

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ERICSSON INC.,
Petitioner,

v.

UNILOC 2017, LLC,
Patent Owner.

IPR2019-01550
Patent 7,016,676 B2

Before JAMESON LEE, KEVIN F. TURNER, and
MICHELLE N. WORMMEESTER, *Administrative Patent Judges*.

TURNER, *Administrative Patent Judge*.

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

I. INTRODUCTION

On August 29, 2019, Ericsson, Inc. (“Petitioner”) filed a Petition to institute *inter partes* review of claims 1, 2, and 8 (“the challenged claims”) of U.S. Patent No. 7,016,676 B2 (Ex. 1001, “the ’676 Patent”). Paper 2 (“Pet.”). Uniloc 2017 LLC (“Patent Owner”) filed a Preliminary Response. Paper 7 (“Prelim. Resp.”).

An *inter partes* review may not be instituted unless the information presented in the petition “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). Based on the particular circumstances of this case, we exercise our discretion under 35 U.S.C. § 314(a) and deny the Petition.

A. Related Matters

Petitioner identifies the following civil actions involving the ’676 patent:

Uniloc 2017 LLC v. Microsoft Corp., No. 8:18-cv-02053 (C.D. Cal.);

Uniloc 2017 LLC, et al. v. Google LLC, No. 2:18-cv-00495 (E.D. Tex.);

Uniloc 2017 LLC v. Verizon Commc’ns Inc., et al., No. 2:18-cv-00513 (E.D. Tex.);

Uniloc 2017 LLC v. AT&T Servs., Inc., et al., No. 2:18-cv-00514 (E.D. Tex.);

Uniloc 2017 LLC, et al. v. Google LLC, No. 2:18-cv-00448 (E.D. Tex.);

Uniloc 2017 LLC, et al. v. AT&T, Inc., et al., No. 2:18-cv-00379 (E.D. Tex.);

Uniloc 2017 LLC, et al. v. Verizon Commc’ns Inc., et al., No. 2:18-cv-00380 (E.D. Tex.);

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Uniloc 2017 LLC et al. v. Google LLC, No. 2:18-cv-00448 (E.D. Tex.); and

Uniloc 2017 LLC, et al. v. Microsoft Corp., No. 8:18-cv-01279 (C.D. Cal.).

Pet. 4–5; Paper 3, 2; Prelim. Resp. 2.

The parties identify other proceedings for *inter partes* review of claims in the '676 patent: IPR2019-01116, IPR2019-01125, IPR2019-01349, and IPR2019-01350¹. Pet. 5; Paper 3, 2; Prelim. Resp. 2–3. In addition, Petitioner filed IPR2020-00376, on January 3, 2020, seeking joinder to IPR2019-01116.

B. *The '676 Patent*

The '676 patent “relates to a method of alternate control of radio systems of different standards in the same frequency band.” Ex. 1001, 1:7–9. For example, the two standards can be that of “US radio system IEEE802.11a and the European ETSI BRAN HiperLAN/2.” *Id.* at 1:19–20. “The two radio systems transmit in the same frequency bands between 5.5 GHz and 5.875 GHz with approximately the same radio transmission method, but different transmission protocols.” *Id.* at 1:20–23.

Specifically, under either ETSI BRAN HiperLAN/2 or IEEE802.11a, radio systems utilize the same radio transmission method, i.e., a 64-carrier OFDM method and adaptive modulation and coding. *Id.* at 1:28–31. However, the Medium Access Control (MAC) of the two systems is totally

¹ We note that the decision granting institution in this proceeding determined that that claim 8 has ambiguous claim scope, and it is unclear what is covered by claim 8. *See* IPR2019-01350, Paper 9 at 49–55.

different. *Id.* at 1:34–35. For these two standards, the frequency band “is comprised between 5.15 GHz and 5.825 GHz.” *Id.* at 5:35–37.

