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Paper 14
Date: December 9, 2025

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ONEPLUS TECHNOLOGY (SHENZHEN) CO., LTD.,
Petitioner,

v.

PANTECH CORPORATION,
Patent Owner.

IPR2025-00756
Patent 10,764,803 B2

Before JAMESON LEE, THU A. DANG, and CHRISTOPHER L. OGDEN, *Administrative Patent Judges*.

DANG, *Administrative Patent Judge*.

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

I. INTRODUCTION

A. Background

OnePlus Technology (Shenzhen) Co., Ltd. ("Petitioner") filed a Petition requesting an *inter partes* review of claims 1, 2, 5–8, 11, and 12 (the "challenged claims") of U.S. Patent No. 10,764,803 B2 (Ex. 1001, "the '803 patent"). Paper 1 ("Pet."). Pantech Corporation ("Patent Owner") filed a Preliminary Response to the Petition. Paper 8 ("Prelim. Resp."). With the Board's authorization, Petitioner filed a Preliminary Reply to Patent Owner's Preliminary Response (Paper 12, "Prelim. Reply"), and Patent Owner filed a Preliminary Sur-reply to Petitioner's Reply (Paper 13, "Prelim. Sur-reply").

Under 37 C.F.R. § 42.4(a), the Board has authority to determine whether to institute an *inter partes* review. Applying the standard set forth in 35 U.S.C. § 314(a), which requires demonstration of a reasonable likelihood that Petitioner would prevail with respect to at least one challenged claim, we grant Petitioner's request and institute an *inter partes* review of all challenged claims.

B. Real Parties in Interest

Petitioner identifies itself and Guangdong OPPO Mobile Telecommunications Corp., Ltd. as the real parties in interest. Pet. 4. Patent Owner identifies itself as the real party in interest. Paper 4, 1.

C. Related Proceedings

The parties identify the '803 patent as the subject of the following related district court matter: *Pantech Corp. v. OnePlus Technology (Shenzhen) Co., Ltd.*, No. 5:24-cv-00038-RWS-JBB (E.D. Tex.). Pet. 4; Paper 4, 1.

D. The '803 Patent

The '803 patent, titled "Enhanced Uplink Operation in Soft Handover," issued on September 1, 2020, from Application No. 16/533,320, with a filing date of August 6, 2019. Ex. 1001, codes (54), (45), (21), (22). The '803 patent claims the benefit of U.S. Patent Application No. 15/212,403, filed on Jul. 18, 2016, which is a continuation of U.S. Patent Application No. 13/236,133, filed on Sep. 19, 2011, which in turn is a continuation of U.S. Patent Application No. 10/925,426 ("the '426 application"), filed on Aug. 25, 2004. *Id.*, code (63). The '803 patent observes a need "to define a protocol for transferring [wireless transmit/receive unit] WTRU-specific information and other [enhanced uplink] EU related information among an [radio network controller] RNC, a Node-B, and a WTRU so that a Node-B is enabled to schedule radio resources and EU connections are handed over properly during soft handover." *Id.* at 2:57–62.

The '803 patent describes a "wireless communication system" that "comprises a WTRU, at least two Node-Bs, and an RNC." *Id.* at 2:67–3:2. "[F]or each WTRU one Node-B is designated as a primary Node-B and any other Node-B within the EU active set as a non-primary Node-B." *Id.* at 3:3–5. The node designated as the "primary Node-B controls EU operation during soft handover including EU scheduling and H-ARQ." *Id.* at 3:5–7. As a result, "[s]oft buffer corruption is avoided by controlling H-ARQ during soft handover only by the primary Node-B." *Id.* at 3:7–9. As an alternative, "an RNC may control EU operation during soft handover including H-ARQ" such that "an RNC generates final ACK/NACK decision based on the error check results of the Node-Bs." *Id.* at 3:9–12.

