

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ARUBA NETWORKS, INC., HEWLETT PACKARD ENTERPRISE
COMPANY, HP INC., ARRIS GROUP, INC., JUNIPER NETWORKS,
INC., BROCADE COMMUNICATIONS SYS., INC., AND RUCKUS
WIRELESS, INC.

Petitioner,

v.

MOBILE TELECOMMUNICATIONS TECHNOLOGIES, LLC,
Patent Owner.

Case IPR2017-00637

Patent 5,915,210

Before MEREDITH C. PETRAVICK, SCOTT A. DANIELS, and
MIRIAM L. QUINN, *Administrative Patent Judges*.

QUINN, *Administrative Patent Judge*.

DECISION

Denying Institution of *Inter Partes* Review
35 U.S.C. § 314(a), 37 C.F.R. § 42.108(a)

Petitioner, as captioned above, filed a Petition to institute *inter partes* review of claims 1, 7, 8, 10, 15–17, and 19 of U.S. Patent No. 5,915,210 (“the ’210 patent”) pursuant to 35 U.S.C. § 311–319. Paper 8 (“Pet.”). Mobile Telecommunications Technologies, LLC (“Patent Owner”) timely filed a Preliminary Response and a Corrected Preliminary Response. Papers 17 and 22 (“Prelim. Resp.”).¹ We have authority under 35 U.S.C. § 314.

For the reasons that follow, we do not institute *inter partes* review.

I. BACKGROUND

A. RELATED MATTERS

Petitioner identifies that the patent-at-issue is the subject matter of several district court litigation cases. Pet. 3–4. Petitioner also identifies that the ’210 patent has been the subject matter of several *inter partes* review proceedings. *Id.*

B. ASSERTED ART AND GROUNDS

The Petition identifies the following references as prior art to the ’210 patent:

- a) *Rault*: Rault, J.C., et al., *The Coded Orthogonal Frequency Division Multiplexing (COFDM) Technique, and its Application to Digital Radio Broadcasting Towards Mobile Receivers*, IEEE GLOBAL TELECOMMUNICATIONS CONFERENCE AND EXHIBITION (GLOBECOM), Nov. 27–30, 1989 (Exhibit 1004).
- b) *Mojoli*: U.S. Patent No. 4,615,040 (Exhibit 1005).
- c) *Saalfank*: DE 41 02 408 A1 (filed Jan. 28, 1991), with an English

¹ All citations to Patent Owner’s Preliminary Response are to the corrected version, filed as Paper 22.

language translation submitted as Exhibit 1010.

- d) *Nakamura*: Yasuhisa Nakamura, et al., *256 QAM Modem for Multicarrier 400 Mbit/s Digital Radio*, IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS, Vol. SAC-5, NO. 3, April 1987, at 329 (Exhibit 1012).

Petitioner contends that claims 1, 7, 8, 10, 15–17, and 19 (“the challenged claims”) are unpatentable under 35 U.S.C. § 103 based on the following specific grounds (Pet. 7–8, 24–66):

