

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AMAZON.COM, INC., HTC CORPORATION, ZTE (USA), INC.,
PANTECH CO., LTD., PANTECH WIRELESS, INC.,
LG ELECTRONICS, INC., LG ELECTRONICS U.S.A., INC., and
DELL INC.,
Petitioner,

v.

CELLULAR COMMUNICATIONS EQUIPMENT, LLC,
Patent Owner.

Case IPR2014-01134
Patent 7,941,174 B2

Before JENNIFER S. BISK, GREGG I. ANDERSON, and
ROBERT J. WEINSCHENK, *Administrative Patent Judges*.

WEINSCHENK, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

Amazon.com, Inc., NEC Corporation of America, NEC Mobile Communications, Ltd.,¹ HTC Corporation, ZTE (USA), Inc., Pantech Co., Ltd., Pantech Wireless, Inc., LG Electronics, Inc., LG Electronics U.S.A., Inc., and Dell Inc. (collectively, “Petitioner”) filed a Petition (Paper 10, “Pet.”) requesting an *inter partes* review of claims 1, 6, 9, 14, 18, and 19 of U.S. Patent No. 7,941,174 B2 (Ex. 1001, “the ’174 patent”). Cellular Communications Equipment, LLC (“Patent Owner”) filed a Preliminary Response (Paper 15, “Prelim. Resp.”) to the Petition. On January 15, 2015, we instituted an *inter partes* review of claims 1, 6, 9, 14, 18, and 19 (“the challenged claims”) of the ’174 patent on the following grounds:

| Claim(s) | Statutory Basis | Applied References(s) |
|-------------------------|------------------------|--|
| 1, 6, 9, 14, 18, and 19 | 35 U.S.C. § 102(e) | U.S. Patent Pub. No. 2008/0151840 A1 (published June 26, 2008) (Ex. 1005, “Baker”) |
| 1, 6, 9, 14, 18, and 19 | 35 U.S.C. § 103(a) | U.S. Patent No. 7,689,239 B2 (issued Mar. 30, 2010) (Ex. 1004, “Reed”) and Baker |
| 1, 6, 9, 14, 18, and 19 | 35 U.S.C. § 103(a) | Reed and U.S. Patent No. 7,321,780 B2 (issued Jan. 22, 2008) (Ex. 1006, “Love”) |

Paper 16 (“Dec. on Inst.”), 17.

After institution, Patent Owner filed a Response (Paper 33, “PO Resp.”) to the Petition, and Petitioner filed a redacted Reply (Paper 42, “Pet. Reply”) and a sealed Reply (Paper 43) to the Response. An oral hearing was

¹ NEC Mobile Communications, Ltd. was formerly known as NEC CASIO Mobile Communications, Ltd. Paper 14, 2. NEC Corporation of America and NEC Mobile Communications, Ltd. were dismissed on February 12, 2015. Paper 21, 2–3.

held on August 26, 2015, and a transcript of the hearing is included in the record. Paper 56 (“Tr.”).

We issue this Final Written Decision pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons set forth below, Petitioner has not shown by a preponderance of the evidence that claims 1, 6, 9, 14, 18, and 19 of the ’174 patent are unpatentable.

A. *Related Proceedings*

The parties indicate that the ’174 patent is the subject of several cases in the United States District Court for the Eastern District of Texas. Pet. 1–2; Paper 13, 2–3.

B. *The ’174 Patent*

The ’174 patent relates to a radio communication system in which a subscriber station is assigned a plurality of codes for transmitting messages. Ex. 1001, col. 1, ll. 14–17. According to the ’174 patent, when radio transmission conditions deteriorate while a subscriber station is transmitting a message, a base station may request that the subscriber station increase the transmit power. *Id.* at col. 4, ll. 47–50. However, a subscriber station can only increase the transmit power up to a maximum value for that subscriber station. *Id.* at col. 4, ll. 50–52. As a result, if a subscriber station reaches the maximum transmit power during transmission of a message and subsequently receives a request from the base station to increase the transmit power, the subscriber station may have to abort transmission of the message before completion. *Id.* at col. 5, ll. 54–61.

