

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

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

v.

MOBILE TELECOMMUNICATIONS TECHNOLOGIES, LLC,
Patent Owner.

Case IPR2017-00642

Patent 5,590,403

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

QUINN, *Administrative Patent Judge*.

DECISION

Denying Institution of *Inter Partes* Review

37 C.F.R. § 42.108

Petitioner, as captioned above, filed a Petition to institute *inter partes* review of claims 1 and 10 of Patent No. 5,590,403 (“the ’403 patent”) pursuant to 35 U.S.C. § 311–319. Paper 1 (“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 ’403 patent is the subject matter of several district court litigation cases. Pet. 7–8. Petitioner also identifies that the ’403 patent has been involved in several *inter partes* review proceedings. *Id.*

B. ASSERTED PRIOR ART AND GROUNDS

Petitioner identifies the following references as prior art to claims 1 and 10 (“the challenged claims”) of the ’403 patent:

- 1) *Jasinski*: U.S. Patent No. 4,968,966 (Exhibit 1004); and
- 2) *Thro*: U.S. Patent No. 4,670,906 (Exhibit 1005).

Petitioner contends that the challenged claims are unpatentable under 35 U.S.C. § 103 based on the following specific grounds (Pet. 12):

¹ We refer to the Corrected Preliminary Response (Paper 22) when citing to Patent Owner’s brief.

Reference[s]	Basis	Claim[s] challenged
Jasinski	§ 103	1
Thro	§ 103	10
Thro and Jasinski	§ 103	10

C. THE '403 PATENT (EX. 1001)

The '403 patent, titled “Method and System for Efficiently Providing Two Way Communication between a Central Network and Mobile Unit,” issued on December 31, 1996, is based on an application filed on November 12, 1992. It relates to “providing two-way communication capability between a central network and a mobile unit over a relatively large area” to allow for rapid communication of large messages and efficient use of system resources. Ex. 1001, 1:10–14. The patent describes that to extend transmitter coverage, simulcast technology is positioned to cover extended areas, operates on substantially the same frequencies, and transmits the same information. *Id.* at 1:44–53. Where the coverage areas overlap, the patent describes that destructive interference of signals occurs. *Id.* at 1:64–2:3. The patent further describes some of the design techniques involved in a simulcast system that may overcome the destructive interference, e.g., using synchronization of carrier frequencies and offsetting. *See id.* at 2:5–65. While these techniques may result in successful data reception, the baud rate in simulcast operation is limited, thus also limiting the system throughput. *Id.* at 3:45–50.

One embodiment of the '403 patent involves a method of delivering a message to mobile units that “would increase information throughput and system efficiency.” *Id.* at 10:19–23, 61–62. The method is depicted in

Figure 7 and is described with respect to the communication system illustrated in Figure 6 (*id.* at 7:47–48), reproduced below.

