

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ARUBA NETWORKS, INC.,
Petitioner,

v.

XR COMMUNICATIONS LLC d/b/a VIVATO TECHNOLOGIES,
Patent Owner.

Case IPR2018-00701
Patent 6,611,231 B2

Before BARBARA A. PARVIS, TERRENCE W. McMILLIN, and
JAMES J. MAYBERRY, *Administrative Patent Judges*.

McMILLIN, *Administrative Patent Judge*.

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

I. INTRODUCTION

Aruba Networks, Inc. (“Petitioner”) filed a Request for Rehearing (Paper 11, “Reh’g Req.”) of our Decision Denying Institution of *Inter Partes* Review (Paper 10, “DDI”) of claims 1–9 and 12 of U.S. Patent No. 6,611,231 B2 (Ex. 1001, “the ’231 patent”). As authorized by the Board, XR Communications LLC d/b/a Vivato Technologies (“Patent Owner”), filed a Response to the Request for Rehearing (Paper 12, “Response”) and Petitioner filed a Reply in Support of the Request for Rehearing (Paper 14, “Reply”).

II. STANDARD OF REVIEW

When reconsidering a decision on institution, the Board reviews the decision for an abuse of discretion. *See* 37 C.F.R § 42.71(c). An abuse of discretion occurs 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. *See 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). “The burden of showing a decision should be modified lies with the party challenging the decision.” 37 C.F.R § 42.71(d); *accord* Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,768 (Aug. 14, 2012). In its request for rehearing, the dissatisfied party must, in relevant part, “specifically identify all matters the party believes the Board misapprehended or overlooked.” 37 C.F.R. § 42.71(d); Office Patent Trial Practice Guide, 77 Fed. Reg. at 48,768. We address Petitioner’s arguments with these principles in mind.

III. ANALYSIS

A. Decision Denying Institution

The Petition challenged claims 1–9 and 12 of the ’231 patent based on a combination of Barratt and Calderbank. *See* DDI 5, 7. Petitioner argued motivation to combine on page 34 of the Petition (Paper 1, “Pet.”) which stated, “while Barratt does not disclose the specific mathematical operations that are performed on the orthogonal training sequences to calculate a remote terminal’s spatial signature in Barratt’s ‘calibration mode,’ a POSA would have recognized that this spatial signature should be calculated using well-known cross-correlation techniques, such as those described in Calderbank.” Pet. 34. In response to this argument, Patent Owner asserted, “the premise of Petition’s motivation to combine—that Barratt requires calculating spatial signatures from orthogonal training sequences but does not explain how to do so—is not supported by the Petition’s allegations and is instead false.” Paper 8 (Preliminary Response), 15–16. Barratt does not use “orthogonal training sequences to calculate a remote terminal’s spatial signature in Barratt’s ‘calibration mode.’” *See* Ex. 1003, 16:31–17:67 (discussing calibration mode using “predetermined calibration signals”); *see also id.* at 18:50–67 (discussing use of orthogonal training sequences in another “closed loop” embodiment). Barratt does disclose the specific mathematical operations that are used to calculate a remote terminal’s spatial signature in Barratt’s “calibration mode.” *See id.* at 16:60–17:32. Thus, as we determined in the Decision Denying Institution, the purported gap in the teachings of Barratt that Petitioner relies on as the basis for providing the motivation to combine Calderbank with Barratt does not exist. DDI 10. Institution was denied because we determined Petitioner failed to sufficiently establish a motivation to combine the relevant teachings of the

cited references. DDI 14–15 (“[W]e do not believe that the Petition establishes a reasonable likelihood of establishing that a person of ordinary skill in the art would have been motivated to combine the relevant teachings of Barratt and Calderbank.”).

B. Petitioner’s Arguments for Rehearing

The Request for Rehearing does not directly address the reason institution was denied. In the Request for Rehearing, Petitioner does not explain or provide any evidence that would support a determination that “Barratt does not disclose the specific mathematical operations that are performed on the orthogonal training sequences to calculate a remote terminal’s spatial signature in Barratt’s ‘calibration mode,’” which is asserted in the Petition as providing the motivation to combine. See Pet. 34. Nothing in the Request for Rehearing addresses the deficiencies in Petitioner’s showing relating to motivation to combine. Petitioner has not presented sufficient explanation, reasoning, or evidence of a motivation to combine the relevant teachings of the cited references.

In addition, the Request for Rehearing presents arguments that are not supported by the cited evidence. The teachings of the prior art reference, Barratt (Ex. 1003)¹, are repeatedly mischaracterized in the Request for Rehearing.

Petitioner contends, “the Decision [Denying Institution] misapprehended and/or overlooked the teachings of the Barratt reference (Ex. 1003) as well as the contents of the Petition (Paper 1) in **two** important ways.” Reh’g Req. 1 (emphasis added). With regard to the first of these contentions, the Request for Rehearing states:

¹ US 5,592,490

First, the Decision misapprehended or overlooked that Barratt teaches the use of orthogonal “predetermined training sequences” in order to calculate spatial signatures. In particular, the Decision overlooked that Barratt’s “closed loop” embodiment, which uses these orthogonal sequences, is included in Barratt’s “DETERMINING SPATIAL SIGNATURES” section (Ex. 1003 at 16:31–19:22)—and thus is one of the multiple options for calculating spatial signatures explicitly disclosed in the Barratt reference.