To address this problem, the ’174 patent describes a system in which the subscriber station maintains a transmit power difference or “power headroom.” *Id.* at col. 6, ll. 40–44. The transmit power difference is a

difference between the total transmit power for a plurality of codes assigned to the subscriber station at the start of a message transmission and the maximum transmit power for a plurality of codes assigned to the subscriber station. *Id.* at col. 6, ll. 42–47. For example, if the maximum transmit power for a subscriber station is 18 dBm and a transmit power difference of 8 dBm is maintained by the subscriber station, the subscriber station has 10 dBm of transmit power at the start of a message transmission. *Id.* at col. 6, l. 55–col. 7, l. 3. As a result, if the base station requests an increase in transmit power for one of the codes during transmission, the subscriber station has 8 dBm of headroom to increase the transmit power without having to abort the transmission. *Id.* at col. 6, ll. 40–49. The amount of the transmit power difference maintained by a subscriber station can be determined based on a variety of factors, including current interference, type of service, network strategy, and subscriber class. *Id.* at col. 7, ll. 29–30, col. 7, ll. 54–55, col. 8, ll. 8–9, col. 8, l. 13.

C. *Illustrative Claim*

Claims 1, 9, and 18 are independent. Claim 1 is reproduced below.

1. A method for operating a radio communication system in which a subscriber station is assigned a plurality of codes for transmitting messages, comprising:

determining a transmit power difference which is to be maintained by the subscriber station between on one hand a total maximum transmit power of the subscriber station for the codes and on another hand a total transmit power of the subscriber station for the codes at a start of a message transmission using a first one of the codes.

Id. at col. 9, ll. 56–64.

II. ANALYSIS

A. *Identification of Real Parties in Interest*

The Petition identifies several real parties in interest. Pet. 1. Based on the information in the Petition and Preliminary Response, we did not identify any issues under 35 U.S.C. § 312(a)(2) or § 315(b), and we instituted an *inter partes* review. See Dec. on Inst. 2. Patent Owner argues in its Response that NEC Corporation and HTC America are real parties in interest that are not identified in the Petition. PO Resp. 41. According to Patent Owner, the Decision on Institution should be vacated because, under 35 U.S.C. § 312(a)(2), a petition that does not identify all the real parties in interest cannot be considered. PO Resp. 42–44. For the reasons discussed below, we do not vacate the Decision on Institution.

1. *NEC Corporation*

The Petition identifies NEC Corporation of America (“NEC America”) and NEC Mobile Communications, Ltd.² (“NEC Mobile”) as real parties in interest. Pet. 1. Patent Owner argues that the Petition also should have identified NEC Corporation as a real party in interest because NEC Corporation controlled the participation of NEC America and NEC Mobile in this case. PO Resp. 47–49. Specifically, Patent Owner argues that NEC Corporation executed a Settlement Agreement with Patent Owner that required NEC America and NEC Mobile to withdraw from this case. *Id.* at 48. Patent Owner also argues that certain statements in the Motion to Terminate NEC America and NEC Mobile demonstrate that NEC

² NEC Mobile Communications, Ltd. was formerly known as NEC CASIO Mobile Communications, Ltd. Paper 14, 2.

Corporation controlled the participation of NEC America and NEC Mobile in this case. *Id.* at 47–48.

Patent Owner and NEC Corporation executed the Settlement Agreement that allegedly demonstrates NEC Corporation’s control with respect to this case on November 17, 2014. *Id.* at 45. Because Patent Owner is a party to the Settlement Agreement, Patent Owner knew of its terms at that time. *Id.* Thus, Patent Owner could have raised the issue of whether NEC Corporation is a real party in interest when the Settlement Agreement was executed, but did not. Patent Owner, NEC America, and NEC Mobile filed the Motion to Terminate that allegedly demonstrates NEC Corporation’s control with respect to this case on February 5, 2015. Paper 19. Because Patent Owner signed the Motion to Terminate, Patent Owner knew of the statements therein at that time. *Id.* at 7–8. Thus, Patent Owner also could have raised the issue of whether NEC Corporation is a real party in interest when the Motion to Terminate was filed, but did not.