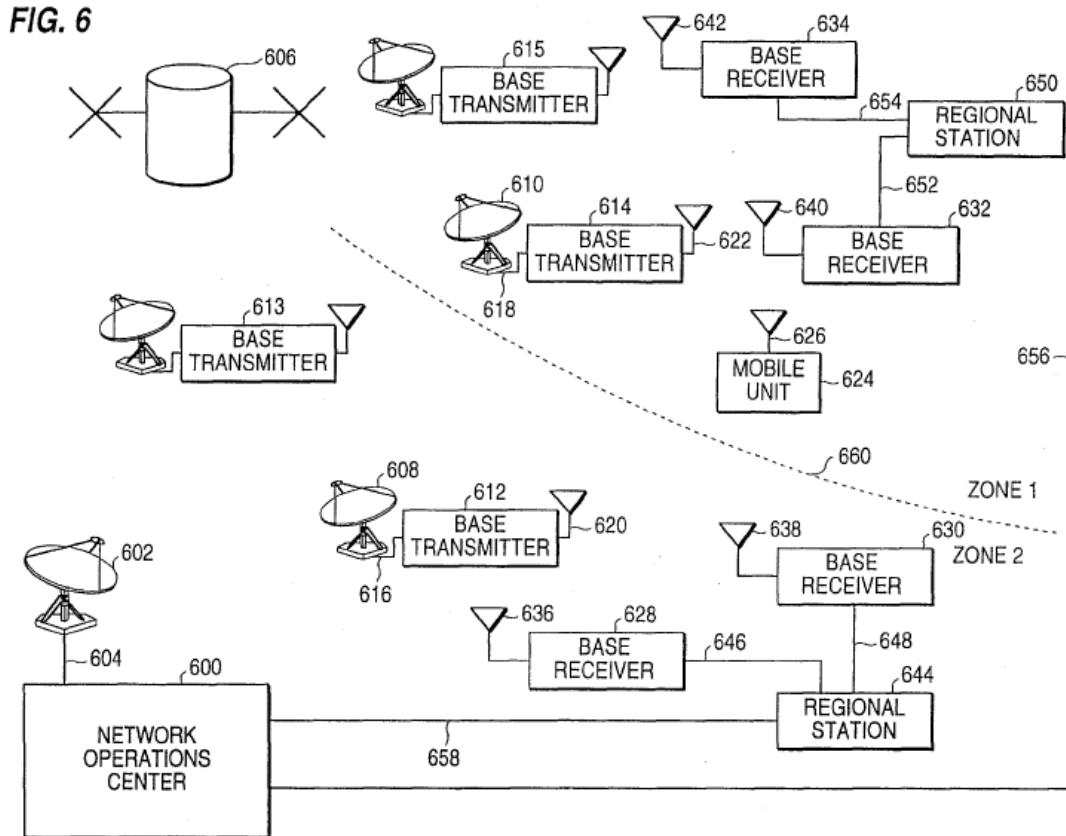


Figure 6 illustrates a system having two zones (Zone 1 and Zone 2), where each zone includes multiple base transmitters (Zone 1 includes base transmitters 613, 612, and Zone 2 includes base transmitters 614, 615). *Id.* at 9:5–8, 40–50; Fig. 6. The patent describes a method by which network operations center 600 generates a system information signal of several blocks of information that includes an electronic message to be delivered to mobile unit 624. *Id.* at 10:23–27. Then the signal is transmitted to satellite 606 and further to base transmitters 612, 614. *Id.* at 10:28–39. These base transmitters 612, 614 transmit the signal, which includes the message to the mobile unit, in simulcast during a first time period. *Id.* at 10:40–46. The

patent describes that the simulcast transmission is useful when the location of the mobile unit is unknown and broad coverage is desired. *Id.* at 10:46–49.

The '403 patent further describes a second time interval for transmitting the signal, which includes the message, by the base transmitter in Zone 1, if the location of mobile unit 612 is known. *Id.* at 10:50–56. During this second time interval, the transmitter in Zone 2 could deliver a different message to a different mobile unit. *Id.* at 10:56–60. The patent describes that the second time interval transmission “would increase information throughput and system efficiency.” *Id.* at 10:61–62.

The patent also describes that, while simulcast may provide uniform transmitter coverage for a region, overlap areas of zones operating in simulcast, each zone transmitting different signals, may experience interference. *Id.* at 10:7–18. To deliver messages to mobile units in an overlap region and to balance the volume of message traffic between zones, the patent describes a method of dynamically changing the zonal assignments of various base transmitters. *Id.* at 23:43–54. According to this method, a zone is redefined by assigning transmitters to another zone, changing thus the zone boundaries and the high traffic overlap region. *See id* at 24:21–25.

D. ILLUSTRATIVE CLAIMS

Challenged claims 1 and 10 are independent and are reproduced below.

1. A method for information transmission by a plurality of transmitters to provide broad communication capability over a region of space, the information transmission occurring during at least both a

first time period and a second time period and the plurality of transmitters being divided into at least a first and second set of transmitters, the method comprising the steps of:

- (a) generating a system information signal which includes a plurality of blocks of information;
- (b) transmitting the system information signal to the plurality of transmitters;
- (c) transmitting by the first and second sets of transmitters a first block of information in simulcast during the first time period;
- (d) transmitting by the first set of transmitters a second block of information during the second time period; and
- (e) transmitting by the second set of transmitters a third block of information during the second time period.

