

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

HUAWEI DEVICE CO., LTD.,

Petitioner,

v.

OPTIS WIRELESS TECHNOLOGY, LLC,

Patent Owner.

Case No. IPR2018-00658
Patent 7,769,238 B2

Before MIRIAM L. QUINN, PATRICK M. BOUCHER, and
JOHN P. PINKERTON, *Administrative Patent Judges*.

PINKERTON, *Administrative Patent Judge*.

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

I. INTRODUCTION

On October 9, 2018, the Decision Denying Institution of *Inter Partes* Review (“Decision”) was entered in this case. Paper 14. On November 8, 2018, Petitioner filed a Request for Rehearing (“Request” or “Req. Reh’g”) under 37 C.F.R. § 42.71(d) of the Decision. Paper 15.

In the Request, Petitioner contends that we erred by not instituting on Ground 1¹ for two reasons. First, Petitioner argues that we misapprehended and overlooked the Specification and Federal Circuit precedent because we ruled that the “determining unit” in limitation [1i] “must be configured with logic that determines a ‘predictive value’ based **only** ‘on a spatial relationship’ (i.e., using information in a decoded block located on a periphery of the current block).” Req. Reh’g 1, 4–11. Second, Petitioner argues that we misapprehended or overlooked Petitioner’s evidence that JVT-B045 discloses limitation [1i] under a proper interpretation of claim 1. *Id.* at 2–3, 11–15.

As we explain below, we have considered the arguments presented by Petitioner in the Request, but we discern no reason to modify the Decision. Accordingly, we *deny* Petitioner’s Request.

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). The party must identify specifically all matters we misapprehended or overlooked, and the place

¹ In Ground 1, Petitioner asserts claim 1 is unpatentable under 35 U.S.C. § 103 over the combination of H.324, H.263, and JVT-B045. Pet. 47–66.

where each matter was addressed previously in a motion, an opposition, or a reply. *Id.* When rehearing a decision on a petition, we review the decision for an abuse of discretion. 37 C.F.R. § 42.71(c). An abuse of discretion may be indicated 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. United States*, 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). With this in mind, we address the arguments presented by Petitioner.

III. ANALYSIS

- A. *We did not overlook or misapprehend the Specification or Federal Circuit precedent because we did not narrowly interpret limitation [1i] as Petitioner asserts to require the determining unit to be configured with logic that determines a predictive value based **only** on a spatial relationship*

Petitioner’s Request is premised on the assertion that we ruled the “determining unit” of limitation [1i] “must be configured with logic that determines a ‘predictive value’ based **only** on ‘a spatial relationship.’” Req. Reh’g 1, 4, 9. This premise is false and incorrect.

We did not expressly interpret limitation [1i] in the claim construction section of the Decision. *See* Decision, 8–10. Nor did we “implicitly” or “impliedly” construe or interpret limitation [1i] in this manner, as Petitioner asserts. Req. Reh’g 1, 8–9. In asserting that we did so, Petitioner cites generally to pages 17–19 of the Decision, but provides no specific analysis

in support of its assertion. In reviewing these pages, it is evident that the word “only” does not appear.

What does appear on those pages of the Decision is the language of limitation [1i] that recites a “determining unit configured to determine a predictive value for the number of non-zero coefficients included in the current block based on the number of non-zero coefficients included in a decoded block located on a periphery of the current block.”² We also examined Dr. Schonfeld’s testimony that a person of ordinary skill would understand that “the last coded 4x4 block” mentioned in the JVT-B045 proposal is a “neighboring block that is located on the periphery of the block being currently coded” in view of Patent Owner’s examples demonstrating that JVT-B045’s “last coded block” would oftentimes not be located on a “periphery of the current block.” Decision 18. We concluded that Patent Owner’s analysis persuasively rebuts Dr. Schonfeld’s testimony. *Id.* at 18–19. We also found it is irrelevant that the last coded block of JVT-B045 would “sometimes” be “located on a periphery of the current block.” *Id.* at 19. In that regard, the Decision states that because claim 1 is an apparatus claim that is “configured to” determine a value based on information in a decoded block “located on a periphery of the current block,” an apparatus programmed to perform the algorithm disclosed by JVT-B045 would be configured to seek information from the “‘last coded block’ (a temporal relationship), which is different from the claimed apparatus configured to

