

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ARRIS INTERNATIONAL PLC, PACE LTD.,
PACE AMERICAS, LLC, PACE AMERICAS HOLDINGS, INC.,
and PACE AMERICAS INVESTMENTS, LLC,
Petitioner,

v.

SONY CORPORATION,
Patent Owner.

Case IPR2016-00834
Patent 6,097,676

Before JENNIFER S. BISK, BART A. GERSTENBLITH, and
CHARLES J. BOUDREAU, *Administrative Patent Judges*.

BOUDREAU, *Administrative Patent Judge*.

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

INTRODUCTION

Patent Owner filed a Request for Rehearing (Paper 14, “Reh’g Req.”) of our Institution of *Inter Partes* Review (Paper 13, “Institution Decision” or “Inst. Dec.”). The Request for Rehearing contends that we misapprehended the law of 35 U.S.C. § 112 ¶ 6 in instituting this trial.¹ Reh’g Req. 1. Patent Owner specifically asserts that we “mistakenly determined that unless a claim recites the terms ‘computer’ or ‘microprocessor,’ it is not computer-implemented” (*id.*); that we erred in finding that the “reproducing means” limitations recited in challenged claims 5 and 8 of the ’676 patent, in particular, are not computer-implemented and do not include an algorithm (*id.* at 7–8); and that “because Petitioners proposed and relied upon a legally incorrect claim construction for the ‘reproducing means’ term, their petition must be dismissed” (*id.* at 8–11). In addition, Patent Owner suggests that this Request for Rehearing be heard before an expanded panel, alleging that our Institution Decision “is in direct conflict with authoritative decisions of the U.S. Court of Appeals for the Federal Circuit and a precedential decision of the Board, and . . . the issue raised here is far-reaching and will have a significant impact on petition practice before the Board.” *Id.* at 2–3.

“When rehearing a decision on petition, a panel will review the decision for an abuse of discretion.” 37 C.F.R. § 42.71(c). “The burden of showing a decision should be modified lies with the party challenging the decision[,]” which party “must specifically identify all matters the party

¹ Section 4(c) of the Leahy-Smith America Invents Act (AIA), Pub. L. No. 112-29, § 4(c), 125 Stat. 284 (2011), re-designated 35 U.S.C. § 112 ¶ 6 as 35 U.S.C. § 112(f). Because the ’676 patent has a filing date before the September 16, 2012, effective date of the statute, we refer to the pre-AIA version of 35 U.S.C. § 112.

believes the Board misapprehended or overlooked, and the place where each matter was previously addressed in a motion, an opposition, or a reply.”

37 C.F.R. § 42.71(d).

For the reasons discussed below, Patent Owner’s Request for Rehearing is *denied*.

BACKGROUND

In the Institution Decision, we addressed the construction of “reproducing means for reproducing the audio data of the channel designated by the default value stored in the storing means,” as recited in claims 5 and 8 of the ’676 patent (the “reproducing means” limitations). Inst. Dec. 12–16. In particular, we agreed with the parties that the reproducing means limitations are written in means-plus-function format pursuant to 35 U.S.C. § 112 ¶ 6 and that the function of the reproducing means is “reproducing the audio data of the channel designated by the default value stored in the storing means.” *Id.* at 10, 12–13 (citing Pet. 16; Prelim. Resp. 4). We also agreed with Petitioner’s identification of “synthesizer 11” and “controller 13” as being the corresponding structure disclosed in the specification for the reproducing means limitations. *Id.* at 12–13, 16. We disagreed, however, with Patent Owner’s assertion that the structure of the reproducing means must further include an algorithm disclosed in the specification, as would be required for a computer-implemented means-plus-function limitation. *Id.* at 13–14 (citing Prelim. Resp. 1, 2, 8). We concluded, therefore, that the reproducing means limitations are, accordingly, properly construed under 35 U.S.C. § 112 ¶ 6 to cover “a controller and a synthesizer, or the equivalent.”