10. A method of communicating messages between a plurality of base transmitters and mobile receivers within a region of space divided into a plurality of zones with each zone having at least one base transmitter assigned thereto, the communication method comprising the steps of:

- (a) transmitting substantially simultaneously a first information signal and a second information signal to communicate messages to the mobile receivers, the first information signal being transmitted in simulcast by a first set of base transmitters assigned to a first zone, and the second information signal being transmitted in simulcast by a second set of base transmitters assigned to a second zone;
- (b) dynamically reassigning one or more of the base transmitters in the first set of base transmitter assigned to the first zone to the second set of base transmitters assigned to the second zone as a function of the messages to be communicated in an area, thereby creating an updated first set of base transmitters and an updated second set of base transmitters; and

(c) transmitting substantially simultaneously a third information signal and a fourth information signal, the third information signal being transmitted in simulcast by the updated first set of base transmitters, and the fourth information signal being transmitted in simulcast by the updated second set of base transmitters to communicate additional messages to said mobile receivers.

II. ANALYSIS

A. CLAIM INTERPRETATION

The '403 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 the purposes of this Decision.

B. DISCRETIONARY NON-INSTITUTION

Petitioner argues that although Jasinski was discussed by the Examiner during prosecution, “it was discussed only with respect to claim 10—not claim 1” of the '403 patent. Pet. 13. Petitioner also argues that the ground based on Thro and Thro/Jasinski was not presented to the Office previously. *Id.* Therefore, according to Petitioner, “this petition does not

involve, under [35 U.S.C.]§ 325(d), ‘the same or substantially the same prior art or arguments previously [] presented’ to the Office or the Board.”

Id. We are not persuaded that, at least for the grounds based on Jasinski, this Petition evades applicability of § 325(d).

Section 325(d) states that “[i]n determining whether to institute . . . the Director may take into account whether . . . the same or substantially the same prior art or arguments previously were presented to the Office.” Thus, the threshold issue is whether the Jasinski grounds identified in the Petition present the same or substantially the same prior art or arguments as those presented during examination.

When evaluating whether the same or substantially the same prior art or arguments previously were presented to the Office under section 325(d), we have considered some of the following non-exclusive factors:

- 1) The similarity of the asserted art and the prior art involved during examination;
- 2) The extent to which the asserted art was considered during examination, including whether the prior art was the basis for rejection;
- 3) The cumulative nature of the asserted art and the prior art considered during examination;
- 4) Whether Petitioner has pointed out sufficiently how the Examiner erred in its consideration of the asserted prior art;
- 5) The extent of the overlap between the arguments made during examination and the manner in which Petitioner relies on the prior art or the applicant’s arguments during examination; and
- 6) The extent to which additional evidence and facts presented in the

Petition warrant reconsideration of the prior art.²

Each case is evaluated on its own facts. 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). When considering all the above factors and the parties’ arguments, we are persuaded that the Petition presents substantially the same prior art or arguments previously presented to the Office with regards to all the grounds based on Jasinski.

First, it is undisputed that Jasinski was considered during examination and was the basis for rejection of examined claims of the ’403 patent. As Petitioner notes, the Examiner rejected now-claim 10 on the basis of Jasinski. *See* Pet. 19; Ex. 1002, 177–83. The Office Action containing said

² *See, e.g., Palo Alto Networks v. Finjan*, Case IPR2015-01999, slip op. at 6–8 (PTAB Mar. 29, 2016) (Paper 7) (evaluating the similarities between the asserted art and the references relied on during examination and determining the extent arguments considered during examination); *Agrinomix v. Mitchell Ellis Prods.*, Case IPR2017-00525, slip op. at 11 (PTAB June 14, 2017) (Paper 8) (determining whether asserted prior art was before Examiner during prosecution); *Inogen v. Separation Design Group IP Holdings*, Case IPR2017-00300, slip op. at 31–33 (PTAB May 19, 2017) (Paper 8) (considering whether the asserted art is cumulative of any reference that previously was before the Office); *Dorco Co. v. The Gillette Co.*, Case IPR2017-00500, slip op. at 18–19 (PTAB June 21, 2017) (Paper 7) (considering whether Petitioner identifies errors by the Office or explanation of why the Office should revisit the patentability issues considered by the Examiner, and also considering the overlap of arguments); *Hyundai Mobis Co. et al. v. Autoliv ASP*, Case IPR2014-01005, slip op. at 44–45 (PTAB Jan. 14, 2015) (Paper 10) (stating that Petitioner’s challenge includes new arguments and new supporting evidence, such as expert testimony, shedding a different light on the prior art); *Prism Pharma v. Choongwae Pharma Corp.*, Case IPR2014-00315, slip op. at 12–13 (PTAB July 8, 2014) (Paper 14) (evaluating the overlap of the arguments in examination and the contentions presented by Petitioner).

rejection specifically relies on Jasinski's disclosure of a "simulcast" system that transmits a first and second information to the mobile, and the central station's operation regarding the acknowledgement signal received from the mobiles. *See* Ex. 1002, 182–183. Accordingly, the Examiner considered Jasinski substantively and was aware of its contents during the examination of the claims of the '403 patent.