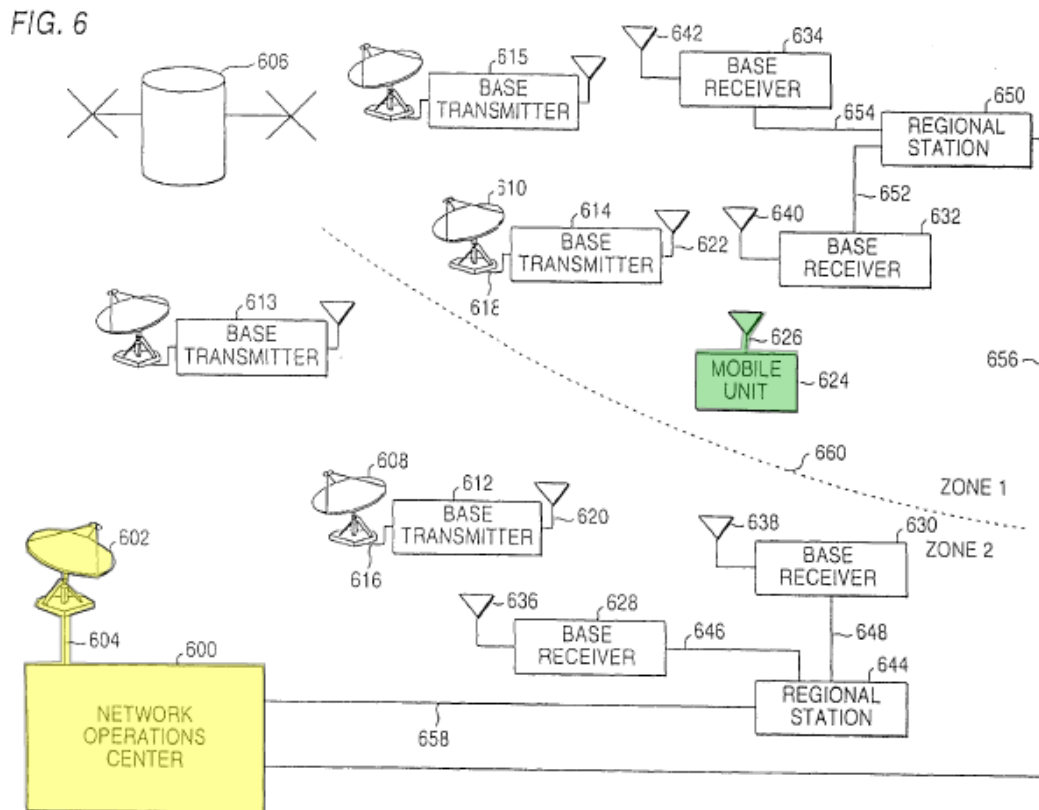
Reference[s]	Basis	Claims challenged
Rault	§ 103	1, 7–8, 10, 15–17, and 19
Rault and Mojoli	§ 103	7–8, 15, and 19
Nakamura and Saalfrank	§ 103	1 and 10

Petitioner supports its challenge with a Declaration of Dr. Anthony Acampora, filed as Exhibit 1003 (“Acampora Decl.”). Patent Owner supports its Preliminary Response with a Declaration of Dr. Jay P. Kesan, filed as Exhibit 2001 (“Kesan Decl.”).

C. THE ’210 PATENT (EX. 1001)

The ’210 patent, titled “Method and System for Providing Multicarrier Simulcast Transmission,” describes a system for two-way communication between a network operations center and a mobile device located somewhere in a wide geographic region. Ex. 1001, Abstract. The ’210 patent explains that an important aspect of the invention is to “provide a communication system with wide area coverage and high message throughput while minimizing frequency bandwidth usage.” *Id.* at 4:46–48.

Annotated Figure 6 of the '210 patent, reproduced below, illustrates the major components of the communication system for sending a data signal between networks operation center 600, highlighted in yellow, and mobile unit 624, highlighted in green. *Id.* at 8:46–48.



Annotated Figure 6 is a schematic diagram of a communication system.

As depicted by Figure 6 of the '210 patent, above, the communication system provides network operations center 600 connected to satellite uplink 602, which in turn, provides data to satellite 606. *Id.* at 8:48–51. Satellite 606 communicates the received data to several satellite downlink stations 608, 610. *Id.* at 8:52–53. Satellite downlink stations 608, 610 send the data signal to geographically spaced-apart base transmitters 612, 614 which emit the signal via antennas 620 and 622, respectively, in different geographic

defined regions, i.e., “zones,” for reception by mobile unit 624. *Id.* at 8:62–9:5. Dash line 660 indicates the boundary between zones 1 and 2, and each zone may include additional base transmitters 613, 615, respectively, as shown in Figure 6. *Id.* at 8:62–9:56. Mobile unit 624, shown in zone 1, is a portable communication device, for instance, a pager, and can both receive and transmit a signal. *Id.* at 9:6–11.

Observing Figure 6 of the ’210 patent, above, in one embodiment of the invention base transmitters 612, 614 receive a data signal from satellite 606 via down link stations 608, 610, and then transmit the same data signal at the same time, i.e., in simulcast, in both zones 1 and 2, to be received by mobile unit 624. *Id.* at 10:35–41. The ’210 patent explains that this method is “useful to deliver the message if, for example, the location of mobile unit 624 in zone 1 or zone 2 is *unknown* and broad coverage is desired.” *Id.* at 10:41–44 (emphasis added). In another embodiment, if for instance the location of mobile unit 624 is *known* to be in zone 1, base transmitter 614 transmits a data signal within zone 1, and at the same time, base transmitter 612 can transmit different data for a different mobile unit within zone 2 to “increase information throughput and system efficiency.” *Id.* at 10:45–59.