ANALYSIS

In the Institution Decision, we determined that the '676 patent discloses a controller and a synthesizer, neither of which is disclosed in the '676 patent as being computer-implemented, as structure corresponding to the “reproducing means” recited in claims 5 and 8. Inst. Dec. 14–15. As we explained, “synthesizer 11 and controller 13 both are shown and described in the '676 patent as discrete hardware elements that interface with other hardware elements of the described information reproducing devices.” *Id.* at 14. We determined, accordingly, that the reproducing means recited in claims 5 and 8 is not a “computer-implemented” means-plus-function term subject to “the legal rule that computer-implemented means-plus-function terms must be construed to include the corresponding algorithmic structure disclosed in the specification.” *Id.*; *cf.* Reh’g Req. 2. Contrary to Patent Owner’s contentions (Reh’g Req. 1–2), we did not determine in the Institution Decision that “unless a claim recites the terms ‘computer’ or ‘microprocessor,’ it is not computer-implemented”; that “the claimed controller is not a computer based solely on a word matching exercise”; or that the Board “is free to disregard the law on how computer-implemented means-plus-function terms are to be construed.” Patent Owner’s arguments in its Request for Rehearing do not persuade us of any error in our Institution Decision.

First, while Patent Owner asserts that “[a] ‘controller’ is nothing more than a broad class of devices that include a [central processing unit] CPU” (Reh’g Req. 1), Patent Owner cites no evidentiary support for its assertion. *See In re Geisler*, 116 F.3d 1465, 1471 (Fed. Cir. 1997) (attorney argument cannot take the place of evidence). We are not persuaded on the record

before us that a person of ordinary skill in the art at the time of the alleged invention of claims 5 and 8 would have understood a controller necessarily to include a CPU. We find no support in the '676 patent or its prosecution history for a controller being a general purpose computer or including a CPU, and we conclude that Patent Owner's assertion is based, at most, on one possible meaning of the term "controller." Notably, courts that have had occasion to construe the term "controller" in various patents have interpreted that term, consistently with our finding in our Institution Decision that controller 13 is a discrete hardware element, as, for example, a "device," "circuit[ry]," or a "component."² Similarly, the Microsoft Computer

² See, e.g., *AutoMed Techs., Inc. v. Microfil, LLC*, 244 F. App'x 354, 357–58 (Fed. Cir. 2007) (affirming district court's construction of "controller" as "single control system that regulates the entire process"); *Braun Corp. v. Vantage Mobility Int'l, LLC*, 608 F. Supp. 2d 1036, 1045 (N.D. Ind. 2009) (construing "controller" as "a device that actuates and/or directs the operation of other components, or is capable of making decisions with respect to the operation or actuation of those components, including being operable to selectively delay execution of the door operation commands"); *911EP v. Whelen Eng'g Co.*, 512 F. Supp. 2d 713, 724 (E.D. Tex. 2007) (concluding that "one of ordinary skill in the art would understand a 'controller' to be a circuit or device that is *either* programmable or has a pre-determined function," and that a "programmable controller" is merely "an aspect of a preferred embodiment that should not be read into the claims") (emphasis added); *Lexar Media, Inc. v. Fuji Photo Film USA, Inc.*, 2007 WL 677166, at *4 (N.D. Cal. Mar 1, 2007) (construing "controller" as "a device that interfaces between a host and nonvolatile memory"); *Koninklijke Philips Elecs., NV v. Defibtech LLC*, 2005 WL 3500783, at *6 (W.D. Wash. Dec. 21, 2005) (construing "controller" as "a circuit or component that controls"); *ABB Automation Inc. v. Schlumberger Res. Mgmt. Servs., Inc.*, 254 F. Supp. 2d 475, 477 (D. Del. 2003) (construing "controller" as "electronic circuitry that generates a control signal"); *EMC Corp. v. Hewlett-Packard Co.*, 2003 WL 25782750, at *9 (D. Mass.

Dictionary defines “controller” as “[a] device that other devices rely on for access to a computer subsystem.” Ex. 3001.

Second, although Patent Owner’s declarant Dr. Stevenson opines that “the ‘reproducing means’ is clearly linked to a synthesizer and controller, with the controller programmed to perform a particular algorithm” and that “[t]he synthesizer and controller programmed with the algorithm are described at [Ex. 1001,] 11:10–32” (Ex. 2002 ¶ 31), we do not find in Dr. Stevenson’s declaration any testimony that a person of ordinary skill in the art would have understood controller 13 to include a CPU or the “reproducing means” otherwise to be computer-implemented.³ Despite Dr. Stevenson’s testimony (Ex. 2002 ¶¶ 28–34) and Patent Owner’s argument that the ’676 patent explicitly discloses an algorithm that controller 13 uses to carry out a determination of a channel to be synthesized or reproduced (Reh’g Req. 4–5 (citing Ex. 1001, 11:10–32)), algorithms are not the sole province of computers, and Patent Owner’s characterization of