² This is the complete limitation, whereas a short-hand version was used on page 17 of the Decision that omitted the words “the number of” preceding each use of the term “non-zero coefficients.”

provide information based on a spatial relationship—a decoded block ‘located on a periphery of the current block.’” *Id.* Thus, we determined that Petitioner had not shown a reasonable likelihood of success on Ground 1 because it did not reasonably demonstrate that configuring a determining unit based on the “last coded block” of JVT-B045 taught or suggested configuring a determining unit based on a decoded block “located on a periphery of the current block.”

In making this determination, we gave effect to the “configured to” language of limitation [1i] and found that Petitioner had not sufficiently shown that designing or programming a determining unit based on the “last coded block” of JVT-B045 would accomplish the stated function of determining a predictive value based on information from a decoded block “located on a periphery of the current block.” This determination is fully consistent with the relevant case law holding that the terms “adapted to” and “configured to” are most naturally understood to mean that the claimed structure is designed or constructed to perform the claimed function, not simply that the structure is “capable of” performing or can be made to perform that function. *See Aspex Eyewear, Inc. v. Marchon Eyewear, Inc.*, 672 F.3d 1335, 1349 (Fed. Cir. 2012) (in construing “adapted to,” adopting the narrower definition of “configured to” instead of the broader sense of “capable of;” “‘adapted to’ is most naturally understood to mean that the . . . members are designed or configured to accomplish the specified objective, not simply that they can be made to serve that purpose”); *see also In re Giannelli*, 739 F.3d 1375, 1379 (Fed. Cir. 2014) (construing “adapted to” to mean “designed or constructed to be used” in the manner claimed); *Acclarent, Inc. v. Albritton*, IPR2017-00498, 2018 WL 3374755 *7 (July 9,

2018) (construing “configured to” and “adapted to” as “requiring structure designed to or configured to accomplish the specified objective, not simply that they can be made to serve that purpose”).

Moreover, contrary to Petitioner’s assertions, we did not implicitly rule that the determining unit must be configured with logic that determines a “predictive value” based **only** on “a spatial relationship.” That is, our ruling that Petitioner was required to reasonably demonstrate that configuring the determining unit with logic based on the JVT-B045 algorithm would accomplish the specified function of limitation [1i] was not an express or implicit ruling that the determining unit could not also be programmed to perform other functions. At the very least, Petitioner was required to reasonably demonstrate that the determining unit was designed or programmed, i.e., “configured to,” perform the claimed function of determining a predictive value based on information “included in a decoded block located on a periphery of the current block,” but failed to do so.

Regarding the Specification, Petitioner argues that the Board’s “narrow interpretation” of limitation [1i] was incorrect because it is “inconsistent with the invention of the ’238 patent.” Req. Reh’g 1. In particular, Petitioner argues that every disclosed embodiment of the claimed “determining unit” (referred to in the Specification as the “predictive value calculating unit”) has at least two modes of operation: “(1) instances in which the ‘predictive value’ is based on information from a decoded block located on a periphery of the current block (i.e, a spatial relationship); and (2) instances in which the ‘predictive value’ is **not based on** such information (i.e., **not** a spatial relationship).” *Id.* at 5. Petitioner also argues that, “when no decoded block is located on a periphery of the current block,