E. Challenged Claims

Of the challenged claims (1, 2, 5–8, 11, and 12), claims 1 and 7 are the independent claims. Claims 2, 5, and 6 depend from claim 1, and claims 8, 11, and 12 depend from claim 7. Independent claim 1 is illustrative and is reproduced below:

> 1. A wireless transmit/receive unit (WTRU) comprising:
>
> a transceiver; and
>
> a processor; and
>
> wherein the transceiver and the processor are configured to cause the WTRU to, while a primary cell is associated with a wireless network node and one or more non-primary cells are associated with the wireless network node:
>
> receive configuration information for the primary cell and the one or more non-primary cells;
>
> receive a message on the primary cell, the received message including an indication of at least one of the one or more non-primary cells from which the WTRU is to receive a downlink shared channel transmission; and
>
> in response to the received message, receive and process the downlink shared channel transmission from the indicated at least one of the one or more non-primary cells.

Ex. 1001, 10:38–56.

F. Evidence

Petitioner relies on the references listed below.

Reference		Date	Exhibit No.
Ericsson	*Mobility examples when the UE has an HS-PDSCH assignment*	Jan. 7–11, 2002	1005
TS 25.331	*3GPP Technical Specification TS 25.331, v5.5.0*	June 2006	1006

Reference		Date	Exhibit No.
Sebire	WO 03/034766 A2	Apr. 24, 2003	1007
TS 36.300	*3GPP Technical Specification TS 36.300, v10.6.0*	Dec. 2011	1008
TS 36.321	*3GPP Technical Specification TS 36.321, v10.6.0*	Sept. 2012	1009
TS 36.331	*3GPP Technical Specification TS 36.331, v10.6.0*	June 2012	1010

Petitioner also relies on the Declaration of Apostolos K. Kakaes, Ph.D. Ex. 1003.

G. The Asserted Grounds of Unpatentability

Petitioner contends that the challenged claims are unpatentable under the following grounds. Pet. 3.

Claim(s) Challenged	35 U.S.C. §[1]	Reference(s)/Basis
1, 5–7, 11, 12	103	TS 36.300, TS 36.321, TS 36.331
1, 2, 5–8, 11, 12	103	Ericsson, TS 25.331
5, 6, 11, 12	103	Ericsson, TS 25.331, Sebire

[1] The Leahy-Smith America Invents Act ("AIA"), Pub. L. No. 112-29, 125 Stat. 284, 287–88 (2011), amended 35 U.S.C. § 103. Because the '803 patent was filed after March 16, 2013, the effective date of the relevant amendment, the AIA version of § 103 applies.

II. ANALYSIS

A. Claim Construction

We construe each claim "in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent." 37 C.F.R. § 42.100(b) (2024). Under this standard, claim terms are generally given their plain and ordinary meaning as would have been understood by a person of ordinary skill in the art (POSITA) at the time of the invention and in the context of the entire patent disclosure. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc).

Only those terms in controversy need to be construed, and only to the extent necessary to resolve the controversy. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

Petitioner asserts that "no claim terms need to be construed." Pet. 13 n. 1. Patent Owner does not propose a construction for any claim term, and asserts that, for purposes of this Preliminary Response, it also applies "the plain and ordinary meaning of all terms except for 'downlink shared channel transmission,'" for which it applies "a meaning of 'a transmission in a downlink shared channel' according to the reasoning set forth by the Magistrate Judge." Prelim. Resp. 7 (citing Ex. 2011, 36–37). However, Patent Owner argues that the plain and ordinary meaning of "primary" and "non-primary" cells, and "indeed the only meaning applied by the '803 Patent," is that the "primary" and "non-primary" cells are "cells that the [wireless transmit/receive unit] WTRU is connected to." *Id.* at 16 (citing Ex. 1001, 8:44–46, 9:4–6). Thus, Patent Owner argues that, although the cited

prior art to Ericsson teaches "multiple cells that are associated with a wireless network node" as recited in the claims, "the WTRU of Ericsson is not connected to them at the same time, and thus, they are not 'primary' or 'non-primary' cells." *Id.* (citing Ex. 1005, 1).

In light of the parties' arguments and evidence, we find that it is necessary to construe "primary," and thus "non-primary," but only to the extent necessary to resolve the disputed issues before us.

