Trials@uspto.gov
571-272-7822

Paper 11
Date: August 3, 2020

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC,
Petitioner,

v.

UNILOC 2017 LLC,
Patent Owner.

IPR2020-00397
Patent 6,980,522 B2

Before KRISTEN L. DROESCH, DAVID C. McKONE, and SHEILA F. McSHANE, *Administrative Patent Judges*.

DROESCH, *Administrative Patent Judge.*

DECISION
Denying Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

A. Background

Google LLC ("Petitioner") filed a Petition requesting an *inter partes* review of claims 1–5 and 9 ("challenged claims") of U.S. Patent No. 6,980,522 B2 (Ex. 1001, "'522 Patent"). Paper 1 ("Pet"). Petitioner filed a Declaration of Stuart J. Lipoff (Ex. 1004) with its Petition. Uniloc 2017 LLC ("Patent Owner") filed a Preliminary Response. Paper 7 ("Prelim. Resp."). Pursuant to our authorization, Petitioner filed a Reply to the Preliminary Response (Paper 8), to which Patent Owner filed a Sur-Reply (Paper 10).

We have authority to determine whether to institute review under 35 U.S.C. § 314 and 37 C.F.R. § 42.4. An *inter partes* review may not be instituted unless it is determined that "the information presented in the petition filed under section 311 and any response filed under section 313 shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition." 35 U.S.C. § 314(a) (2018).

Upon considering the argument and evidence presented in the Petition, we determine that it is appropriate to exercise our discretion to deny institution under 35 U.S.C. § 314(a). Accordingly, we decline to institute an *inter partes* review of any challenged claim of the '522 patent.

B. Related Matters

Petitioner indicates that the '522 Patent is or has been the subject of litigation in several cases. *See* Pet. 62; Prelim. Resp. 10–11; Paper 3, 2. The parties indicate that claims 1–9 of the '522 Patent are the subject of two petitions filed by Samsung Electronics America, Inc., in IPR2020-00045 and

IPR2020-00046. *See* Pet. 63; Prelim. Resp. 11. Institution of *inter partes* review was denied in IPR2020-00046 challenging claims 1–5 and 9. *See* IPR2020-00046, Paper 6. Review was instituted in IPR2020-00045 challenging claims 6–8, but the parties have since settled their dispute and the proceeding has been terminated. *See* IPR2020-00045, Papers 6, 10. The parties also indicate claims 6–8 of the '522 Patent are the subject of a petition concurrently filed by Petitioner in IPR2020-00396. *See* Pet. 63; Prelim. Resp. 11.

C. The '522 Patent (Ex. 1001)

The '522 Patent relates to a plurality of stations capable of forming an ad-hoc radio communications network, for example, a network using Bluetooth. *See* Ex. 1001, 1:4–6. A station includes an antenna for transmitting and receiving radio signals on a communication channel, a digital controller unit comprising a link baseband controller, a microprocessor, and an interface unit. *See id.* at 2:42–48, Fig. 2. The interface unit comprises hardware and software for interfacing the station to a host device. *See id.* at 2:57–59.

To overcome a problem encountered in an ad-hoc network when a station having an inefficient antenna operates as a master, the '522 Patent discloses ranking each station in terms of its antenna performance, with the station having the best antenna ranking becoming the master. *See* Ex. 1001, 2:63–3:14. "The antenna ranking can be determined under static conditions, or it may be adjusted dynamically depending on the local environment of a station [], for example based on measured VSWR [voltage standing wave ratio] or some other signal quality measure." *Id.* at 3:15–18. Other factors may be taken into account in the ranking instead of, or in addition to,

antenna performance. *Id.* at 4:34–37. For example, a station having access to electricity instead of a battery would be suitable as a master due to the extra power requirements for the master role. *See id.* at 4:38–42. A station capable of antenna diversity would be given a high ranking because of its advantages. *See id.* at 3:18–20.