then ‘either a value of 0 or other arbitrary value is given directly as a predictive value.’” *Id.* at 6 (citing Ex. 1001, 9:42–10:3, 13:22–47 (first embodiment); *see also id.* at 2:44–46, 2:60–64 (“Disclosure of Invention”); 16:30–45, 17:1–11 (second embodiment); 23:30–48, 25:54–26:3 (sixth embodiment); 28:47–62, 29:17–27 (seventh embodiment); Chart 1 and Chart 6 (“None”)). Petitioner further argues that the ’238 patent contemplates other instances, such as when a picture frame is divided into sections referred to as a slice, and the upper and left boundaries of the current block are outside the boundary of the slice, “then a value of 0 is given as the predictive value.” *Id.* at 7–8 (citing *id.* at 2:60–64, 4:24–28, 9:42–10:3, 13:22–47, 60–62). Thus, Petitioner argues that the Board’s “implied interpretation of limitation [1i] was incorrect because it would exclude from the scope of claim 1 every embodiment that describes the claimed ‘determining unit.’” *Id.* at 8 (citing *Broadcom Corp. v. Emulex Corp.*, 732 F.3d 1325, 1333 (Fed. Cir. 2013)).

We are not persuaded by Petitioner’s arguments. Although the Specification describes different modes of operation depending on whether there is a “spatial relationship” among blocks, claim 1 is specifically directed to the mode in which there is a “spatial relationship” among blocks because limitation [1i] recites that the “determining unit” is configured to determine the predictive value based on information from a “decoded block located on a periphery of the current block” (i.e, a spatial relationship). Ex. 1001, 38:49–53. This mode of operation is described in the first, second, sixth, and seventh embodiments of the ’238 patent, all of which include “a predictive value calculating unit.” Ex. 1001, 9:34–39; 16:30–35; 23:24–34; 28:47–52. Because we gave full effect to this mode of operation in the

Decision, we did not exclude from the scope of claim 1 any of the four embodiments of the '238 patent that include “a predictive value calculating unit.”

Although Petitioner argues the Board erred in applying an unduly narrow interpretation of claim 1 that would not include other modes of operation or instances in which there is no “spatial relationship” among blocks, neither *Broadcom* nor any other Federal Circuit authority of which we are aware requires that claim 1 be construed as covering these other modes. First, the claims should be interpreted as written. *SRAM Corp. v. AD-II Eng'g Inc.*, 465 F.3d 1351, 1359 (Fed. Cir. 2006) (“While SRAM strongly urges the court to interpret the claim to encompass the innovative precision indexing shifting feature it contends it has invented, we are powerless to rewrite the claims and must construe the language of the claim at issue based on the words used.”). Here, claim 1 is written to cover the mode of operation in which a reference block satisfies the requirement for a “spatial relationship,” and does not address other modes. Second, as confirmed by the Federal Circuit, the claims of a patent need not encompass all disclosed modes of operation, particularly when, as here, to construe limitation [1i] to include alternative modes of operation, in which the predictive value is not based on information from a decoded block located on a periphery of the current block, would contradict the language of limitation [1i]. See *TIP Systems, LLC v. Phillips & Brooks/Gladwin, Inc.*, 529 F.3d 1364, 1373 (Fed. Cir. 2008) (“However, to construe the claim term to encompass the alternative embodiment in this case would contradict the language of the claims Our precedent is replete with examples of subject matter that is included in the specification, but is not claimed.”)

Third, Petitioner's argument is flawed as a matter of claim construction. As Petitioner argues, the "determining unit" of limitation [1i] is referred to in the Specification as the "predictive value calculating unit." Req. Reh'g 4–5. The Specification states that the numbers of coefficients of coded blocks on the periphery are inputted from the coefficient number storing unit and the "predictive value calculating unit" determines the predictive value by "calculating an average value of these values." Ex. 1001, 9:34–39; 16:30–35; 23:29–34; 28:47–52. Petitioner contends that the "determining unit" must be construed to perform the recited mode and also the mode in which there is no "spatial relationship." Req. Reh'g 4–5, 8. However, in the other modes, in which no decoded block is located on the periphery of the current block, the Specification does not describe "calculating" a predictive value, but instead teaches that a value is "assigned"—a value of 0 or other arbitrary value is "given directly" or "set" as a predictive value. Ex. 1001, 10:1–3; 16:43–45; 23:45–47; 28:60–62. Accordingly, it would not be proper to construe the claimed "determining unit" of limitation [1i], which the Specification describes as "calculating" the predictive value in the mode where there is a "spatial relationship," to include the mode where there is no "spatial relationship" because the Specification teaches that, in the latter mode, a predictive value is "given directly" or "set," instead of being "calculated" or "determined" by the "predictive value calculating unit."