Second, although Petitioner acknowledges that the Examiner cited Jasinski during prosecution, Petitioner unpersuasively characterizes the Examiner's reliance on Jasinski as limited to "a subset of Jasinski," and without consideration of "the other embodiments . . . where the second interval messages are simulcast/pseudo-simulcast by multiple transmitters." Pet. 35. We do not agree. As stated above, the Examiner stated that Jasinski discloses a "simulcast" system that transmits first and second information to a mobile. The Examiner cited to various portions of Jasinski, not all limited to the subset of Jasinski Petitioner alleges. For example, the Examiner cites Figures 2 to 4 as supporting the findings of the simulcast system taught in Jasinski transmitting first and second information. Ex. 1002, 182. Figure 4 of Jasinski, we find, describes the current frame communication, as well as the current frame-1 communication. *See* Ex. 1004, Fig. 4; 3:40–43 ("FIG. 4 is a timing diagram showing the application of the signaling format of FIG.3 in a simulcast transmission system."). Other citations in the Office Action, pointing to the Abstract and column 2, lines 41–57, for example, also confirm that the Examiner was aware of the various transmissions of the address and messages. *See id.* 2:41–57; Ex. 1002, 182 (citing "col. 2, lines 41–57; Abstract). Indeed, in claim 10, all recited transmissions appear to require simulcast. It follows then, that in considering Jasinski to reject claim

10, the Examiner was aware of Jasinski's simulcast communications, contrary to what Petitioner argues. Therefore, even though the Examiner did not reject now-claim 1 over Jasinski, we are persuaded that the Examiner substantively considered Jasinski's disclosure of a simulcast system and was aware of Jasinski's timing diagram and the various transmissions of the addresses and messages. Thus, we do not agree with Petitioner's contention that the Examiner did not consider "the second interval messages" sent in "simulcast/pseudo-simulcast by multiple transmitters." See Pet. 35. And we have been presented with no other reasoning showing Examiner error that would warrant reconsidering Jasinski.

Third, we note that there is sufficient overlap in the arguments presented here and the arguments presented during examination with regard to the limitation of "dynamically reassigning," recited in claim 10. The Examiner stated that Jasinski disclosed the limitation because Jasinski transmits the additional message to the mobile once the mobile acknowledges its location. Ex. 1002, 182–83 (relying on Abstract which describes simulcasting transceiver addresses, and the cells that receive the acknowledgement transmit the address and message at a different data rate). In essence, Jasinski's method of first simulcasting the transceiver addresses causes the second transmissions to be delivered only to the found transceivers, as longer messages at high speed, but in non-adjacent zones. In response to the Office Action, the applicant argued that Jasinski did not disclose the dynamically reassigning limitation. Ex. 1002, 201–203. The argument overcame the rejection and the claim was allowed. *Id.* at 210, 277. The instant Petition relies on Jasinski as teaching this limitation in combination with Thro. Pet. 86–88. The argument presented is premised on

Jasinski's teaching of "accounting for message length" to implement Thro's "prioritization algorithm." *Id.* at 87. But the disclosure of the longer message transmission in Jasinski was already considered as this is precisely what Jasinski sought to solve with its method of transmitting at higher speeds in zones, with one *or more* transmitters, where the transceiver is found. See Ex. 1004, 2:18–28, 4:57–64 ("Once the location of paging transceivers 18 have been determined, the messages, which are stored at central station 12, corresponding to each paging transceiver 18 are tagged identifying one or more remote stations 14 to be used in the subsequent transmission of the message."); Ex. 1002, 183 (Examiner acknowledging the operation of locating transceivers in a zone). Accordingly, we are not persuaded that we should re-evaluate Jasinski for the "dynamically reassigning" limitation recited in claim 10.