D. ILLUSTRATIVE CLAIMS

Claims 1, 10, and 19 are independent. Claim 1 illustrates the subject matter at issue, and is reproduced below. The italicized language is hereinafter referred to as the “No Redundancy Limitation.”

1. A multi-carrier simulcast transmission system for transmitting in a desired frequency band at least one message contained in an information signal, the system comprising:
a first transmitter configured to transmit a first plurality of carrier signals within the desired frequency band, *each of the*

first plurality of carrier signals representing a portion of the information signal substantially not represented by others of the first plurality of carrier signals; and

a second transmitter, spatially separated from the first transmitter, configured to transmit a second plurality of carrier signals in simulcast with the first plurality of carrier signals, each of the second plurality of carrier signals corresponding to and representing substantially the same information as a respective carrier signal of the first plurality of carrier signals.

II. ANALYSIS

A. CLAIM INTERPRETATION

The '210 patent is expired, and “the Board’s review of the claims of an expired patent is similar to that of a district court’s review.” *In re Rambus Inc.*, 694 F.3d 42, 46 (Fed. Cir. 2012). In this context, claim terms generally are given their ordinary and customary meaning, as understood by a person of ordinary skill in the art, at the time of the invention, taking into consideration the language of the claims, the specification, and the prosecution history of record because the expired claims are not subject to amendment. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc).

We determine that no explicit claim construction is required for purposes of this Decision.

B. DISCRETIONARY NON-INSTITUTION

The Petitioner in this proceeding comprises various entities, a subset of which have petitioned previously for *inter partes* review challenging the

'210 patent. Specifically, on March 16, 2016, entities Arris Group, Inc., HP² and Aruba Networks, Inc. filed petitions for *inter partes* review of the challenged claims of the '210 patent asserting grounds based on Saalfrank and Nakamura. See IPR2016-00765 (filed by Arris) and IPR2016-00769 (filed by Aruba and HP) (hereinafter, collectively, the “Previous IPRs”). On September 21, 2016, we denied institution of those petitions because the petitioners (Arris, HP, and Aruba) failed to meet the burden of showing that Saalfrank anticipates the challenged claims. See Ex. 2008. In particular, we noted in our Decision denying institution that the relied-on disclosure of Saalfrank—that “individual carriers are each modulated with one part of the data”—does not explicitly describe the No Redundancy Limitation’s requirement that the modulation is such that the “carriers represent a portion of the digital data substantially not represented by the others.” See IPR2016-00765, Paper 15 at 11. We also noted that the supporting testimony of Petitioner’s declarant was conclusory with regard to the No Redundancy Limitation, and did not explain how Saalfrank’s modulation *necessarily means* that the carriers fall under the scope of the claims. *Id.*

In the instant Petition, filed on January 10, 2017 (almost 4 months after we denied institution in the Previous IPRs), Arris, HP, and Aruba, together with Juniper, Brocade, and Ruckus Wireless, state that they anticipated an argument by Patent Owner that the “presence of coding” is incompatible with the No Redundancy Limitation. Pet. 8. Petitioner, therefore, now submits the Rault grounds “in which information signals do not contain coding,” and the Nakamura and Saalfrank ground, which “contain coding.” *Id.* Furthermore, Petitioner argues against exercising

² Collectively identifying Hewlett Packard Enterprise Company and HP, Inc.

discretion under 35 U.S.C. § 325(d) in light of the Previous IPR petitions filed by Arris, HP, and Aruba Networks. *Id.* at 8–15. We do not repeat all the reasons proffered by Petitioner, except that Petitioner argues in the end that this “Petition . . . represents Petitioner’s first practical attempt to advance their own grounds of invalidity.” *Id.* at 10–11.