Patent Owner instead waited until after we granted the Motion to Terminate and dismissed NEC America and NEC Mobile from this case to argue that NEC Corporation had controlled their participation. Ex. 2002, 19:18–25:18. The result of Patent Owner’s delay is that the parties whose conduct is in question no longer are involved in this case. Patent Owner previously assured the remaining parties and the Board that “NEC’s termination from the IPRs [would] have little, if any, impact on the remaining parties or the Board.” Paper 19, 5. Yet, now, Patent Owner seeks the extraordinary remedy of terminating this case in its entirety based on statements made in the documents that secured the dismissal of NEC America and NEC Mobile (documents which the remaining parties did not

sign). Given Patent Owner's delay and previous assurances regarding the dismissal of NEC America and NEC Mobile, we decline to terminate this case with respect to the remaining parties. *See* 37 C.F.R. § 42.12.

2. *HTC America*

Patent Owner argues that HTC America should have been identified as a real party in interest in the Petition because of the relationship between HTC America and HTC Corporation. PO Resp. 51–58. Specifically, Patent Owner argues that: 1) HTC America is a wholly owned subsidiary of HTC Corporation (*id.* at 51); 2) HTC America and HTC Corporation often act jointly in other cases (*id.* at 51–52, 54); 3) HTC America and HTC Corporation share inside and outside counsel (*id.* at 52–53); 4) the power of attorney for HTC Corporation in IPR2014-01135 was signed on behalf of an HTC America employee (*id.* at 53); and 5) HTC America is identified as a real party in interest in most other petitions for *inter partes* review that identify HTC Corporation as a real party in interest (*id.* at 54–55). Patent Owner's argument is not persuasive.

Whether a party is a real party in interest is a “highly fact-dependent question” that is evaluated “on a case-by-case basis.” Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,759–60 (Aug. 14, 2012). Some of the common considerations for determining whether a party is a real party in interest include whether the party funds, directs, or controls the petition or proceeding. *Id.* at 48,760. Here, Patent Owner does not identify any evidence indicating that HTC America funds, directs, controls, or otherwise is involved in *this* petition or proceeding. Patent Owner's argument that HTC America and HTC Corporation acted jointly in other cases and that HTC America is named as a real party in interest in other cases does not

indicate that HTC America is a real party in interest in this case. Similarly, Patent Owner's argument that an employee of HTC America is identified on the power of attorney for HTC Corporation in IPR2014-01135 does not indicate that HTC America is a real party in interest in this case.³ Finally, Patent Owner's argument that HTC America and HTC Corporation share counsel does not indicate that HTC America funds, directs, controls, or otherwise is involved in this case.

B. *Claim Construction*

The claims of an unexpired patent are interpreted using the broadest reasonable interpretation in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b); *In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1278–79 (Fed. Cir. 2015). Claim terms generally are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the specification. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). An applicant may provide a different definition of the term in the specification with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). In the absence of such a definition, limitations are not to be read into the claims from the specification. *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993).

³ We also are not persuaded by Patent Owner's argument because the power of attorney for HTC Corporation in IPR2014-01135 was signed by an employee of HTC Corporation (Pet. Reply 23–24; Ex. 2023, 24:20–25:6), and Petitioner represents that the reference to an HTC America employee was an oversight (Pet. Reply 24).

1. *at a start of a message transmission using a first one of the codes*

Petitioner argues that the phrase “at a start of a message transmission using a first one of the codes” does not require express construction. Pet. Reply 3. Patent Owner argues that we should clarify that the phrase “at a start of a message transmission using a first one of the codes” modifies the phrase “a total transmit power of the subscriber station for the codes” in the challenged claims. PO Resp. 15–17. We determine that Patent Owner’s proposed interpretation is the broadest reasonable interpretation.

Patent Owner’s proposed interpretation is supported by the claim language and the specification. In the challenged claims, the disputed phrase “at a start of a message transmission using a first one of the codes” immediately follows the phrase “a total transmit power of the subscriber station for the codes.” Ex. 1001, col. 9, ll. 62–64, col. 10, ll. 38–40, col. 12, ll. 8–10. Further, the specification explains that a “transmit power difference” is a difference between “a first and a second transmit power.” *Id.* at col. 2, ll. 41–43. According to the specification, the first transmit power is “the total maximum transmit power of the subscriber station for the plurality of codes” (*id.* at col. 2, ll. 45–47), and “[t]he second of the two transmit powers is the total transmit power of the subscriber station for the plurality of codes *at the start of a message transmission using a first of the codes*” (*id.* at col. 2, ll. 59–61 (emphasis added)). Thus, the specification indicates that the phrase “at a start of a message transmission using a first one of the codes” modifies the total transmit power. Other portions of the specification also support Patent Owner’s interpretation. *See, e.g., id.* at col. 6, ll. 42–47 (“The transmit power difference . . . is required to exist between *the total transmit power for the two codes DCH and EDCH at the start of*

