

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

QUECTEL WIRELESS SOLUTIONS CO. LTD.,
Petitioner,

v.

KONINKLIJKE PHILIPS N.V.,
Patent Owner.

IPR2021-00563
Patent 8,195,216 B2

Before KEVIN F. TURNER, MICHELLE N. WORMMEESTER, and
RUSSELL E. CASS, *Administrative Patent Judges*.

TURNER, *Administrative Patent Judge*.

DECISION

Denying Patent Owner's Request on Rehearing of Final Written Decision
37 C.F.R. § 42.71(d)

I. INTRODUCTION

On September 13, 2022, we issued a Final Written Decision, determining that Petitioner had shown, by a preponderance of the evidence, that claim 9 of U.S. Patent No. 8,195,216 B2 (Ex. 1001, “the ’216 Patent”) was unpatentable. Paper 25 (“Dec.” or “Decision”). On October 13, 2022, Patent Owner, Koninklijke Philips N.V., filed a Request for Rehearing (Paper 26, “Reh’g Req.”) under 37 C.F.R. § 42.71(d) to seek reconsideration of the Decision.

For reasons discussed below, the Request for Rehearing is *denied*.

II. STANDARD OF REVIEW

When rehearing a decision on institution, we do not review the merits of the decision *de novo*, but instead review the decision for an abuse of discretion. 37 C.F.R. § 42.71(c) (2020). An abuse of discretion occurs when a “decision was based on an erroneous conclusion of law or clearly erroneous factual findings, or . . . a clear error of judgment.” *PPG Indus. Inc. v. Celanese Polymer Specialties Co.*, 840 F.2d 1565, 1567 (Fed. Cir. 1988) (citations omitted). The party requesting rehearing has the burden to show that the decision should be modified. 37 C.F.R. § 42.71(d). Additionally, the request for rehearing “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.*

III. ANALYSIS

We determined, based on the Petition (Paper 2, “Pet.”), that claim 9 of the ’216 Patent was obvious under 35 U.S.C. § 103 over the combination of

Agin¹ and Chen² by a preponderance of evidence. Dec. 2, 29. That sole claim is reproduced below:

9. A secondary station for use in a radio communication system having a communication channel between the secondary station and a primary station, the channel including an uplink and a downlink control channel for transmission of control information, including power control commands, and a data channel for the transmission of data, the secondary station comprising:

power control means for adjusting the power of the uplink control and data channels in response to the downlink power control commands;

means for setting an initial transmission power after an interruption in transmission to that before the interruption adjusted by an offset; and

means for determining the offset from a difference between a last transmission power and a weighted average of the transmission power over a predetermined period before the interruption in transmission.

Ex. 1001, 8:44–60.

In the Request for Rehearing, Patent Owner:

A. asserts that we failed to resolve a fundamental claim construction dispute concerning the claim term “offset” (Reh’g Req. 3–5);

B. asserts that we misapprehended that Agin teaches the claimed means for setting an initial transmission power after an interruption in transmission to that before the interruption adjusted by an offset (Reh’g Req. 5–10);

¹ U.S. Patent No. 6,337,988 B1, filed June 22, 1999, issued January 8, 2002 (Ex. 1004, “Agin”).

² U.S. Patent No. 6,512,925 B1, filed December 3, 1998, issued January 28, 2003 (Ex. 1005, “Chen”).

C. asserts that we overlooked evidence of record showing that the initial transmission power after an interruption in Agin is not adjusted, as compared to the power level immediately preceding the interruption (Reh’g Req. 10–14); and

D. asserts that we determined that a person of ordinary skill would have been motivated to combine the teachings of Agin with Chen to achieve the claimed invention, although this is factually unsupported (Reh’g Req. 14–15).

We address these arguments, in turn.

A.

Patent Owner contends we failed to resolve a fundamental claim construction dispute concerning the claim term “offset.” Reh’g Req. 3–5. Patent Owner argues that “[t]he parties presented a dispute regarding the appropriate construction of the term ‘offset.’” *Id.* at 3. The actual claim term, “means for setting an initial transmission power after an interruption in transmission to that before the interruption adjusted by an offset,” certainly involves the term “offset,” but the actual construction of the means-plus-function limitation does not require the explicit construction for the claim term “offset.” We acknowledged that Agin adjusts the power by a step size and not an offset (Dec. 18), and we acknowledged the differences in the terms (*id.* at 18–19), but found that given that an offset is quantized in units of step size, the application of an offset of a single step size alteration is not distinguishable from the application of a step size (*id.* at 19).

To the extent that the claim term “offset” needed construction, we determined it to be distinct from “step size,” and possibly denominated into units of the latter. The overall construction of the means-plus-function

limitation is independent of the construction of “offset” because we determined that Petitioner had identified a corresponding structure for respective claim element, specifically the power control means. Dec. 9 (citing Pet. 6–7).