Sept. 12, 2003) (construing “data storage system controller” as “a device that controls data storage operations”); *see also Orenshteyn v. Citrix Sys., Inc.*, 341 F. App’x 621, 625 (Fed. Cir. 2009) (reversing district court’s grant of summary judgment of non-infringement based on construction of “controller” as “something other than a general purpose CPU,” based on determination that, despite that “portions of the specification . . . seem to indicate a distinction between a ‘controller’ and a general purpose CPU, . . . they do not indicate that *all* controllers are distinct from all CPUs” (emphasis added)).

³ Even if Dr. Stevenson *had* expressed such an opinion, our rules nonetheless require that we view any genuine issue of material fact created by testimonial evidence provided with a patent owner’s preliminary response in the light most favorable to the petitioner, solely for purposes of deciding whether to institute an *inter partes* review. 37 C.F.R. § 42.108(c).

one disclosed sequence of operations to carry out a determination of a channel by the controller as an algorithm does not mean that the controller is computer-implemented. Absent persuasive evidence that would support a threshold finding that the “reproducing means” of claims 5 and 8 are computer-implemented, we are not persuaded that it would be proper to read any algorithm from the specification into the claims. *See E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co.*, 849 F.2d 1430, 1433 (Fed. Cir. 1988) (holding that reading an “extraneous limitation” into a claim from the specification is improper).

Third, we are not persuaded by Patent Owner’s suggestion that “reproducing means” is “in part computer-implemented” based on “Petitioners’ . . . proposed construction for this term in the related district court litigation, where Petitioners argued that the corresponding structure for the term includes a specific algorithm shown in one of the figures of the ’676 patent.” Reh’g Req. 4. Claim construction is a matter of law, and the determination as to whether the “reproducing means” recited in claims 5 and 8 is “computer-implemented” does not turn on arguments made by Petitioner in another proceeding.

Nor are we persuaded by Patent Owner’s characterization of *Netgear, Inc. v. Ruckus Wireless, Inc.*, 5 F. Supp. 3d 592, 622 (D. Del. 2013), as “finding [a] means-plus-function term indefinite because the specification merely disclosed a generic ‘controller’ for carrying out the claimed function without a corresponding algorithm.” Reh’g Req. 8. Although “a controller” was a recited claim element in an independent claim at issue in that case, the court’s conclusion of indefiniteness of that claim was based on failure to disclose algorithms for three other elements, namely “means in the base

station for determining which one of . . . multiple antennas received data most successfully . . .,” “means in . . . at least one mobile station for selecting one of said multiple antennas . . .,” and “means in said at least one mobile station for selecting one of said multiple antennas . . .,” as well as on insoluble ambiguity of the term “most successfully.” *Id.* at 622–23.

Notably, the court explicitly found that “[t]he recited means” determined to lack essential algorithms “are *processors* performing ubiquitous functions.” *Id.* at 624 (emphasis added).

In sum, we are not persuaded that the Institution Decision is inconsistent with Federal Circuit or Board precedent cited by Patent Owner, none of which holds that *non*-computer-implemented means terms must be construed to include corresponding algorithmic structure disclosed in the specification. This is not to say that “a patent must use the specific words ‘computer’ or ‘microprocessor’ to refer to [a] computing device that performs [an] algorithm for carrying out the function of a means-plus-function term in order for the Federal Circuit’s algorithm requirement to come into play” (*see* Reh’g Req. 7), but rather that where, as here, a patent discloses a structure not shown to be computer-implemented, we do not understand Federal Circuit precedent to support application of such an “algorithm requirement.”

Because, on this record, we conclude that the reproducing means limitations of claims 5 and 8 are not properly construed to include “algorithmic structure,” we also disagree with Patent Owner’s further argument that “[b]ecause Petitioners failed to consider the algorithmic structure corresponding to the ‘reproducing means’ and thus failed to compare the ‘reproducing means’ as properly construed to the prior art for

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structural equivalency, the Board should have denied institution as to all claims with that term.” *Id.* at 10.

We accordingly deny Patent Owner’s Request for Rehearing.

Additionally, the Chief Administrative Patent Judge declines Patent Owner’s suggestion for an expanded panel.

Accordingly, it is

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

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