the transmission of an EDCH message and the maximum transmit power for the two codes DCH and EDCH.” (emphasis added)), col. 8, ll. 51–63.

Therefore, we determine that, when given the broadest reasonable interpretation, the phrase “at a start of a message transmission using a first one of the codes” in the challenged claims modifies the phrase “a total transmit power of the subscriber station for the codes.”

C. *Anticipation of Claims 1, 6, 9, 14, 18, and 19 by Baker*

Petitioner argues that claims 1, 6, 9, 14, 18, and 19 are anticipated by Baker. Pet. 20. A claim is anticipated if each limitation of the claim is disclosed in a single prior art reference arranged as in the claim. *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008). We have considered the parties’ arguments and supporting evidence, and we determine that Petitioner has not shown by a preponderance of the evidence that claims 1, 6, 9, 14, 18, and 19 are anticipated by Baker.

Independent claim 1 recites “determining a transmit power difference which is to be maintained by the subscriber station between on one hand a total maximum transmit power of the subscriber station for the codes and on another hand a total transmit power of the subscriber station for the codes *at a start of a message transmission* using a first one of the codes.” Ex. 1001, col. 9, ll. 56–64 (emphasis added). Independent claims 9 and 18 recite similar limitations, with independent claim 18 further reciting at least one processor that is programmed to determine the transmit power difference. *Id.* at col. 10, ll. 32–40, col. 12, ll. 1–10.

Petitioner argues that Baker discloses a mobile station that transmits signals on two channels, DPDCH and DPCCH. Pet. 21; Ex. 1005 ¶ 23. The mobile station also transmits a positive (“ACK”) or negative (“NACK”)

acknowledgement using a third channel, HS-DPCCH. Pet. 21; Ex. 1005 ¶¶ 24–25. The transmit power for the signals on the DPDCH and DPCCH channels is reduced at the boundary of the frame or timeslot immediately preceding the ACK or NACK signal to ensure that there is enough transmit power available for the ACK or NACK signal. Pet. 22; Ex. 1005 ¶¶ 27, 30. Petitioner argues that the mobile station in Baker determines a transmit power difference, as recited in the challenged claims, by determining how much to reduce the transmit power for the DPDCH and DPCCH channels at the boundary of the frame or timeslot immediately preceding the ACK or NACK signal. Pet. 22–23. Figure 4 of Baker, as annotated by Petitioner, is reproduced below.

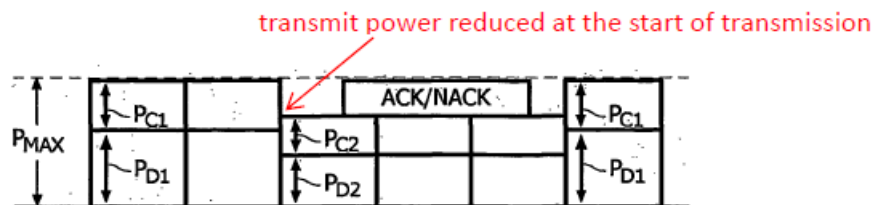


FIG. 4

Id. at 26. Figure 4 of Baker is a timing diagram showing the signals sent by the mobile station. Ex. 1005 ¶ 15. According to Petitioner, the transmit power difference is the difference between P_{max} and the total transmit power for P_{C2} and P_{D2} at the boundary of the frame or timeslot immediately preceding the ACK or NACK signal. Pet. 23–26.