The stations in an ad-hoc network may determine their antenna rankings relative to one another to choose the optimum master station. *See* Ex. 1001, 3:20–23. To compare rankings, the master station requests each of the other stations to provide their rankings using standard Bluetooth communication protocols. *See id.* at 3:25–28. If the master station determines that its ranking is lower than one of the slave stations, the master station hands over its master role to that station using Bluetooth standard methods. *See id.* at 3:28–32, 3:67–4:3. Because of the nature of an ad-hoc network, handover of the master function from one station to another needs to be possible as new stations join the network. *See id.* at 3:33–35, 3:57–4:3, Fig. 3. It is also desirable to enable handoff of the master function to mitigate effects of position dependent fading. *See id.* at 3:35–37.

D. Illustrative Claim

Claims 1 and 3 are independent. Claim 2 depends from claim 1, and claims 4, 5, and 9 depend from claim 3. Claim 1 is illustrative and reproduced below:

> 1. An ad-hoc radio communication system comprising a plurality of stations formed into at least one network, wherein at least one station including transceiver means coupled to antenna means for communication with other stations, control means for enabling master or slave functionality in the station and ranking means for determining a rank representative of the station's suitability for acting as master in the network using

> performance characteristics of the antenna means in view of its local environment, wherein at least one of the stations has comparison means for determining the rank of all the stations in the network and master transfer means for enabling the station having the highest rank to take the role of master in the network.

E. Asserted Ground of Unpatentability and Asserted Prior Art

Petitioner challenges claims 1–5 and 9 of the '522 Patent under 35 U.S.C. § 103(a) as unpatentable over Morris[1], Hulyalkar[2], and Sugaya[3].

II. ANALYSIS

A. Claim Construction

For petitions filed after November 13, 2018, the Board applies the same claim construction standard as that applied in federal courts. *See* 37 C.F.R. § 42.100(b) (2019). The claim construction standard used in a civil action under 35 U.S.C. § 282(b) is generally referred to as the *Phillips* standard. *See Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). Under the *Phillips* standard, generally words of a claim are given their ordinary and customary meaning. *Phillips*, 415 F.3d at 1312.

Petitioner asserts that "[c]laims 1–5 and 9 include several 'means' terms presumptively governed by 35 U.S.C. § 112 ¶ 6[4]." Pet. 15 (citing

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[1] Ex. 1008, US Patent Publication No. 2003/0149794 A1, published Aug. 7, 2003 ("Morris").
[2] Ex. 1006, WO 99/11081, published March 4, 1999 ("Hulyalkar").
[3] Ex. 1007, US Patent No. 6,804,209 B1, issued Oct. 12, 2004 ("Sugaya").
[4] Section 4(c) of the Leahy-Smith America Invents Act ("AIA"), Pub. L. No. 112-29, 125 Stat. 284, 296 (2011) redesignated 35 U.S.C. § 112, sixth paragraph as 35 U.S.C. § 112(f). Because the application from which the '522 Patent issued was filed before September 16, 2012, the effective date of the relevant amendment, we refer to the pre-AIA version of § 112.

Williamson v. Citrix Online, LLC, 792 F.3d 1339, 1348 (Fed. Cir. 2015) (en banc in relevant part)). The use of the word "means" in a claim element creates a rebuttable presumption that 35 U.S.C. § 112 ¶ 6 applies. *See Williamson*, 792 F.3d at 1348. Petitioner asserts that the presumption is not overcome for most of the "means" terms and contends that the Board should treat these "means" terms as means-plus-function claim terms. *See* Pet. 15 (citing *Williamson*, 792 F.3d at 1348–49). Petitioner asserts that it identifies the claimed function and corresponding structure for "transceiver means . . . ," "control means . . . ," "ranking means . . . ," "comparison means . . . ," "inquiry means," and "master transfer means . . .". *See id.* at 16, 18–26. We agree that these terms should be construed to cover the corresponding structure described in the specification and equivalents thereof. *See* 35 U.S.C. § 112 ¶ 6. Petitioner, however, calls into doubt whether "antenna means" is a means-plus-function limitation. *See id.* at 17–18.