"primary" and "non-primary"

Claim 1 recites inter alia, a "wireless transmit/receive unit (WRTU)," a "primary cell . . . associated with a wireless network node" and "one or more non-primary cells . . . associated with the wireless network node," wherein the WTRU is caused to receive "configuration information" for the primary cell and one or more non-primary cells, and a message is received on the primary cell "including an indication of at least one of the one or more non-primary cells . . . is to receive a downlink shared channel transmission." Ex. 1001, 10:38−56. Claim 7 similarly recites, inter alia, receiving by a WRTU "configuration information for a primary cell and one or more non-primary cells wherein the primary cell is associated with a wireless network node and the one or more non-primary cells are associated with the wireless network node," and "receiving, by the WTRU, a message on the primary cell' . . . 'including [an] indication of at least one of the one or more non-primary cells . . . is to receive a downlink shared channel transmission." *Id.* at 11:11–26. Thus, the claims define a "primary" cell as being: a cell "associated with a wireless network node," comprising "configuration information" to be received by a WTRU, and comprising a message including indication of "at least one[ ]non-primary cells from which

the WTRU is to receive a downlink shared channel transmission." *Id.* at 10':38–56, 11:11–26.

Although Patent Owner argues that, according to the plain and ordinary meaning, "primary" and "non-primary" cells are all cells that the WTRU is connected to (PO Resp. 16), the plain language in claim 1, and similarly in claim 7, does not require a "primary" node or "non-primary" cell to have a connection to the WTRU. *See* Ex. 1001, 10:38−56; 11:11–26. We find unavailing Patent Owner's contention that the claims require that the WTRU "be connected to more than one cell," wherein cells that are "associated with a wireless network node," but are not connected to the WTRU "at the same time" cannot be "primary" or "non-primary" cells. PO Resp. 16.

In the '803 patent, nothing in the Specification clearly limits "primary" and "non-primary" cells as Patent Owner proposes. Prelim. Resp. 16. Patent Owner points to the Specification of the '803 patent to show that, for softer handover, the WTRU is connected "with more than one cell [] which are controlled by the same Node-B," and "[o]ne of the[se] cells 808 may be designated as a primary cell 808a, while other cells are designated as a non-primary cells 808b." *Id.* (alterations in original) (citing Ex. 1001, 8:44–46, 9:4–6, Figs. 8A–B). However, this portion of the Specification (describing a softer handover embodiment in which a cell "may be designated" as a primary while other as non-primary) does not provide a clear definition to warrant interpreting the "primary" and "non-primary" cells as requiring "connection" to the WTRU "at the same time." *Id*. That is, nothing in the Specification clearly precludes "primary" and "non-primary" cells from being "source" and "target" cell, as Patent Owner contends. PO Resp. 16.

On this preliminary record, in view of the plain language of the claims and the Specification, we determine that the terms "primary" and "non-primary" recited in claims 1 and 7 are not limited to cells connected to a WRTU at the same time. We determine no further explicit construction of this term is necessary to resolve the controversy. *See Vivid Techs.*, 200 F.3d at 803.

B. Principles of Law

A patent claim is unpatentable under 35 U.S.C. § 103 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 said 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) objective evidence of non-obviousness. *See Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

C. Level of Skill in the Art

The level of skill in the art is a factual determination that provides a primary guarantee of objectivity in an obviousness analysis. *See Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308, 1324 (Fed. Cir. 1999) (citing *Graham*, 383 U.S. at 17–18 (1966); *Ryko Mfg. Co. v. Nu-Star, Inc.*, 950 F.2d 714, 718 (Fed. Cir. 1991)). Generally, it is easier to establish obviousness under a higher level of ordinary skill in the art. *See Innovention Toys, LLC v. MGA Entm't, Inc.*, 637 F.3d 1314, 1323 (Fed. Cir. 2011) ("A less

sophisticated level of skill generally favors a determination of nonobviousness . . . while a higher level of skill favors the reverse.").

Petitioner, relying on the testimony of Dr. Kakaes, contends that a person of ordinary skill in the art (POSITA) "would have had a B.S. in Electrical Engineering or a related field with at least three years of experience designing, developing, and/or testing telecommunication systems," and "would also have familiarity with the wireless standards and well-known protocols for accessing wireless networks existing at the relevant time," wherein "[m]ore education may supplement practical experience or vice versa." Pet. 12–13. At this stage in the proceeding, Patent Owner does not contest Petitioner's proposal or offer an alternative. On this record, we are persuaded that Petitioner's proposal is consistent with the technology described in the Specification and the cited prior art. For purposes of this Decision, we adopt Petitioner's proposed level of skill.