Patent Owner argues that Petitioner has not shown sufficiently that the boundary of the frame or timeslot immediately preceding the ACK or NACK signal in Baker is the start of a message transmission. PO Resp. 35–36. Specifically, Patent Owner identifies evidence indicating that a message

transmission may include multiple frames and timeslots. *Id.*; Ex. 1015 ¶ 11; Ex. 2022 ¶ 87. Thus, according to Patent Owner, the boundary of the frame or timeslot immediately preceding the ACK or NACK signal in Baker is not necessarily the start of a message transmission. PO Resp. 35–36; Ex. 2022 ¶¶ 85–87. We agree with Patent Owner.

Petitioner does not identify any express disclosure in Baker indicating that the boundary of the frame or timeslot immediately preceding the ACK or NACK signal is the start of a message transmission. Pet. 23–26; Pet. Reply 9–10; Tr. 11:3–10. Petitioner instead argues that “an EDCH message as described in the ’174 patent can be a single frame,” and, thus, “maintaining a transmit power difference at a start of a *frame* (i.e., at a start of an EDCH message transmission) must be equivalent to maintaining a transmit power difference at a start of a *message*.” Pet. Reply 9; Tr. 13:15–19. In other words, Petitioner argues that the start of a frame of an EDCH message inherently is the start of a message transmission.⁴

Petitioner’s argument is not persuasive. First, Petitioner only argues that the mobile station in the ’174 patent transmits an EDCH message. Pet. Reply 9. Petitioner does not argue or identify evidence indicating that the mobile station in Baker transmits an EDCH message. *Id.* at 9–10; Tr. 12:6–

⁴ Petitioner argued at the oral hearing that the term “message transmission” in the challenged claims refers to any frame in a message because the EDCH message described in the ’174 patent can be a single frame. Tr. 61:2–62:10. Petitioner’s argument is improper because it was presented for the first time at the oral hearing. *See* Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,768 (Aug. 14, 2012). Further, we are not persuaded that, because an EDCH message sometimes can be a single frame, the phrase “at a start of a message transmission” refers to the start of *any* frame in a message transmission.

16. Therefore, Petitioner's argument that the start of a frame of an EDCH message inherently is the start of a message transmission does not demonstrate that the start of a frame in Baker inherently is the start of a message transmission. Tr. 12:6–16. Second, Petitioner does not identify evidence indicating that the start of a frame of an EDCH message necessarily is the start of a message transmission. Pet. Reply 9–10. Petitioner argues that an EDCH message *can* be a single frame, and, thus, the start of a frame of an EDCH message *can* be the start of a message transmission. *Id.* at 9; Ex. 1015 ¶ 11. However, the mere possibility that the start of a frame may correspond to the start of a message transmission is not sufficient to show that Baker anticipates the challenged claims. *See In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999) (“Inherency . . . may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.”). Further, Petitioner acknowledges that a message transmission in Baker may include more than one frame, and, as a result, the start of a frame in Baker does not necessarily correspond to the start of a message transmission. Tr. 12:6–16, 16:19–19:13.

Therefore, because Petitioner has not shown that Baker expressly or inherently discloses determining a transmit power difference between a maximum transmit power for the codes and a total transmit power for the codes *at a start of a message transmission* using a first one of the codes, Petitioner has not shown by a preponderance of the evidence that Baker anticipates claims 1, 6, 9, 14, 18, and 19.

D. *Obviousness of Claims 1, 6, 9, 14, 18, and 19*

Petitioner argues that claims 1, 6, 9, 14, 18, and 19 would have been obvious over Reed and Baker and over Reed and Love. Pet. 27, 36. A claim is unpatentable as obvious under 35 U.S.C. § 103(a) if the differences between the claimed subject matter and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations, including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) any objective indicia of non-obviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). We have considered the parties' arguments and supporting evidence, and we determine that Petitioner has not shown by a preponderance of the evidence that claims 1, 6, 9, 14, 18, and 19 would have been obvious over Reed and Baker or over Reed and Love.

1. *Reed and Baker*

Petitioner argues that Reed teaches a mobile station that determines its maximum transmission power, subtracts a headroom, and uses the remaining available transmit power to determine a maximum data rate for the data in its buffer. Pet. 32; Ex. 1004, col. 1, ll. 32–36. Petitioner argues that the headroom in Reed corresponds to the transmit power difference recited in the challenged claims. Pet. 30–32.