The ETSI BRAN HiperLAN/2 utilizes a centrally controlled reservation-based method in which a radio station takes over the role of a central station coordinating the radio resources. *Id.* at 1:35–38. That central radio station (Access Point, AP) periodically signals the MAC frame structure. *Id.* at 1:38–41. Figure 1 of the '676 patent is reproduced below:

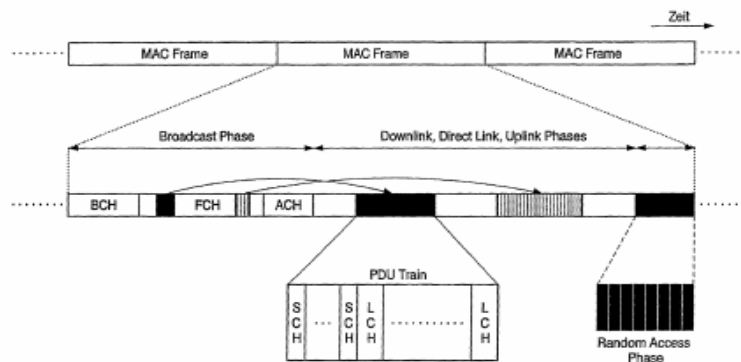


FIG. 1

Figure 1 shows the structure of the HiperLAN/2 MAC frame. *Id.* at 4:45–46. “In a HiperLAN/2 system the central controller can be controlled via the Access Point (AP) which periodically generates the MAC frame and then transmits the data of the broadcast phase to individually control the service quality (Packet delay sending rate and so on) of individual links.” *Id.* at 4:50–54. Figure 2 of the '676 patent is reproduced below:

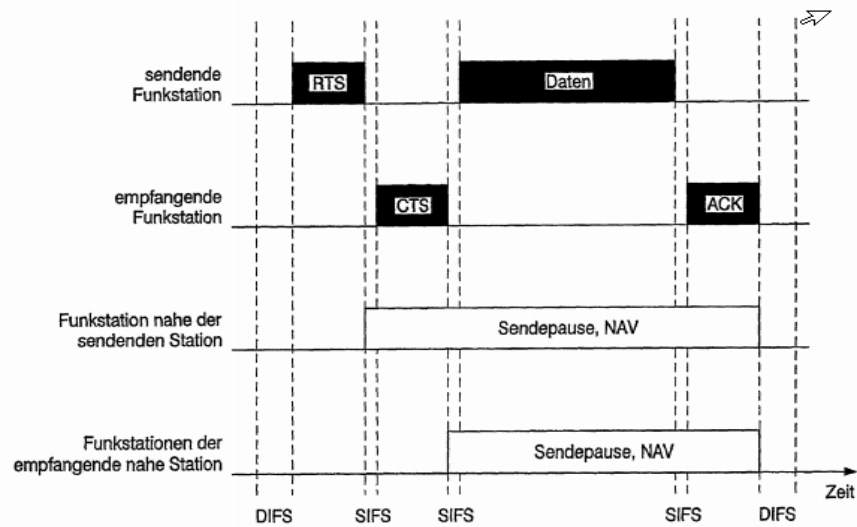


FIG. 2

Figure 2 diagrammatically shows the media access in systems working in accordance with the radio interface standard IEEE802.11a. *Id.* at 4:47–49. The Specification describes the IEEE802.11a standard as follows:

The IEEE802.11a standard describes a CSMA/CA (Carrier Sense Multiple Access/Collision Avoidance) method not based on reservations, in which all the radio stations listen in on the medium and assume that the channel is unused for a minimum duration (Short InterFrame Space, SIFS) before 802.11a-MAC frames, thus user data packets, are transmitted if necessary. The method is highly suitable for self-organizing ad hoc networks, but requires positive acknowledgements of all the packets.

Id. at 1:43–51. The Specification further describes the standard as follows:

FIG. 2 shows by way of example the sequence for media access in accordance with IEEE802.11a. In accordance with a variant of the standard a station is to then transmit an RTS packet (Ready To Send) and wait for a CTS packet (Clear To Send) from the addressed station before it is allowed to transmit user data. All the other stations in the radio coverage area set a time monitoring (Network Allocation vector, NAV) and do not transmit until the addressed station has been sent an acknowledgment (ACKnowledge, ACK).