D. Claims 1, 2, 5, 6, 7, 8, 11, and 12 as allegedly obvious over Ericsson and TS 25.331; and Claims 5, 6, 11, and 12 as allegedly obvious over Ericsson, TS 25.331 and Sebire

Petitioner contends that Ericsson, in view of TS 25.331, renders obvious claims 1, 2, 7, and 8 of the '803 patent. Pet. 34–52, 57–58. Petitioner also contends that Ericsson and TS 25.331, in further view of POSITA knowledge, renders obvious claims 5, 6, 11, and 12 of the '803 patent. *Id.* at 52–57, 59. Alternatively, Petitioner contends that Ericsson and TS 25.331, in further view of Sebire, renders obvious claims 5, 6, 11, and 12 of the '803 patent. *Id.* at 60–68.

In response, Patent Owner contends that Petitioner has not shown a reasonable likelihood of prevailing because "Ericsson . . . does not disclose or render obvious at least the limitations whereby there are 'primary' and

'non-primary' cells," and Petitioner "does not rely on either TS 25.331 or Sebire as secondary references for these limitations." *See* Prelim. Resp. 15–18.

We briefly summarize Ericsson, TS 25.331, and Sebire below.

1. Ericsson (Ex. 1005)

Ericsson, titled "Mobility examples when the UE has an HS-PDSCH assignment," discloses "an intra-Node B serving HS-DSCH cell change while keeping the dedicated physical channel configuration and the active set, using the Physical channel reconfiguration procedure" with the "transition from source to target HS-DSCH cell [being] performed synchronised, i.e. at a given activation time." Ex. 1005, 1, 4. More specifically, Ericsson describes "the UE transmits a MEASUREMENT REPORT message containing intra-frequency measurement results," and "the Node B is prepared for the serving HS-DSCH cell change at an activation time indicated with CPHY-RL-Commit-REQ primitive" when the SRNC has performed the handover decision. *Id.* at 4. Then, the SRNC "sends a PHYSICAL CHANNEL RECONFIGURATION message, which indicates the target HS-DSCH cell and the activation time to the UE," and "[w]hen the UE has completed the serving HS-DSCH cell change it transmits a PHYSICAL CHANNEL RECONFIGURATION COMPLETE message to the network." *Id.*

2. TS 25.331 (Ex. 1006)

TS 25.331 is a technical specification that includes RRC procedures. Ex. 1006. Specifically, TS 25.331 describes RRC connection establishment, including the reception of an RRC CONNECTION SETUP message by the UE. *Id.* at 67–71. TS 25.331 details that the "UE shall compare the value of the IE 'Initial UE identity' in the received RRC CONNECTION SETUP

message with the value of the variable INITIAL_UE_IDENTITY," and what actions to take when the values are different or identical. *Id.* at 69–70.

3. Sebire (Ex. 1007)

Sebire, titled "A Handover Method," relates to "handing over user equipment from a source cell to a target cell in a cellular communications network." Ex. 1007, codes (54), (57). In particular, Sebire describes a source sending to the user "Temporary Block Flow (TBF) link information for the target cell, while the user is associated with said source," and that the "TBF link information defin[es] at least one TBF in said target cell." *Id.* at 3:26–29. Sebire describes "changing the cell with which the user equipment is associated from the source cell to the target cell, whereby the TBF link information allows said user to use said TBF in said target cell." *Id.* at 3:29–31.

4. Independent claim 1 as allegedly obvious over Ericsson and TS 25.331

We begin by addressing in detail Petitioner's contentions and Patent Owner's arguments with respect to the limitations of representative independent claim 1.

a) Preamble, "A wireless transmit/receive unit (WTRU)"

Petitioner contends that Ericsson is titled "Mobility examples when the UE has an HS-PDSCH assignment," wherein "the term 'UE' refers to a 'user equipment,'" and "is synonymous with WTRU and mobile station, which are abbreviations or other names for a cellular phone/device." Pet. 38 (citing Ex. 1005, 1–5; 1003 ¶¶ 176–177). Thus, Petitioner contends that Ericsson discloses the preamble.