Petitioner acknowledges that Reed does not teach expressly that the mobile station is assigned *a plurality of codes* for transmitting messages,

and, thus, also does not teach expressly a transmit power difference between a maximum transmit power *for the codes* and a total transmit power *for the codes*, as recited in the challenged claims. *Id.* at 28–29, 32–33; Ex. 1001, col. 9, ll. 56–64, col. 10, ll. 32–40, col. 12, ll. 1–10. Petitioner argues that:

[A]lthough Reed does not explicitly disclose that a mobile station can be assigned a plurality of codes, Reed discloses that the mobile station can transmit two or more data streams or signals at the same time. Reed also discloses that the described communication system is a CDMA (Code Division Multiple Access) system in which signals are transmitted using codes.

Baker explicitly discloses that “[a]s is customary with spread spectrum signaling several signals can be transmitted simultaneously each signal having its own signature or spreading code selected from a set of signatures.” Thus, Baker discloses that the plurality of data streams mentioned in Reed can each have its own code. Indeed, as described above, Baker discloses *a subscriber station is assigned a plurality of codes*. It would have been obvious to one skilled in the art to understand that the two or more data streams transmitted by the mobile station in Reed can be transmitted on different channels using different codes.

Id. at 29 (internal citations omitted). In other words, Petitioner argues that Reed teaches a mobile station that can transmit two or more data streams, and it would have been obvious to one of ordinary skill in the art based on Baker that each data stream in Reed could be assigned a different code. *Id.*

Patent Owner argues that, even assuming each data stream in Reed is assigned a different code, Petitioner still has not shown sufficiently that the challenged claims would have been obvious over Reed and Baker. PO Resp. 39–41. The challenged claims recite determining a single transmit power difference for a plurality of codes assigned to the subscriber station. *Id.* at 39; Ex. 1001, col. 9, ll. 56–64, col. 10, ll. 32–40, col. 12, ll. 1–10. Patent

Owner argues that, in contrast, Reed teaches determining a separate headroom for each data stream (and thus each code), not a single headroom for a plurality of codes. PO Resp. 39–41. We agree with Patent Owner that Petitioner has not shown by a preponderance of the evidence that the challenged claims would have been obvious over Reed and Baker.

As discussed above, Petitioner argues that Reed teaches a mobile station that can transmit two or more data streams. Pet. 28–29 (citing Ex. 1004, col. 4, ll. 14–21). The portion of Reed cited by Petitioner states that:

If the mobile station desires to send two or more data streams (or hold voice and data connections at the same time), an addition [sic] degree of freedom allows the mobile station to deliberately increase the headroom on one of the data streams to de-prioritize that data stream. This would result in, for example, a longer time to transmit a text message from the mobile station but allow a digital picture to be transmitted at an optimum data rate.

Ex. 1004, col. 4, ll. 14–21 (emphases added). This portion of Reed indicates that the headroom for one data stream can be adjusted independently of the headroom for the other data streams, and, thus, demonstrates that each data stream has its own headroom. *Id.*; Ex. 1003 ¶ 110; Ex. 2022 ¶¶ 100–101. As a result, assuming that each data stream in Reed is assigned a different code, Reed teaches determining a separate headroom for each code, not determining a single headroom for a plurality of codes. Ex. 1003 ¶ 110; Ex. 2022 ¶¶ 101–104.

Petitioner argues that Patent Owner’s interpretation of Reed is incorrect. Pet. Reply 12–14. Specifically, Petitioner argues that:

The disclosure in Reed that Patent Owner refers to describes that one data stream can be de-prioritized for the benefit of another data stream (for example, the system can de-prioritize a text message transmission in order to reserve transmission

power for more data intensive transmissions such as digital pictures). (*See* Williams Decl. ¶¶ 13–14.) This provides “an addition[al] degree of freedom” because more power can be allocated to higher-priority transmissions by reducing power allocated to lower- priority transmissions. (*See* Williams Decl. ¶¶ 13–14.) If Reed disclosed *independently* establishing headroom for each code, as Patent Owner contends, there would be no “degree of freedom” for this prioritization of transmissions because the reserved power on one stream could not be used for transmission on any other stream. (*See* Williams Decl. ¶¶ 13–14.)