Id. at 1:53–62.

Figure 3 of the '676 patent is reproduced below:

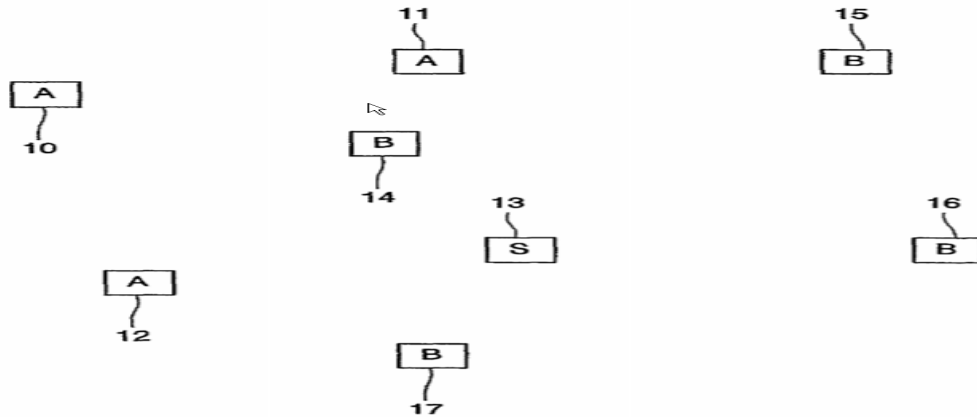


FIG. 3

Figure 3 illustrates two wireless local area networks in accordance with a first radio interface standard and a second radio interface standard of the '676 patent. *Id.* at 4:43–44. The '676 patent describes the standards as follows:

A first wireless local area network comprises three stations 10, 11, and 12. These three stations 10, 11, and 12 work in accordance with *the first radio interface standard A*, for example, in accordance with the HiperLAN/2 standard.

A second wireless local area network includes four stations 14, 15, 16, and 17. These four stations 14, 15, 16, and 17 work in accordance with *the second radio interface standard B*, for example, in accordance with the IEEE802.11a standard.

Id. at 5:22–30 (emphases added). In both standards, the frequency band is the same. *Id.* at 5:35–37.

Central control station 13 is provided which controls the alternate access by the first wireless network and the second wireless network to the

common frequency band. *Id.* at 5:39–41. The Specification describes the alternate access control as follows:

[T]he station 13 sends a broadcast message to the stations 14 to 17 of the IEEE802.11a standard when the stations 10 to 12 do not need transmission capacity. This broadcast message preferably contains time information which informs the stations 14 to 17 of the IEEE802.11[a] standard how long they are allowed to utilize the common frequency band.

If the stations 10 to 12 of the first wireless network are HiperLAN/2 stations, the control station 13 preferably also operates as the central control station (Access Point) of the HiperLAN/2 network and co-ordinates its radio resources. In HiperLAN/2 systems it is planned beforehand at what time the stations are allowed to send. For this purpose the HiperLAN/2 systems have a central controller (Access Point, AP) which receives the request for capacity from the various stations and assigns capacity accordingly. The central station 13 is preferably also provided for carrying out the function of the access point of the HiperLAN/2 standard.

Id. at 5:42–63.

The Specification describes that the control station is provided “for controlling the access to the frequency band for stations operating in accordance with the first radio interface standard.” *Id.* at 2:63–67. The Specification further describes that the control station is provided “for releasing the common frequency band for access by stations operating in accordance with the second radio interface standard, if stations operating in accordance with the first radio interface standard do not request access to the frequency band.” *Id.* at 3:7–13. According to the Specification, “the first radio interface standard is given priority over the second radio interface standard *in this manner.*” *Id.* at 3:13–15 (emphasis added). The Specification states the following: “In accordance with the invention a

control station is provided which controls the alternate use of the common frequency band of the two radio interface standards.” *Id.* at 2:45–47.