At this stage of the proceeding, Patent Owner does not present arguments in the Preliminary Response addressing the specific merits of Petitioner's contentions with respect to the preamble. *See generally* Prelim. Resp. 15–18.

Having reviewed all of Petitioner's assertions regarding the limitations in the preamble, as well as all supporting evidence, we determine on this preliminary record that Petitioner has made a sufficient showing that Ericsson teaches a "wireless transmit/receive unit (WTRU)," as recited in the preamble of claim 1.[2]

b) a "transceiver; a "processor"

Petitioner contends that Ericsson teaches a user equipment (UE), wherein "a transceiver and a processor are common elements within a 'UE.'" Pet. 38 (citing Ex. 1003 ¶¶ 181, 185). Petitioner asserts that a POSITA "would understand a 'transceiver' as shorthand for transmitter/receiver, which are fundamental components of a UE used to transmit and receive information for communication with a base station (i.e., Node B of Ericsson . . .)." *Id.* at 38–39 (citing Ex. 1003 ¶ 181). Similarly, Petitioner asserts that a POSITA "would understand a 'processor' is a fundamental component of a UE," wherein a processor is "used to process data for transmission from the transceiver or process data received from the transceiver." *Id.* at 39 (citing Ex. 1003 ¶ 185). That is, "data sent from the UE or received at the UE would be processed by the 'processor' within the UE." *Id.*

[2] Because Petitioner has shown that the recitation in the preamble is satisfied by Ericsson, there is no need at this time to determine whether the preamble is limiting. *See Vivid Techs.*, 200 F.3d at 803.

At this stage of the proceeding, Patent Owner does not present arguments in the Preliminary Response addressing the specific merits of Petitioner's contentions with respect to this claim limitation. *See generally* Prelim. Resp. 15–18.

Having reviewed all of Petitioner's assertions regarding this claim limitation, as well as all supporting evidence, we determine on this preliminary record that Petitioner has made a sufficient showing Ericsson teaches a "transceiver," and a "processor," as recited in claim 1.

c) "while a primary cell is associated with a wireless network node and one or more non-primary cells are associated with the wireless network node"

Petitioner contends that Ericsson teaches an "[i]ntra-Node B synchronized serving [high-speed downlink, shared-channel] HS-DSCH cell change" procedure, in which the serving HS-DSCH cell is changed "without change of the active set," wherein an "active set" refers to a "set of cells controlled by and associated with the Node B." Pet. 40 (citing Ex. 1005, 1; Ex. 1003 ¶ 190). According to Petitioner, Ericsson teaches "a UE . . . undergoing a [service] cell change where the source cell (i.e., primary cell) is changed to a target cell (i.e., one or more non-primary cells), both of which are included in a 'active set' of cells controlled by the same Node B (i.e., wireless network node)." *Id.* (citing Ex. 1005, 1, 4–5; Ex. 1003 ¶ 193).

Patent Owner responds that, although Ericsson "does say that '[t]he same Node B controls source and target HS-HSCH cells,'" Ericsson "does not make explicitly clear" what an "active set" is that is "unchanged when the service HS-DSCH cell is changed." Prelim. Resp. 15 (citing Ex. 1005, 1). According to Patent Owner, "Ericsson lacks . . . connection by a UE to more than one cell," and "[t]his deficiency means that Ericsson does not

teach the use of a 'primary cell' and 'one or more non-primary cells." *Id.* Thus, although Patent Owner acknowledges that "Ericsson concerns . . . a handover process" and "teaches multiple cells that are associated with a wireless network node," Patent Owner argues that "the WTRU of Ericsson is not connected to them at the same time, and thus they are not 'primary' or 'non-primary' cells." *Id.* at 15–16.

We find unavailing Patent Owner's arguments, which rely on its proposed claim construction for "primary" and "non-primary" discussed above in Section II.A ("Claim Construction"), with which we decline to adopt. Prelim Resp. 15–18. In particular, as discussed above in Section II.A, we find unavailing Patent Owner's argument that the claims require the "primary" and "non-primary" cells to have a "connection" to the WTRU "at the same time," and thus, source and target cells cannot be "primary" and "non-primary" cells, respectively. PO Resp. 16.