Further we disagree with Patent Owner that “[t]he parties presented a fundamental disagreement concerning the proper construction of the term ‘offset,’ and the law requires that such a dispute must be resolved.” Reh’g Req. 3. Both parties acknowledge and agree that the specification specifically teaches that an offset and a step size are related, thus acknowledging them as separate concepts, although related. *See* Dec. 18–19. Although Patent Owner now appears to disagree, the claim construction determination requires consideration of what the disclosed structure of the means-plus-function term is, which the Decision did. We determined the proper structure in the Decision and we did not need to proffer an explicit construction for the term “offset,” since we acknowledged the claim term’s distinctiveness with respect to “step size.” We do not reach a different conclusion herein, and do not agree with Patent Owner that the lack of an explicit claim construction of “offset” in the Decision constituted legal error.

B.

Patent Owner contends that we misapprehended that Agin teaches the claimed means for setting an initial transmission power after an interruption in transmission to that before the interruption adjusted by an offset. Reh’g Req. 5–10. Patent Owner emphasizes that Agin only teaches the application of step size change in power *after* resuming transmission, and thus does not teach that the power after interruption is the prior power and an offset, i.e., the initial transmission level, where this understanding is supported by the

Examiner's conclusions during prosecution of the instant patent. *Id.* at 5–6. Patent Owner also argues that upon resumption, step size changes can be made in Agin, through communication between mobile and base stations, but that Agin provides that such communication does not occur during interruption, i.e., prior to resumption of transmission. *Id.* at 7–8. Patent Owner also argues that we shifted the burden to Patent Owner to show that Agin does not teach applying an offset to the first transmission after an interruption. *Id.* at 8–9.

We do not agree with Patent Owner's arguments. As we discussed in the Decision, Agin describes setting the power control step size to $\delta = \delta_1$ if transmission is resumed after an interruption and if a duration T' is passed, where δ_1 is a non-modified power control step size, and if the duration T' is still running, then $\delta = \delta_2$, where δ_2 corresponds to a modified power control step size, in particular an increased power control step size. Dec. 15–19 (citing Ex. 1004, 5:44–48, 5:54–57). Contrary to Patent Owner's assertions (Reh'g Req. 8–9), Agin specifically addresses transmission “after an interruption.” Although Patent Owner argues that Agin does not provide for an offset to the initial transmission power, Agin does provide for multiple step sizes after interruption, that would also include the initial transmission power.

Patent Owner also argues that we “erroneously cite[d] to the '216 patent itself to support the conclusion that this limitation would have been obvious” (*id.* at 9, n.2), with which we do not agree. The citation to the '216 Patent was made by Petitioner in its argument that the specification reflects the understanding of skilled artisans that the state of the power control loop may be retained from before the interruption (Dec. 17), which is an

understanding that is echoed by both parties declarants, and discussed below. We are not persuaded that we cited to the '216 Patent to support obviousness, other than to discuss what one of ordinary skill would have understood, which is a part of any obviousness analysis. As such, we do not agree that we misapprehended what Agin discloses with respect to the claimed means for setting an initial transmission power.

C.

Patent Owner further contends that we overlooked or misapprehended the testimony of both sides' expert witnesses as to Agin. Reh'g Req. 10–14. Patent Owner takes issue with a statement that we made, namely that “[b]oth parties agree that Agin’s power control command instructs the MS regarding the step size *for increasing or decreasing power after the interruption.*” *Id.* at 10 (citing Dec. 17, emphasis added). Patent Owner characterizes this as concluding that “the parties agreed that Agin’s power control command instructs the mobile station *to apply the step size adjustment to the initial transmission* after the interruption.” *Id.* (emphasis added). We do not agree. The statement made in the Decision discusses the behavior of Agin after interruption, but would also apply prior to the interruption, in that Agin teaches a step size change of increasing or decreasing transmission power. Patent Owner’s declarant, Dr. Jackson, agrees with that general assessment of what Agin discloses (*see* Ex. 2001 ¶¶ 114-115), i.e., adjusting the power levels using a step size δ . We acknowledge that Dr. Jackson testifies that Agin is silent as to the power level applied immediately following the interruption. Ex. 2001 ¶ 115. As such, we did not determine that the parties agreed that a step size adjustment is made to the initial transmission after interruption, only that both sides agreed that Agin discloses the functionality

of making a step size change in power, which can occur after the interruption. We did not assert or conclude that both parties agreed that such a step size change does or could occur in the initial transmission after interruption; that is a contention that is discussed at length in the Decision, where consensus would have obviated that discussion.