Of the challenged claims, claims 1 and 8 are independent. Claim 2 depends from claim 1. Claim 1 is considered to be representative and is reproduced below:

1. An interface-control protocol method for a radio system which has at least one common frequency band that is provided for alternate use by a first and a second radio interface standard, the radio system comprising:
 - stations which operate in accordance with a first radio interface standard and/or a second radio interface standard, and
 - a control station which controls the alternate use of the frequency band,wherein the control station controls the access to the common frequency band for stations working in accordance with the first radio interface standard and—renders the frequency band available for access by the stations working in accordance with the second radio interface standard if stations working in accordance with the first radio interface standard do not request access to the frequency band.

Ex. 1001, 6:20–36.

C. Asserted Grounds of Unpatentability

Petitioner asserts the following grounds of unpatentability (Pet. 11–12)²:

² The claims at issue have an effective filing date of August 8, 2001, which is prior to March 16, 2013, the effective date of the Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“AIA”), and, thus, we apply the pre-AIA version of 35 U.S.C. § 103.

Claims Challenged	35 U.S.C. §	Reference(s)
1, 2	103	Shellhammer ³
8	103	Shellhammer, Haartsen ⁴
8	103	Shellhammer, Panasik ⁵
1, 2	103	Lansford ⁶

Petitioner also relies on the testimony of Mr. Jeffrey Fischer (Ex. 1003) to support the contentions in the Petition.

II. ANALYSIS

A. *Application of Discretion under 35 U.S.C. §§ 314, 325*

Patent Owner asks that we discretionarily deny this Petition under 35 U.S.C. §§ 314(a), 325(d), because [d]espite the Petition’s arguments to the contrary, the facts show undue burden, inefficient overlap, and unexplained differences across the various petitions and challenges. Prelim. Resp. 5–21 (quoting *id.* at 6). In its Petition, Petitioner asserts that we should not exercise our discretion under 35 U.S.C. §§ 314, 325(d) because this is Petitioner’s first petition filed against this patent, because there is no

³ U.S. Patent No. 7,039,358 B1, filed November 16, 2000, issued May 2, 2006 (Ex. 1006, “Shellhammer”).

⁴ U.S. Patent No. 7,280,580 B1, filed October 15, 1999, issued October 9, 2007 (Ex. 1008, “Haartsen”).

⁵ U.S. Patent No. 6,643,278 B1, filed December 28, 1999, issued November 4, 2003 (Ex. 1009, “Panasik”).

⁶ U.S. Patent No. 6,937,158 B2, filed December 29, 1999, issued August 20, 2005 (Ex. 1005, “Lansford”).

relationship between Petitioner and the prior petitioners, and because the instant Petition was filed promptly after learning of the cited references. Pet. 68–76. As we determine below that we will apply our discretion under 35 U.S.C. § 314(a), we do not reach the arguments regarding 35 U.S.C. § 325(d).

With respect to 35 U.S.C. § 314, we must consider our discretion with respect to “follow-on petitions” under the factors set forth in *General Plastic Industrial Co. v. Canon Kabushiki Kaisha*, IPR2016-01357, Paper 19 (PTAB Sept. 6, 2017) (designated precedential in relevant part). *General Plastic* addresses the situation where the same petitioner files “follow-on petitions” against the same patents, after a first set of petitions is denied on the merits. *General Plastic*, Paper 19 at 2–3. *General Plastic* has not been limited to instances where multiple petitions are filed by the same petitioner. *Valve Corp. v. Elec. Scripting Prods., Inc.*, IPR2019-00062, Paper 11 (PTAB Apr. 2, 2019) (precedential). In *Valve Corp.*, the Board, evaluating the first *General Plastic* factor (whether the same petitioner previously filed a petition directed to the same claims of the same patent), considered the “significant relationship” between the two different parties filing the petitions, among other factors. *Id.* at 10.