As discussed in Section II.A, claim 1 defines a "primary" or a "non-primary" cell as being, inter alia, a cell "associated with a wireless network node." *See* Ex. 1001, 10:38–56. In Ericsson, "[t]he same Node B controls source and target HS-DSCH cells." *See* Ex. 1005, 1. That is, as Petitioner contends, both Ericsson's source and target HS-DSCH cells are associated with the same Node B. Pet. 40. As even Patent Owner acknowledges, Ericsson discloses that the same Node B controls source and target cells. Prelim. Resp. 15.

As Petitioner contends, "Ericsson discloses 'Intra-Node B . . . cell change' for changing from a source HS-DSCH cell to a target HS-DSCH cell while both are associated with the same Node-B." Pet. 17; *see* Ex. 1005, 1, 4–5. In particular, Ericsson discloses that the serving HS-DSCH cell is changed without change of the active set, wherein "'[h]ard handover'

is comprised of the following steps: 'DCH and DSCH resources are released in the source cell, a DCH is established in the target cell, DSCH is assigned in the new cell.'" *See* Ex. 1005, 1.

We find availing Petitioner's reliance on Ericsson's source cell (among the cells associated with the same Node B) in which resources are released for hard handover, as the "primary" cell, while the source ("primary") and target ("non-primary") cells are associated with the same Node B. Pet. 40; *see* Ex. 1005, 1, 4–5. We find Petitioner's contention is supported by Ericsson which teaches that, during hard handover, resources are released in the source (i.e, "primary") cell, a DCH is established in the target ("non-primary") cell, and then DSCH is assigned in the new cell. *See* Ex. 1005, 1.

We find persuasive Dr. Kakaes' supporting testimony relied upon by Petitioner, wherein Dr. Kakaes testified that, in Ericsson, "[t]he same Node B controls source and target HS-DSCH cells," wherein "[t]he 'active set' of Ericsson describes a set of cells controlled by the 'same Node B' and are therefore associated with the same Node B." Ex. 1003 ¶¶ 190–193. Dr. Kakaes' testimony is consistent with the teachings of Ericsson. *See* Ex. 1005, 1, 4–5. As Dr. Kakaes testified, during Ericsson's cell change procedure, "the UE transitions its connection from a source cell (primary cell) to a target cell (a non-primary cell)," wherein "[b]oth source and target cells are in an 'active set' controlled by the same Node B, i.e., are associated with the wireless network node controlling these cells." *Id.* ¶ 193. Thus, we find persuasive Petitioner's contention and Dr. Kakaes' supporting testimony that Ericsson teaches a "primary" (i.e., source) cell "associated with a wireless network node", i.e., Node B, and one or more "non-primary"

(i.e., target) cell "associated with the wireless network node." *See* Ex. 1005, 1, 4–5.

Having reviewed all of Petitioner's assertions, Patent Owner's responsive arguments, as well as all supporting evidence, we determine on this preliminary record that Petitioner has made a sufficient showing that Ericsson teaches "while a primary cell is associated with a wireless network node and one or more non-primary cells are associated with the wireless network node," as recited in claim 1.

> *d) "the transceiver and the processor are configured to cause the WTRU to . . . receive configuration information for the primary cell and the one or more non-primary cells"*

Petitioner contends that Ericsson discloses an "[i]ntra-Node B synchronized serving HS-DSCH cell change" while "keeping the dedicated physical channel configuration and the active set, using the Physical channel reconfiguration procedure." Pet. 41 (citing Ex. 1005, 4). Petitioner contends that, in Ericsson, "the UE transmits a MEASUREMENT REPORT message containing intra-frequency measurement results . . . to be triggered by the event . . . 'change of best cell.'" *Id.* at 42 (citing Ex. 1005, 4, Fig. 3; Ex. 1003 ¶ 198). According to Petitioner, a POSITA would have understood this disclosure to mean that "configuration information is received at the UE." *Id.* (citing Ex. 1003 ¶ 199). In particular, Petitioner contends that the POSITA would have understood that "previous 'configuration information' had been received at the UE in order to trigger the taking of measurement information for the Measurement Report of Ericsson." *Id.*