Thus, for these reasons, we did not implicitly construe the "determining unit" in the manner alleged by Petitioner, nor did we err by interpreting claim 1 in an unduly narrow manner.

B. We did not misapprehend or overlook Petitioner’s evidence that JVT-B045 purportedly discloses limitation [1i] under a proper interpretation of claim 1

Petitioner contends that JVT-B045 discloses limitation [1i] under the “proper application of the BRI standard.” Req. Reh’g 11–12 (citing Pet. 58–59; Ex. 1008 ¶¶ 146–150, 295–300). Petitioner essentially rehashes arguments made in the Petition. *Id.* at 12–13. In addition, Petitioner asserts, for the first time,³ that based on the coding method disclosed in JVT-B045, “the last coded 4x4 block **is indeed the same block** that is located on a periphery of the current block, in fourteen out of sixteen cases.” *Id.* at 12–13.

We are not persuaded by Petitioner’s arguments. First, we are not persuaded by Petitioner’s argument that “disclosure of JVT-B045 to a POSITA is sufficient to satisfy limitation [1i].” Req. Reh’g 13. Petitioner argues that the Petition supports this argument by (1) asserting that a person of ordinary skill would “understand” the last coded block of JVT-B045 is “located on the periphery and may exist within an 8x8 block or within a neighboring block” and (2) illustrating the coding of a macroblock consisting of 16x16 pixels, which have been further divided into blocks that are processed sequentially based on their physical arrangement. *Id.* at 12 (citing Pet. 59; Ex. 1008 ¶¶ 146–150). Although Petitioner asserts it also provided evidence that “a POSITA, reading JVT-B045 would understand that the last coded block is synonymous with a block located on a periphery

³ Although Petitioner asserts that this information was explained in the Petition, we have not located this information in the cited portion of the Petition or Dr. Schonfeld’s declaration. See Pet. 59; Ex. 1008 ¶¶ 146–150.

of the block currently being coded,” this assertion is incorrect because Dr. Schonfeld did not testify that the terms “last coded block” and “located on a periphery of the block currently being coded” are “synonymous.” See Ex. 1008 ¶ 150.

Petitioner’s arguments are unconvincing in view of Patent Owner’s evidence, as well as Petitioner’s new information. As set forth in the Decision, Petitioner’s argument regarding the understanding of a person of ordinary skill is unconvincing in view of Patent Owner’s analysis, based on Dr. Schonfeld’s illustration, showing several examples in which the “last coded block” is not “located on a periphery of the current block.” Decision 18. It is also unconvincing in view of Petitioner’s new assertion that the “last coded 4x4 block” is the same block that is located on a periphery of the current block “in fourteen out of sixteen cases.” Req. Reh’g 12. In other words, contrary to Petitioner’s assertions that the terms “last coded block” and “located on a periphery of the current block” are the same or synonymous, Petitioner’s new analysis shows they were only the same in fourteen out of sixteen cases. Petitioner’s analysis merely shows it is possible that “the last coded block” of JVT-B045 is sometimes located on a periphery of the current block. However, Petitioner’s evidence does not reasonably demonstrate that programming the determining unit based on JVT-B045’s “last coded block” results in the claimed determining unit designed or made to perform the claimed function of determining the predictive value based on information included in a decoded block “located on a periphery of the current block.”