Finally, we note that Petitioner has provided a declaration of Dr. Acampora to support the unpatentability challenges based on Jasinski. Although the declaration provides further explanations of Jasinski's operation, this factor alone does not overcome the circumstances presented here. Patent Owner has argued persuasively that Jasinski was the subject of substantive discussion and studied evaluation in the rejection of claims of the '403 patent. See, *e.g.*, Prelim. Resp. 34 ("Patent Owner submits that the Examiner obviously studied Jasinski in great detail (and rejected claim 10 in light of it), and would similarly have rejected Claim 1 if he thought Jasinski disclosed it."). We have been shown no reason sufficient to warrant a reevaluation of Jasinski, whether alone or in combination with Thro or in light of declaration evidence.

In summary, we recognize that Petitioner has an interest in the review

of its unpatentability challenge, but we also recognize the need to assess the cumulativeness of challenges that raise the same or substantially the same arguments and prior art presented previously to the Office. Here, Jasinski was substantively considered and relied upon during examination to reject certain claims of the '403 patent. We find that the Examiner was aware of the contents of Jasinski in material respects applicable to both claim 1 and claim 10, and that we have been shown no reason sufficient to reevaluate Jasinski with respect to any of the challenged claims. Consequently, we determine that the Petition presents the same or substantially the same prior art and arguments presented previously to the Office, and we exercise our discretion not to institute *inter partes* review with regard to all grounds relying on Jasinski.

C. DENIAL OF GROUND BASED ON THRO

Petitioner asserts that Thro teaches all the limitations of claim 10. Pet. 58–86. We do not agree with Petitioner at least with regard to the “dynamically reassigning” limitation. The claim requires that the recited reassignment is made “as a function of the messages to be communicated in an area.” Ex. 1001, 34:52–53. Petitioner points to Thro’s disclosure of “where-are-you” messages as teaching the limitation. Pet. 84. According to Petitioner, a dynamic reassignment is triggered in Thro “via ‘where-are-you’ messages sent to exemplary remote stations A and B to [e]nsure remote station location information does not become stale.” *Id.* This contention is not supported sufficiently by the record.

Thro describes a data communication system comprising a general communications controller (GCC), a plurality of channel communication

modules (CCM), associated co-located transmitters and receivers, and a plurality of radios. Ex. 1005, Abstract. “Each CCM receiver takes a signal strength measurement every time it receives a message from a portable radio.” *Id.* The receiver’s strength measurement signal is used by the GCC to compute the radio channel path loss between the portable radio and each base/transmitter receiver site that received the portable’s message. *Id.* This information is used, in addition to the transmitter power, to determine which sites are capable of transmitting a message to the portable radio, and additional sites that can transmit simultaneously without interfering with the message transmission. *Id.*

Every time a portable transmits a message signal, the GCC updates the portable’s zones of communication. *Id.* at 16:44–47. The re-computation is based on the signal strength measurements. *Id.* at 16:47–50. According to Thro, the GCC initiates short “where-are-you” message signals “for those portable radios that have been inactive for a relatively long period of time.” *Id.* at 16:50–54.

From the above description, we do not find persuasive Petitioner’s evidence and argument that the “where-are-you” signal triggers a dynamic reassignment as a function of the messages to be communicated in the area, as the claim requires. To the contrary, under the “where-are-you” signal scenario, if there was a “dynamic reassignment,” it is based on the inactivity of the portable, not as a function of the messages to be communicated. The inactivity of the portable does not indicate messages to be communicated. Furthermore, even though Thro updates the portable’s zones, it does so by factoring in the signal strength of the portable, i.e., the portable’s location.

There is no indication in Thro and no other persuasive evidence³ that Thro also takes into account messages to be communicated in an area.

Accordingly, we are not persuaded that Petitioner has demonstrated a reasonable likelihood that it would prevail in its assertion that claim 10 would have been obvious over Thro.

III. CONCLUSION

For the foregoing reasons, we do not institute *inter partes* review of the '403 patent.

IV. ORDER

After due consideration of the record before us, it is

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

³ Petitioner relies on the Acampora Declaration to support its contentions. The paragraphs cited (Ex. 1003 ¶ 130–31) are a *verbatim* reiteration of the argument presented in the Petition and are not helpful.

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