Both parties in this case have addressed the *General Plastic* factors and asserted that they weigh in favor of or against the denial of institution. Petitioner asserts that none of the *General Plastic* factors weigh in favor of denying institution. Pet. 68. Petitioner addresses each of the *General Plastic* factors and asserts that each favors institution. *Id.* at 68–73. In contrast, Patent Owner addresses each of the *General Plastic* factors and

argues that the factors weigh against institution. Prelim. Resp. 7–19. We address the seven factors below.

1) General Plastic Factor 1

With respect to this first factor, Petitioner argues that Petitioner challenges a different set of claims than have been challenged in any single petition, that it is unrelated to the prior petitioners, and that Patent Owner’s assertions against Petitioner, with respect to the ’676 Patent, involved unrelated products. We note that although the petitioners are not related, the instant Petitioner acknowledges reviewing the prior petitions filed to determine grounds to be advanced in this proceeding. *See* Pet. 69, 71. Ultimately, this factor weighs against institution.

Petitioner cites *Valve Corp.*, arguing that it is different from the petitioners therein who (a) challenged the same set of claims; (b) were co-defendants in district court litigation and accused of infringing the same patent based on the same product; and (c) shared a significant relationship because the first petitioner was a licensee of the second petitioner. Pet. 69.

Petitioner asserts that a different set of claims is being challenged, but Petitioner distinguishes its challenged claims from “any single pending petition.” (Pet. 69). Looking at all of the challenged claims in the aggregate, the same claims are being challenged in this Petition as in the prior petitions. Although the instant Petition seeks to challenge only a “subset” of the totality of the claims challenged, we do not determine that challenging a subset of previously challenged claims is availing to Petitioner. Given the discussion in *Valve Corp.*, if Petitioner had challenged claims that were not previously challenged, this fact could weigh in its favor. *See Valve Corp.*, IPR2019-00062, Paper 11 at 10

(acknowledging a complete overlap between claims challenged in the Valve petitions and the claims challenged in the previous petition).

Petitioner also asserts that its district court suit with Patent Owner is separate from the suits involving Microsoft and Marvell involving non-Ericsson products. Pet. 69. It seems clear that Petitioner is not a co-defendant with the prior petitioners. We also determine that Patent Owner does not assert otherwise. *See* Prelim. Resp. 9–10.

Lastly, Petitioner asserts that it does not have a significant relationship with the other petitioners. Pet. 69. We agree that, absent this petition, no such relationship, on the record before us, existed. We determine, however, that Petitioner implicitly created such a relationship by using the prior petitioners' work as a menu and picking and choosing from their work product. The instant Petitioner's decision to use the prior petitions as a roadmap for its own petition ties the interests of all of the petitioners together. *See General Plastic*, Paper 19 at 11, 17 (“[m]ultiple, staggered petitions challenging the same patent and same claims raise the potential for abuse.”).

Overall, we determine that Petitioner and the prior petitioners in this case are similar to petitioners discussed in *Valve Corp*. As such, we determine that *General Plastic* Factor 1 weighs against institution.

2) *General Plastic* Factor 2

Petitioner asserts that this factor is neutral or should carry very little weight. *Id.* We disagree. Petitioner was aware of many of the applied references before Microsoft filed the first petitions in May 2019. For instance, Ericsson acknowledges that it knew of Lansford, Panasik, and Haartsen “before Microsoft’s petitions were filed.” *Id.* Petitioner asserts,

however, that it learned of Shellhammer from the Marvel petitions, filed in July 2019. *Id.*

Patent Owner asserts that Ericsson knew of Shellhammer as early as July 2018, when it submitted the reference as an exhibit in another *inter partes* review proceeding. *Id.* at 12. The fact that Petitioner appears to have filed the Shellhammer reference as an exhibit in another IPR prior to Marvell petition filings calls into question the accuracy of Petitioner's assertion that it was not aware of this reference until Marvell filed its petitions. IPR2017-01661, Paper 39 and Ex. 1036 (submitted July 13, 2018). Patent Owner also points out that Haartsen was known to Petitioner "as early as 2003," when it was assigned to Petitioner. *Id.* at 11.