By rule, Petitioner is required to identify in its Petition the structure in the specification corresponding to the claimed function for means-plus-function limitations. *See* 37 C.F.R. § 42.104(b)(3) ("Where the claim to be construed contains a means-plus-function . . . limitation . . . the construction of the claim *must* identify the specific portions of the specification that describe the structure, material, or acts corresponding to each claimed function.") (emphasis added). As mentioned above, Petitioner purports to identify the respective claimed function and corresponding structure. *See* Pet. 16, 18–26. On the other hand, Petitioner makes the following assertion in a footnote:

> [s]everal of these 'means' terms link little or no structure to the claimed functions, so they are arguably indefinite. Nonetheless, Petitioner has identified the corresponding structure to the extent that it can be discerned, without commenting on whether the identified structure is sufficient for the claims' ultimate compliance with 35 U.S.C. § 112.

Pet. 15 n.4.

"In cases involving a computer-implemented invention in which the inventor has invoked means-plus-function claiming, [the Federal Circuit] has consistently required that the structure disclosed in the specification be more than simply a general purpose computer or microprocessor." *Aristocrat Techs. Australia Pty Ltd. v. Int'l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008). "A computer-implemented means-plus-function term is limited to the corresponding structure disclosed in the specification and equivalents thereof, and the corresponding structure is the algorithm." *Harris Corp. v. Ericsson Inc.,* 417 F.3d 1241, 1253 (Fed. Cir. 2005) (quoted with approval in *Aristocrat*). "The algorithm may be expressed as a mathematical formula, in prose, or as a flow chart, or in any other manner that provides sufficient structure." *Williamson*, 792 F.3d at 1352 (citing *Noah Sys., Inc. v. Intuit Inc.*, 675 F.3d 1302, 1312 (Fed. Cir. 2012)).

For the aforementioned means-plus-function limitations, Petitioner proposes corresponding structure that it believes is insufficient and purports to give us the option of construing the means limitations to include this insufficient structure (and grapple with indefinite claims later, during a trial), or to simply declare the terms to be indefinite now. As an example, with respect to "ranking means for determining a rank representative of the station's suitability for acting as master in the network using performance characteristics of the antenna means in view of its local environment,"

recited in independent claims 1 and 3, Petitioner identifies the corresponding structure as "a microprocessor implementing the 'ranking' feature reflected in the cited '522 text and the ranking portion of the algorithm depicted in Figure 3." Pet. 21 (citing Ex. 1004 ¶¶ 73, 76). In support of its contentions, Petitioner asserts the '522 Patent discloses that the ranking is based on the measured voltage standing wave ratio (VSWR) or some other signal quality measure and is one of the underlying steps performed in the algorithm of Figure 3. *See id.* (citing Ex. 1001, 3:11–18, Fig. 3; Ex. 1004 ¶ 71). Petitioner further asserts the algorithm in Figure 3 is implemented by microprocessor 210. *See id.* (citing Ex. 1001, 1:21–23, 2:54–56, 3:63–67, Fig. 2; Ex. 1004 ¶ 72).

Petitioner assumes this structure and algorithm when applying the prior art to the challenged claims. *See* Pet. 46–48. Specifically, Petitioner asserts: (1) "Morris describes a station's CPU (its microprocessor) running an algorithm to assess the station's suitability to act as a master in a network . . . ." (Pet. 46 (emphasis added)); and (2) Hulyalkar discloses "the QoS [quality of service] manager in the central controller runs an algorithm that compiles measured 'signal quality' information . . . and analyzes the information to assess the central controller's rank and the ranks of the other stations based on antenna performance." (Pet. 47–48 (emphasis added)).