Patent Owner, as forecasted by Petitioner, argues that Petitioner fails to show the prior art teaches or suggests the No Redundancy Limitation. Prelim. Resp. 24–25, 30–41, 47–51. But more significantly, Patent Owner raises to our attention that the *arguments* presented here with regard to Rault are the same or substantially the same as the arguments presented previously with regard to the Previous IPRs. Prelim. Resp. 26–29 (arguing, for example, that both Rault and Saalfrank refer to digital audio broadcasting using coded orthogonal frequency division multiplex (COFDM) to transmit radio programs on 448 carriers using PSK modulation). With regard to the Nakamura/Saalfrank ground presented here, Patent Owner also argues that we should exercise our discretion under § 325(d) because both references were presented previously. Prelim. Resp. 43–46 (arguing that “[r]esources are better spent addressing matters other than a second attempt to raise a plurality of duplicative grounds against the same patent claims.”).

1. Exercise of Discretion Under 35 U.S.C. § 314(a)

We start our analysis with the premise that institution of *inter partes* review is discretionary. *See* 35 U.S.C. § 314(a); 37 C.F.R. § 42.108(a). Our rules and procedures “shall be construed to secure the just, speedy, and inexpensive resolution of every proceeding.” *See* 37 C.F.R. § 42.1(b). Further, we exercise discretion with an eye toward ensuring fairness for both petitioner and patent owner, and, particularly, in proceedings where a

petitioner has previously challenged the same patent claims. *See* Decision Denying Institution of *Inter Partes* Review, *NVIDIA Corp. v. Samsung Elecs. Co., Ltd.*, Case IPR2016-00134, Paper 9, slip op at 7–8 (PTAB May 4, 2016). While weighing a petitioner’s desire for consideration of the petition on the merits against a patent owner’s concerns about repeated challenges to the patent, we consider the impact to the limited resources of the Board. Each case, nevertheless, is evaluated on its own facts.

When exercising our discretion, therefore, we recognize the potential for unfair prejudice to a Patent Owner that must respond to repeated challenges, and the drain on the Board’s resources that such repeated challenges may cause.

Against this background, we consider several, non-exclusive factors in deciding whether to exercise discretion not to institute review:

- a) the finite resources of the Board;
- b) the requirement under 35 U.S.C. § 316(a)(11) to issue a final determination not later than 1 year after the date on which the Director notices institution of review;
- c) whether the same petitioner already previously filed a petition directed to the same claims of the same patent;
- d) whether at the time of filing of the first petition the petitioner knew of the prior art asserted in the second petition or should have known about it;³

³ *See Conopco, Inc. v. Proctor & Gamble Co.*, Case IPR2014-00506, slip op. at 4 (PTAB Dec. 10, 2014) (Paper 25) (Informative), and (PTAB July 7, 2014) (Paper 17); *Toyota Motor Corp. v. Cellport Sys., Inc.*, Case IPR2015-01423, slip op. at 8 (PTAB Oct. 28, 2015) (Paper 7).

- e) whether at the time of filing of the second petition the petitioner already received patent owner's preliminary response to the first petition or received the Board's decision on whether to institute review in the first petition;⁴
- f) the length of time that elapsed between the time petitioner learned of the prior art asserted in the second petition and filing of the second petition; and
- g) whether petitioner provides adequate explanation for the time elapsed between the filings of multiple petitions directed to the same claims of the same patent.

Decision Denying Institution of *Inter Partes* Review, *General Plastic Indus. Co., Ltd., v. Canon Kabushiki Kaisha*, Case IPR2016-01359, Paper 12, slip op. at 4–5 (PTAB Nov. 14, 2016). Application of these factors and the considerations explained above warrant our exercise of discretion to deny institution under 35 U.S.C. § 314(a).

First, the timing of the relevant filings weighs against institution. The instant Petition was filed nearly four months after this panel issued a Decision denying the Previous IPRs. There is no question that Petitioner gained the benefit of the Previous IPRs, i.e., knowledge of Patent Owner's arguments in the Preliminary Response and our view on whether the proffered prior art had been shown to disclose the No Redundancy Limitation. Indeed, Petitioner submits in its delineation of grounds that the

⁴ See *Conopco, Inc. v. Proctor & Gamble Co.*, Case IPR2014-00628, slip op. at 11 (PTAB October 20, 2014) (Paper 21) (discouraging filing of a first petition that holds back prior art for use in later attacks against the same patent if the first petition is denied); *Toyota Motor Corp.*, slip op. at 8 (“the opportunity to read Patent Owner's Preliminary Response in IPR2015-00634, prior to filing the Petition here, is unjust”).