Reh’g Req. 1. The Request for Rehearing does not identify where in the Petition the Petitioner made this argument as required in a rehearing request. *See* 37 C.F.R. § 42.71(d) (“The request must specifically identify all matters the party believes the Board misapprehended or overlooked, and the place where each matter was previously addressed.”). The Board cannot have misapprehended or overlooked an argument that was not made in the Petition. And, the paragraph relating to the “closed loop” embodiment (Ex. 1003, 18:50–67) was included in the “DETERMINING SPATIAL SIGNATURES” section (*id.* at 16:31–19:22) of Barratt because it relates to “another embodiment” for updating the spatial signatures. *See id.* at 18:50–52 (“In yet another embodiment, the system can be designed to continuously update the spatial signatures of the remote terminals in a ‘closed loop’ manner.”). Even considering and giving appropriate weight to the referenced section heading in Barratt, we do not find this argument persuasive of error in our consideration of Petitioner’s showing with regard to motivation to combine.

With regard to the second of these contentions, the Request for Rehearing states, “[s]econd, the Decision misapprehended or overlooked that Barratt does not provide the mathematical operations for how to calculate spatial signatures from these orthogonal sequences, but rather makes reference to ‘well known techniques.’ Ex. 1003 at 18:50–19:11.”

Reh’g Req. 1–2. The reference to “well known techniques” (Ex. 1003, 18:66) in the paragraph relating to the “closed loop” embodiment of Barratt (*id.* at 18:50–67) does not relate to methods for calculating spatial signatures. The full sentence in which this reference appears states, “[e]ach time the training sequences are transmitted, each remote terminal **calculates how much of each training sequence it has received using well known techniques**, and transmits this information to the base station.” *Id.* at 18:63–67 (emphasis added). The “well known techniques” are used to calculate how much of each training sequence the remote terminal has received and not for calculating spatial signatures. Thus, the reference to “well known techniques” cannot provide the motivation for combining the technique for calculating spatial signatures from Calderbank with Barratt’s closed loop embodiment as argued by Petitioner. See Reh’g Req. 1–2.

Petitioner also contends, “[t]he Decision misapprehended or overlooked that Barratt does disclose the use of orthogonal training sequences to calculate spatial signatures.” Reh’g Reg. 6. In support of this contention, Petitioner argues, “Barratt **repeatedly** states that this embodiment [the ‘closed loop’ embodiment] uses orthogonal predetermined training sequences for the purpose of calculating spatial signatures” (*id.* at 6 (emphasis added)) and in support cites this passage from Barratt:

In yet another embodiment, the system can be designed **to continuously update the spatial signatures** of the remote terminals in a “closed loop” manner. . . . To do this, both the base station and the remote terminal periodically transmit predetermined training sequences. . . . Each time the training sequences are transmitted, each remote terminal calculates how much of each training sequence it has received . . . and transmits this information to the base station.

In the illustrative embodiment, the base station uses the receiver outputs and knowledge of the transmitted waveforms ***to calculate the remote terminal receive spatial signatures.***

Id. at 6–7 (citing Ex. 1003, 18:50–19:4 (emphasis added by Petitioner)). The cited passage does not support Petitioner’s contention as to the teachings of Barratt. The first sentence in the second paragraph of this passage refers to calculating spatial signatures “[i]n the illustrative embodiment.” This statement does not refer to the “closed loop” embodiment of the ’231 patent. As is repeatedly stated in the section of the ’231 patent titled, “DETERMINING SPATIAL SIGNATURES,” the “illustrative embodiment” is Barratt’s “calibration mode.” See Ex. 1003, 16:31–59. For example, Barratt states, “[i]n the illustrative embodiment, each remote terminal is capable of entering a ***calibration mode*** in which the signal received by the remote terminal 43 is transmitted back to base station 1. *Id.* at 16:38–41 (emphasis added).

In its Response to the Request for Rehearing, the Patent Owner disputed Petitioner’s contention that the first sentence in the second paragraph of the above-quoted passage from Barratt (*id.* at 19:1–4) refers to the “closed loop” embodiment. See Response 10–11. In the Reply, Petitioner contends this sentence is an “express statement that, in the closed loop embodiment, ‘the base station uses . . . knowledge of the transmitted waveforms to calculate the remote terminal receive spatial signatures.’” Reply 1, see also *id.* at 2–4. Petitioner mischaracterizes the teachings of Barratt. The quoted statement expressly refers to the “illustrative embodiment” which, as shown above, is the “calibration mode” and not the “closed loop” embodiment as Petitioner contends.

IV. CONCLUSION

For the reasons stated above, we do not find Petitioner's arguments in the Request for Rehearing persuasive and we determine not to change our Decision Denying Institution.

V. ORDER

Accordingly, it is:

ORDERED that the Request for Rehearing (Paper 11) is *denied*.

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PETITIONER:

David Garr
dgarr@cov.com

Jay Alexander
jalexander@cov.com

Peter Chen
pchen@cov.com

Grant Johnson
gjohnson@cov.com

PATENT OWNER:

William Rothwell
william@noroozipc.com

Kayvan Noroozi
kayvan@noroozipc.com