Pet. Reply 13. Petitioner’s argument is not persuasive. Petitioner’s argument cites exclusively to the second declaration of Dr. Tim Williams. *Id.* In his first declaration, Dr. Williams states that “[o]ne skilled in the art would understand that the data streams disclosed in Reed are assigned different codes, each code having its own headroom.” Ex. 1003 ¶ 110. Thus, Dr. Williams’ first declaration supports Patent Owner’s argument. In his second declaration, Dr. Williams takes the opposite position and states that one of ordinary skill in the art would understand that Reed teaches determining a single headroom for more than one code. Ex. 1015 ¶¶ 13–14. Because the statements in Dr. Williams’ second declaration cited by Petitioner are inconsistent with Dr. Williams’ first declaration, we determine that those statements lack credibility and we afford them little weight.

Further, even if we afforded significant weight to the cited statements in Dr. Williams’ second declaration, Petitioner’s argument still is not persuasive. Petitioner argues that Reed teaches that one data stream can be deprioritized relative to another data stream. Pet. Reply 13. Petitioner argues that, to deprioritize a data stream, power must be reallocated from one data stream to another data stream, which allegedly cannot be

accomplished if each data stream has its own headroom.⁵ *Id.* However, Petitioner does not identify any portion of Reed that mentions reallocating power between data streams. *Id.* Rather, Reed teaches that, if the headroom for one data stream is increased, then the maximum data rate for that data stream is decreased. Ex. 1004, col. 2, ll. 13–19. Reed explains that, as a result, a particular data stream can be deprioritized by increasing the headroom for that data stream until its data rate is less than the data rate of the other data streams. *Id.* at col. 4, ll. 11–21. Thus, contrary to Petitioner’s argument, Reed teaches that a data stream can be deprioritized relative to other data streams, even when each data stream has its own headroom. Ex. 2022 ¶ 101.

Petitioner also argues that Reed teaches determining “headroom for the *entire* device, rather than just for an individual code the mobile station may be transmitting.” Pet. Reply 13–14 (citing Ex. 1004, col. 2, l. 56–col. 4, l. 13, Fig. 2). Petitioner’s argument is not persuasive. The portions of Reed cited by Petitioner refer to a first preferred embodiment that describes transmitting one data stream. Ex. 1004, col. 2, ll. 22–25, col. 2, ll. 56–57. In that embodiment, where the mobile station only transmits one data stream, the headroom for that data stream would correspond to the headroom for the entire device. However, the portions of Reed cited by Petitioner do not demonstrate that there is a single headroom for the entire device when the mobile station transmits two or more data streams. Also, Petitioner does not argue or identify evidence indicating that it would have been obvious to a

⁵ Petitioner acknowledged at the oral hearing that this argument is premised on an assumption that the headroom in Reed is fixed. Tr. 25:1–27:12. That assumption is inconsistent with the express teaching in Reed that the headroom can be increased. Ex. 1004, col. 4, ll. 9–21.

person of ordinary skill in the art to modify Reed to use a single headroom when the mobile station transmits two or more data streams.

Because Petitioner has not shown that it would have been obvious based on Reed and Baker to determine a transmit power difference between a maximum transmit power *for a plurality of codes* and a total transmit power *for a plurality codes* at a start of a message transmission, Petitioner has not shown by a preponderance of the evidence that claims 1, 6, 9, 14, 18, and 19 would have been obvious over Reed and Baker.

2. *Reed and Love*

Petitioner relies on the same teachings in Reed discussed above (Pet. 36–42), but relies on Love instead of Baker to compensate for the identified deficiencies in Reed (*id.* at 37–38). Specifically, Petitioner argues that Reed teaches a mobile station that can transmit two or more data streams, and it would have been obvious to one of ordinary skill in the art based on Love that each data stream in Reed could be assigned a different code. *Id.* For the same reasons discussed above with respect to the combination of Reed and Baker, Petitioner has not shown that it would have been obvious based on Reed and Love to determine a transmit power difference between a maximum transmit power *for a plurality of codes* and a total transmit power *for a plurality codes* at a start of a message transmission. *See supra* Section II.D.1; PO Resp. 41; Pet. Reply 15. Therefore, Petitioner has not shown by a preponderance of the evidence that claims 1, 6, 9, 14, 18, and 19 would have been obvious over Reed and Love.