Petition answers or clarifies Patent Owner arguments made in the Previous IPRs. Pet. 8. In particular, knowing Patent Owner's characterization and evidence of "coding" in the Saalfrank reference, Petitioner proposed the ground based on Rault, specifically to address the "coding" argument previously presented by Patent Owner. *Id.* Also, the ground based on Nakamura and Saalfrank admittedly responds to Patent Owner's assertions made in the Preliminary Response of the Previous IPRs. Pet. 11–12 (Petitioner arguing how Patent Owner's characterizations in the Previous IPRs of Saalfrank's system and its "coding" were erroneous). Finally, Petitioner argues in the instant Petition, although misguidedly, that the Decision denying institution in the Previous IPRs relied upon Patent Owner's arguments regarding Saalfrank's coding. *Id.* at 11. Petitioner's argument is evidence that the instant Petition attempts to address our Decision in the Previous IPRs by proposing alternative grounds based primarily on Rault and Nakamura, instead of Saalfrank. See Pet. 9 (arguing that the Petition includes new arguments "explicitly rebutting PO's erroneous assertions" allegedly relied on the Board in the Previous IPRs).

Second, Arris, HP, and Aruba are the same entities that filed the Previous IPRs, and their association with additional entities to file the instant Petition does not overcome this fact. We acknowledge that three out of the seven entities that make up Petitioner here did not have a hand in the Previous IPRs. However, we cannot ignore the burdensome effect of a petitioning entity that, by mere association with a new petitioning entity, evades scrutiny when filing consecutive petitions against the same claims of the same patent. Accordingly, we find that the overlap of entities in this Petition and the Previous IPRs must be considered in whether to exercise our

discretion to deny institution.

Third, there is no adequate explanation for the 10-month lapse between the filing of the Previous IPRs and the instant Petition. The only inference we can draw from the facts is that this Petition is an attempt to recast and enhance unpatentability challenges lodged in the Previous IPRs against the same claims of the same patent with the insight provided by the Preliminary Response and the Board's Decision regarding the Previous IPRs.

Finally, we address the finite resources of the Board. We have reviewed to-date several challenges to the '210 patent. Petitioner points out that the Previous IPRs were "copycat" petitions designed to obtain joinder with IPR2015-01724. Pet. 10–11. The parties to IPR2015-01724 settled shortly after institution, and we terminated the proceeding. *See* IPR2015-01724, Papers 14–16. The Previous IPRs were filed by Arris, HP, and Aruba together with motions for joinder with IPR2015-01724. Patent Owner submitted arguments and evidence challenging institution of the Previous IPRs that were not presented in IPR2015-01724. Thus, we reviewed IPR2016-00765 and IPR2016-00769 on the merits, and we denied the joinder motions. *See* IPR2015-01724 (motion for termination filed within two months from institution); *see also* IPR2016-00766, Paper 12 (denying expedited review of motions for joinder because, *inter alia*, patent owner submitted a different preliminary response and testimonial evidence not presented previously). This Petition represents the second or consecutive request for review by Arris, HP, and Aruba of the same claims of the same patent, where the panel has issued a Decision on Institution on the merits in the previous challenge. No case, rule, or procedure compels

the Board to expend judicial resources on consecutive unpatentability challenges by the same entity/ies, against the same claims of the same patent. Indeed, “it is more efficient for the parties and the Board to address a matter once rather than twice.” *Samsung Elec. Co. v. Rembrandt Wireless Techs., LP*, Case IPR2015-00114, slip op. at 6 (PTAB Jan. 28, 2015) (Paper 14).

Based on our analysis of the foregoing factors, we exercise our discretion to deny institution of the ’210 patent.

2. *Exercise of Discretion Under 35 U.S.C. § 325(d)*

As discussed above, both parties argue the posture of the instant Petition under 35 U.S.C. § 325(d). Because we exercise our discretion to not institute under 35 U.S.C. § 314(a), we need not decide “whether, and reject the petition or request because the same or substantially the same prior art or arguments previously were presented to the Office” under § 325(d).

III. CONCLUSION

Having found that sufficient factors weigh in favor of our exercise of discretion under 35 U.S.C. § 314(a), we do not institute *inter partes* review of the ’210 patent.

IV. ORDER

After due consideration of the record before us, it is

ORDERED that the Petition is *denied* and no trial is instituted.

IPR2017-00637
Patent 5,915,210

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