-WO799’s smart card was by forming a card antenna on a card body before adding the chip.” Req. Reh’g 2 (citing Pet. 39–40; Paper 20 (“Reply”) at 31). Thus, Petitioner argues a person of ordinary skill in the art would have understood that an obvious and conventional way of manufacturing the card body of Eray-WO799 would have had unconnected ends as required by our construction. *Id.*

Paragraph 149 of Dr. van der Weide’s declaration states that a person of ordinary skill in the art “would have understood that an obvious and conventional way to construct the smart card as shown in Eray-WO799 FIG. 12 would have been to form the turns S1, S2, SC3 and SC4 on or in the card body (e.g., by laying wire) before connecting the wire to (or forming) access terminals and connecting module M.” Ex. 1003 ¶ 149. In support of that

opinion, he cited Ryu² and Finn-089³. We found Ryu to be unhelpful because it was “directed to solving problems that occur during the manufacture of cards.” Dec. 42 (citing Ex. 1028, 1:25–2:53). Petitioner points out that “[w]hile Ryu discloses manufacturing techniques, Ryu also describes and claims a ‘communication system’ with a smart card and a reader.” Reh’g Req. 9 (citing Ex. 1028, code (57), claims 1–2). Petitioner is correct in noting that Ryu’s disclosures are not so narrow as we described in the Decision. As to Finn-089, we found that reference unhelpful because it was “directed to a process for the contacting of a wire conductor in the course of manufacture of a transponder unit.” Dec. 41–42 (citing Ex. 1015, 1:15–17). Petitioner asserts that we failed to acknowledge the fact that Finn-089 was incorporated by reference in the ’240 patent noting that “[p]atents incorporated by reference ‘are effectively part of the host [patents] as if [they] were explicitly contained therein.’” Reh’g Req. 9 (citing *X2Y Attenuators, LLC v. U.S. Int’l Trade Comm’n*, 757 F.3d 1358, 1362–63 (Fed. Cir. 2014) (alterations in Rehearing Request)). On this record, we agree that we overlooked and misapprehended the import of Ryu and Finn-089 and if those references are given appropriate weight, they lend further credence to Dr. van der Weide’s testimony that one of ordinary skill in the art would have known that an obvious way to manufacture Eray-WO799 would have created an intermediate product with requisite free ends. Further, we adopt the full reasoning stated in the Dissent as to the unpatentability of claim 3 (Dec. 53–57). Therefore, we GRANT Petitioner’s Request for Rehearing

² U.S. Patent No. 8,286,873 (Ex. 1028, “Ryu”).

³ U.S. Patent No. 6,698,089 (Ex. 1015, “Finn-089”).

and hold that Petitioner has shown by a preponderance of the evidence that claim 3 would have been obvious over Eray-WO799.

IV. CONCLUSION

For the foregoing reasons, Petitioner has shown that the Decision overlooked or misapprehended Petitioner's arguments and evidence regarding the unpatentability of claim 3 as obvious over Eray-WO799. Accordingly, Petitioner's Request for Rehearing is granted.

Outcome of Decision on Rehearing:

Claim(s)	35 U.S.C. §	Reference(s)/Basis	Denied	Granted
3	103	Eray-WO799		3

Final Outcome of Final Written Decision after Rehearing:

Claim(s)	35 U.S.C. §⁴	Reference(s)/Basis	Claims Shown Unpatentable	Claims Not shown Unpatentable
1–3, 9–11	103	Eray-WO799	1–3, 9–10	11
1, 4–7	103	Eray-WO799, Phillips-171	1, 4–6	
1, 4, 8	103	Eray-WO799, Phillips-171, Caruana	1, 4, 8	
Overall Outcome			1, 2–6, 8–10	11

⁴ We found that claim 7 was not amenable to construction and as such, we could not ascertain the scope of the claim in a manner that would allow us to apply the asserted art.

V. ORDER

In consideration of the foregoing, it is hereby:
ORDERED that Petitioner's Request for Rehearing is *granted*.

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DIRBA, *Administrative Patent Judge, dissenting*.

In my view, Petitioner has not shown that dependent claim 3 is unpatentable for the reasons I previously explained. *See* Dec. 47–52 (concurring opinion). Accordingly, I respectfully dissent from the decision granting rehearing and concluding that claim 3 is unpatentable.

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