Patent Owner argues that Petitioner seeks an advisory opinion that the challenged claims are invalid as indefinite. *See* Prelim. Resp. 24 (quoting Pet. 15 n.4). Patent Owner asserts the Petition should be denied on this basis. *See id.* at 24–25 (quoting *Samsung Elecs. Am., Inc. v. Uniloc 2017 LLC*, IPR2020-00046, Paper 6 at 7–8, (PTAB Apr. 1, 2020); *Intex Recreation Corp. v. Team Worldwide Corp.*, IPR2019-00243, Paper 7 at 19

(PTAB May 8, 2019); *Becton, Dickinson & Co. v. Baxter Int'l*, IPR2018-01741, Paper 8 at 13–14 (PTAB Mar. 18, 2019) .

We agree with Patent Owner that Petitioner improperly seeks an advisory opinion. Petitioner invites us to either adopt its proposed constructions, or determine which one(s) of the means-plus-function limitations of claims 1–5 and 9 may be possibly indefinite. For example, Petitioner invites us to adopt its proposed construction for "ranking means for determining a rank representative of the station's suitability for acting as master in the network using performance characteristics of the antenna means in view of its local environment," as having an algorithm as the structure corresponding to the claimed function, "to the extent it can be discerned," although it is "arguably indefinite." Pet. 15 n.4; *see id.* at 21. In the alternative, Petitioner invites us to determine that the '522 Patent Specification does not disclose sufficiently an algorithm for performing the function of "determining a rank representative of the station's suitability for acting as master in the network using performance characteristics of the antenna means in view of its local environment," and declare the claims indefinite. *See id.* at 15 n.4, 21.

We decline to take a position on whether the challenged claims are indefinite or whether Petitioner's proposed claim constructions are correct. The purpose of a decision on institution is to make a threshold determination whether Petitioner has shown a reasonable likelihood of prevailing in showing at least one claim is unpatentable on the statutory grounds set forth in § 311(a) (§ 103), not to issue advisory opinions on how we might have ruled if given additional statutory authority. 35 U.S.C. § 314(a) (2018).

If we were to proceed to trial based on Petitioner's proposed constructions for means-plus-function limitations that are "arguably indefinite" the Board would be put in the position of attempting to apply prior art to claims that may not be amenable to construction. In such an event, "the proper course for the Board to follow, if it cannot ascertain the scope of a claim with reasonable certainty for purposes of assessing patentability, is to decline to institute the IPR or, if the indefiniteness issue affects only certain claims, to conclude that it could not reach a decision on the merits with respect to whether petitioner had established the unpatentability of those claims under sections 102 or 103." *Samsung Elecs. Am., Inc. v. Prisua Eng'g Corp.*, 948 F.3d 1342, 1353 (Fed. Cir. 2020).

Institution of *inter partes* review is discretionary. *See Harmonic Inc. v. Avid Tech, Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) ("[T]he PTO is permitted, but never compelled, to institute an IPR proceeding."). We exercise our discretion and decline Petitioner's invitation to adopt Petitioner's proposed claim constructions for means-plus-function limitations that are "arguably indefinite" and institute an *inter partes* review on the basis of those constructions.

For the foregoing reasons, we exercise our discretion under 35 U.S.C. § 314(a) and do not institute *inter partes* review of claims 1–5 and 9 of the '522 patent.

III. ORDER

In consideration of the foregoing, it is hereby

ORDERED that *inter partes* review of claims 1–5 and 9 of U.S. Patent No. 6,980,522 is *denied*.

For PETITIONER:

Erika Arner
Jason Stach
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, LLP
erika.arner@finnegan.com
jason.stach@finnegan.com

For PATENT OWNER:

Ryan Loveless
Brett Mangrum
James Etheridge
Brian Koide
Jeffrey Huang
ETHERIDGE LAW GROUP, PLLC
ryan@etheridgelaw.com
brett@etheridgelaw.com
jim@etheridgelaw.com
brian@etheridgelaw.com
jeff@etheridgelaw.com