Second, we are not persuaded by Petitioner’s argument that “JVT-B045 is configured to determine a ‘predictive value’ in the manner recited in limitation [1i],” and the fact that, in a small subset of cases, JVT-B045 is also configured to determine a predictive value using a non-neighboring block is “immaterial.” Req. Reh’g 13–14 (citing *Core Wireless*). As set forth in the Decision, Petitioner’s argument is not persuasive because a determining unit programmed to perform the algorithm disclosed by JVT-B045 would be configured to seek a predictive value from the “last coded block,” which is a temporal relationship among blocks, that is different from the claimed determining unit programmed to seek a predictive value from a decoded block “located on a periphery of the current block,” which is a spatial relationship among blocks. Because a determining unit configured based on JVT-B045 is not designed or made to perform the recited function of determining a predictive value based on a decoded block “located on the periphery of the current block,” a determining unit configured pursuant to JVT-B045 does not satisfy limitation [1i]. Petitioner relies on *Core Wireless*, but it is distinguishable from this case. The court in *Core Wireless* held that Apple’s mobile devices that were configured to receive multiple timing advance values (“TAVs”) per multi-frame structure infringed a claim reciting “configured to [] receive a timing advance value once,” which was construed to require receiving a TAV one time for a multi-frame structure. *Core Wireless S.A.R.L. v. Apple Inc.*, 899 F.3d 1356, 1362 (Fed. Cir. 2018). Although Apple argued that the claim is infringed only when a mobile device is configured to receive one and only one TAV transmission per multi-frame structure, the court affirmed the jury verdict of infringement because the evidence showed that Apple’s devices are configured to receive

a TAV once per multi-frame structure, even though they were also configured in a variety of modes and to receive more than one TAV per multi-frame structure. *Core Wireless*, 899 F. 3d at 1363–1364. The facts here are different because Patent Owner’s evidence, and Petitioner’s new information, demonstrates that determining a predictive value based on the “last coded block” of JVT-B045 does not always result in determining a predictive value based on a decoded block “located on a periphery of the current block,” as recited in limitation [1i]. Thus, *Core Wireless* is distinguishable because the claimed function was always performed by the accused devices in that case, along with other functions, whereas here programming a determining unit based on JVT-B045 does not always result in performance of the function of limitation [1i], even though it sometimes performs the claimed function. *See Ball Aerosol and Specialty Container, Inc. v. Limited Brands, Inc.*, 555 F.3d 984, 995 (Fed. Cir. 2009) (where claim recites a particular configuration, finding that accused device was “reasonably capable” of being put into the configuration is insufficient for infringement).

Third, Petitioner’s arguments that limitation [1i] and JVT-B045 cannot be distinguished based on “the spatial/temporal distinction” and such distinction should be ignored when comparing the two are unavailing. *Req. Reh’g* 14–15. Initially, we note these are new arguments that were not made in the Petition and, therefore, we could not have misapprehended or overlooked them. Moreover, these arguments are not substantively persuasive. Regarding JVT-B045, Petitioner argues that “last coded block” is not “solely” a temporal relationship, but is also based on the physical arrangement of blocks and the sequence in which they are processed. *Id.* at

14. However, Petitioner fails to cite to sufficient evidence to support this assertion. Nor does Petitioner cite sufficient evidence to support its assertion that “[t]o a POSITA, last-coded block implies a spatial relationship.” *Id.* Regarding limitation [1i], Petitioner argues that, although it recites “a block located on a periphery of the current block,” it does not operate strictly based on a spatial relationship because the determining unit is also configured based on some other parameter, such as an arbitrary value. This argument is unpersuasive. By the express language of limitation [1i], the determining unit is configured to determine a predictive value based only on a decoded block “located on a periphery of the current block,” a spatial relationship. As discussed *supra*, the determining unit is not otherwise “configured to” determine or calculate a predictive value based on an “arbitrary value;” instead such an arbitrary value is assigned or set when there is no decoded block located on a periphery of the current block.

Thus, we did not misapprehend or overlook any evidence that JVT-B045 purportedly discloses limitation [1i].

IV. CONCLUSION

For the foregoing reasons, Petitioner has not demonstrated that we abused our discretion in not instituting an *inter partes* review of claim 1 of the '238 patent. In particular, Petitioner has not persuaded us that we misapprehended or overlooked (1) the Specification or Federal Circuit precedent regarding the interpretation of the determining unit of limitation [1i] or (2) any evidence that JVT-B045 purportedly discloses limitation [1i] under the proper interpretation of claim 1.

V. ORDER

Accordingly, it is:

ORDERED that Petitioner's Request for Rehearing is *denied*.

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