Patent Owner also contends that we failed to acknowledge testimony from Petitioner's declarant that the initial transmission power after an interruption would continue from the power level prior to the interruption. *Id.* at 10–11. Patent Owner refers specifically to Dr. Ding's testimony that "you are basically starting from where you were because this algorithm tells you to start from where you were, and that is to set [] the powers that you using before and then make an adjustment based on the step size," and "right after the transmission has resumed beyond an interruption, past the interruption, your [] power control algorithm [] will ... continue from where the power value level -- power level value was prior to the interruption." *Id.* (quoting Ex. 2002, 111:2–13, 113:13–21). We determine, however, that these statements are equivalent to those made by Dr. Jackson, i.e., that a logical starting point, with transmission level after the interruption, would have been the prior transmission level. Dr. Ding also describes Agin's process of applying δ_1 or δ_2 , depending specified parameters. Ex. 1003 ¶ 89–91. With respect to his deposition, Dr. Ding also provides that "an adjustment based on the step size" is made, as well as a determination of whether "you come up with either a new step size or the same step size." Ex. 2002, 111:7–8, 113:19–20. As such, we continue to find Dr. Ding's assertion to be persuasive that one of ordinary skill in the art, in view of

Agin and Chen, would have applied the prior transmission power, after interruption, adjusted by a step size change.

Patent Owner also argues that we mischaracterized testimony by Patent Owner's declarant, where Dr. Jackson testified that Agin does not teach applying an adjustment to the initial transmission after an interruption, and that if one were to assume that Agin set its initial transmission level to that immediately before the interruption, it would not involve an offset. Reh'g Req. 11 (citing Ex. 2001 ¶¶ 114–117). Patent Owner asserts that we “erroneously state[d] that Dr. Jackson ‘agrees that a person of ordinary skill in the art would have understood that the transmission power, to be adjusted by the step size in Agin, is the transmission power before the interruption.’” *Id.* at 12 (quoting Dec. 17). We do not agree. First, as discussed above, we appreciate what Dr. Jackson testified to and what he did not testify to. Second, the quotation from the Decision was to what Petitioner responded in Petitioner's Reply Brief, and not a direct assertion in the Decision of what we determined the parties to have both acknowledged. Third, Dr. Jackson acknowledged that one could assume that Agin set its initial transmission level, after interruption, to that immediately before the interruption, which would have been a logical assumption, i.e., starting from where it left off. Ex. 2001 ¶ 115. Thus, Dr. Jackson acknowledged that a person of ordinary skill in the art would have understood that the initial transmission power could have been the same transmission power before the interruption. Further, we continue to determine that Dr. Jackson did not testify that this initial transmission power would have been adjusted. *See* Ex. 2001 ¶¶ 114–117. As such, we do not agree with Patent Owner that we mischaracterized Dr. Jackson's testimony.

D.

Patent Owner lastly contends that we determined that a person of ordinary skill would have been motivated to combine the teachings of Agin with Chen to achieve the claimed invention, although this is factually unsupported. Reh’g Req. 14–15. More specifically, Patent Owner argues that Chen does not teach utilizing a single base station in its calculations, and Chen’s disclosure of making the determination “by a number of possible methods” all utilize feedback received at the power control processor from the multiple base stations. *Id.* at 14. Patent Owner continues that it would have been fundamentally inconsistent with the teachings of Chen to use a single base station in making the power control decision. *Id.* at 14–15. Additionally, Patent Owner argues that the weighted average of Chen is calculated based on multiple power control commands from multiple base stations, such that if only a single were used, there would be nothing to average. *Id.* at 15.

We do not agree with Patent Owner’s arguments. As stated in our Decision, Agin discloses that parameters may be determined based on statistics on power control results for a transmission period before said transmission interruption, including “the largest [of] the variations of a received signal power before the interruption. *See* Dec. 24; Ex. 1004, 6:9–13. Thus, Agin acknowledges that variations are possible, and can be taken into account, even with a single base station. Chen discusses that a power control processor determines the correct power control command by use of averaging or weighted averaging from “each transmitter’s signal at the receiver.” Ex. 1005, 10:45–56. Thus, although Patent Owner is correct that those signals are received from multiple transmitters, in Chen, Agin

demonstrates that variations can occur and can be compensated for with even a single transmitter, countering Patent Owner's argument that there would be nothing to average over. Taking Agin and Chen together, as Petitioner has asserted, we remain persuaded that ordinarily skilled artisans would have applied the weighted average, disclosed in Chen, in Agin, even if a single transmitter/ base station is utilized. *See* Dec. 23–25. We remain persuaded that those of ordinary skill in the art would have been able to apply the concept of a weighted average to signals received from a single base station.

IV. CONCLUSION

Outcome of Decision on Rehearing:

Claim(s)	35 U.S.C §	Reference(s)/Basis	Denied	Granted
9	103	Agin, Chen	9	
Overall Outcome			9	

V. ORDER

For the reasons given, it is:

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

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