As Patent Owner points out, the time period over which Petitioner knew of most of the cited references may be "considerable." Prelim. Resp. 11. Petitioner has not provided information that specifically details when it learned of each of the cited references, such that we determine that Petitioner knew of, or should have known, of the prior art asserted in the earlier petitions prior to the earlier petition filings. Based on Petitioner's representations, we determine that this factor weighs against institution.

3) *General Plastic Factor 3*

Petitioner asserts that it did not have the benefit of preliminary responses from Patent Owner in the prior petitions. Pet. 70. We agree and determine that this factor weighs in favor of institution.

4) *General Plastic Factors 4 and 5*

Petitioner asserts that it learned of the Shellhammer reference as of the filing of the Marvel petitions, and filed its petition just over a month after learning of that reference. Pet. 71–72. As discussed above, Patent

Owner has presented facts that call into question Petitioner's assertion.

With respect to the last ground, applying *Lansford*, Petitioner asserts that the elapsed time is reasonable because Petitioner was not part of any district court proceedings until April 2019, when it chose to intervene. *Id.* The relevant date to be considered, however, is not the date that Petitioner chose to intervene. Rather, the relevant date is when Petitioner was notified that the defendants that use its accused products had complaints filed against them (i.e., when it first learned that infringement allegations could be made against it). *See Valve Corp.*, Paper 11 at 10 (acknowledging that the relevant time period began when Valve became aware of the Patent Owner's infringement allegations). Petitioner has not disclosed on this record when it became aware of these complaints alleging infringement based on use of its products. We are not persuaded that Petitioner has provided adequate explanations for the elapsed time periods and find these factors weigh against institution.

5) *General Plastic Factors 6 and 7*

Petitioner asserts that "the overlap in art between this Petition and the earlier-filed petitions" would allow the Board to evaluate the petitions efficiently. Pet. 72. Petitioner also asserts that "the Board could adjust the deadlines in the cases to ensure all cases proceed on the same or similar procedural schedules." *Id.* at 73 (citing *Netflix, Inc. v. Realtime Adaptive Streaming LLC*, IPR2018-01630, Paper 13 at 11 (PTAB Apr. 19, 2019)). We disagree with Petitioner's first assertion, and determine that this additional Petition places an unnecessary burden on the Board. With respect to Petitioner's second assertion, we further determine that it would be difficult to schedule the trial in the instant proceeding so that any final

written decision on all cases involving the instant patent can be mailed on the same date.

Based on the Board's prior experience, one petition should be sufficient to challenge the claims of a patent in most situations. Two or more petitions filed against the same patent at or about the same time (e.g., before the first preliminary response by the patent owner) may place a substantial and unnecessary burden on the Board and the patent owner and could raise fairness, timing, and efficiency concerns. *See* 35 U.S.C. § 316(b). In addition, multiple petitions by a petitioner are not necessary in the vast majority of cases. To date, a substantial majority of patents have been challenged with a single petition.

Trial Practice Guide Update, 26 (July 2019); Consolidated Trial Practice Guide (November 2019), 59.

Further, we agree with Patent Owner that Petitioner has failed to explain "how its Petition differs from the prior challenges and why it should be permitted to benefit from the review of the other petitions." Prelim. Resp. 18 (citing *TomTom, Inc. v. Blackbird Tech, LLC*, IPR2017-02025, Paper 7 at 15-17 (March 12, 2018) (noting that the Board is "mindful of the potential inequity of parties filing multiple petitions," where Petitioner has "relie[d] on substantially similar references and analyses" and "[has] not shown sufficiently, how the [asserted] references are different enough to warrant institution")).

As such, upon review of the evidence and the *General Plastic* factors, we are persuaded that we should apply our discretion based on the facts of this case. Taking into consideration the efficient administration of the Office under 35 U.S.C. § 316(b), we exercise our discretion under 35 U.S.C. § 314 (a) and deny the Petition in this proceeding.

III. ORDER

It is

ORDERED that the Petition is *denied*, and no *inter partes* review is instituted on any claim over any alleged ground of unpatentability.

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