E. *Petitioner's Motion to Exclude*

Petitioner filed a Motion to Exclude Exhibits 2003, 2005–2019, and 2021 (Paper 48), to which Patent Owner filed an Opposition (Paper 51), and

Petitioner filed a Reply (Paper 54). Petitioner's Motion to Exclude Exhibits 2003, 2005–2019, and 2021 is *dismissed as moot* because this Decision does not rely on Exhibits 2003, 2005–2019, and 2021.

F. *Patent Owner's Motion to Exclude*

Patent Owner filed a Motion to Exclude (Paper 46, "PO Mot."), to which Petitioner filed an Opposition (Paper 50), and Patent Owner filed a Reply (Paper 53). Patent Owner argues that Exhibit 1017 and paragraphs 15 and 16 of Exhibit 1015 should be excluded under Fed. R. Evid. 802, Fed. R. Evid. 901, 37 C.F.R. §§ 42.22, 42.23, 42.104, and 35 U.S.C. § 312. PO Mot. 2. Patent Owner also argues that Petitioner's reliance on Exhibit 1017 and paragraphs 15 and 16 of Exhibit 1015 "present[s] a number of rule violations." PO Mot. 3. Patent Owner points out that "Exhibit 1017 was not included in the petition or part of any instituted ground of unpatentability," but does not explain specifically why Exhibit 1017 and paragraphs 15 and 16 of Exhibit 1015 should be excluded under any of the cited rules. PO Mot. 2–3. Therefore, we are not persuaded that Exhibit 1017 and paragraphs 15 and 16 of Exhibit 1015 should be excluded, and Patent Owner's Motion to Exclude is *denied*. Patent Owner's Motion to Exclude also is moot because this Decision does not rely on Exhibit 1017 or paragraphs 15 and 16 of Exhibit 1015.

G. *Petitioner's Motion to Seal*

Petitioner filed a Motion to Seal. Paper 41 ("Mot."). Petitioner requests entry of a protective order and seeks to seal portions of Petitioner's Reply. *Id.* at 1, 4. For the reasons discussed below, the Motion to Seal is *granted*.

The parties agree to the default protective order found in Appendix B of the Office Patent Trial Practice Guide with one modification. *Id.* at 3. Specifically, the parties limit the individuals who can access confidential information to outside counsel for the parties, the Office, and their support personnel. *Id.* We hereby enter the Protective Order filed as Exhibit 1018 in this proceeding, which governs the treatment and filing of confidential information in this proceeding.

There is a strong public policy that favors making information filed in an *inter partes* review open to the public. *Garmin Int'l, Inc. v. Cuozzo Speed Techs. LLC*, IPR2012-00001, Paper 34, 1–2 (PTAB Mar. 14, 2013). The standard for granting a motion to seal is good cause. 37 C.F.R. § 42.54. That standard includes showing that the information addressed in the motion to seal is truly confidential, and that such confidentiality outweighs the strong public interest in having the record open to the public. *See Garmin* IPR2012-00001, Paper 34, 2–3. The portions of the Reply that Petitioner seeks to seal relate to the terms of the confidential Settlement Agreement between Patent Owner and NEC Corporation. Mot. 2–3. We have reviewed the Motion to Seal, the document sought to be sealed, and the redacted, public version of that document, and we determine that good cause exists to grant Petitioner's Motion to Seal.

III. CONCLUSION

Petitioner has not shown by a preponderance of the evidence that claims 1, 6, 9, 14, 18, and 19 of the '174 patent are unpatentable under 35 U.S.C. §§ 102(e), 103(a).

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that claims 1, 6, 9, 14, 18, and 19 of the '174 patent are not shown unpatentable;

FURTHER ORDERED that Petitioner's Motion to Exclude is *dismissed as moot*;

FURTHER ORDERED that Patent Owner's Motion to Exclude is *denied*;

FURTHER ORDERED that Petitioner's Motion to Seal is *granted*;

FURTHER ORDERED that the Protective Order filed as Exhibit 1018 is entered in this proceeding;

FURTHER ORDERED that the identified portions of Petitioner's Reply (Paper 43) will be sealed; and

FURTHER ORDERED that, because this is a Final Written Decision, parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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