Petitioner further asserts that, "[i]n the same field of endeavor (i.e., intra-Node B synchronized cell change)," TS 25.331 "expressly discloses the UE will 'receive configuration information or the primary cell and the one or

more non-primary cells.'" Pet. 42 (citing Ex. 1003 ¶ 200). In particular, Petitioner contends that, in an example, TS 25.331 discloses that "in response to 'Reception of an RRC CONNECTION SETUP message by the UE,'" the UE "shall: . . . initiate the radio bearer, transport channel and physical channel configuration in accordance with the received radio bearer, transport channel and physical channel information elements." *Id.* at 42–43 (citing Ex. 1006, 69; Ex. 1003 ¶¶ 200–201). According to Petitioner, the "RRC CONNECTION SETUP message" corresponds to the claimed "configuration information or the primary cell." *Id.* at 43 (citing Ex. 1003 ¶ 201). Furthermore, Petitioner contends that TS 25.331 discloses that "the network transmits and the UE receives the claimed configuration information for the non-primary cell via the 'Reconfiguration procedures.'" *Id.* at 43–47 (citing Ex. 1006, 31, 110–111, 191–193 254, 314–315, 326, 328, 554, Figs. 8.2.2-9. 8.4.1-1; Ex. 1003 ¶¶ 204–205, 208–210).

As discussed above, Patent Owner merely contends that Ericsson does not disclose or render obvious "the limitations whereby there are 'primary' and 'non-primary' cells." *See generally* Prelim. Resp. 15–18. However, as discussed above in Section II.A, we find unavailing Patent Owner's arguments, which rely on its proposed claim construction for "primary" and "non-primary," with which we decline to adopt. Prelim. Resp. 15–18.

Having reviewed all of Petitioner's assertions regarding this claim limitation, as well as all supporting evidence, we determine on this preliminary record that Petitioner has made a sufficient showing Ericsson in view of TS 25.331 teaches "wherein the transceiver and the processor are configured to cause the WTRU to . . . receive configuration information for the primary cell and the one or more non-primary cells," as recited in claim 1.

e) *"receive a message on the primary cell . . . including an indication of at least one of . . . non-primary cells from which the WTRU is to receive a downlink shared channel transmission;" "in response to the received message, receive and process the downlink shared channel transmission"*

Petitioner contends that Ericsson discloses a "PHYSICAL CHANNEL RECONFIGURATION message, which indicates the target HS-DSCH cell and the activation time to the UE." Pet. 47 (quoting Ex. 1005, 4). According to Petitioner, in Ericsson, "the Physical Channel Reconfiguration message is sent by the Node B to the UE specifying a target cell and activation time for the cell change." *Id.* at 48 (citing Ex. 1005, 4, Fig. 3). Petitioner reasons that, "[b]ecause the Physical Channel Reconfiguration message only specifies a target cell and activation time, it must be sent to and received by the UE over the primary cell." *Id.* (citing Ex. 1003 ¶ 219). Thus, "[t]he new target cell is a non-primary cell from which the UE is expected to receive a downlink shared channel transmission." *Id.* at 48–49.

Petitioner further asserts that, as shown in Ericsson's Figure 3, Ericsson teaches start of transmission/retransmission in the target HS-DSCH cell and stop of transmission/retransmission in source HS-DSCH cell at the given activation time. Pet. 50 (citing Ex. 1005, 5, Fig. 3). According to Petitioner, in this context, Ericsson teaches that "the target HS-DSCH cell is the non-primary cell that service was switched to as a result of the previously received Physical Channel Reconfiguration message." *Id.* (citing Ex. 1003 ¶ 227). Thus, Petitioner asserts that "Ericsson teaches receiving

and processing downlink shared channel transmission from the indicated non-primary cell (i.e., target HS-DSCH cell)." *Id.* at 50–51.

As discussed above, Patent Owner merely contends that Ericsson does not disclose or render obvious "the limitations whereby there are 'primary' and 'non-primary' cells." *See generally* Prelim. Resp. 15–18. However, as discussed above in Section II.A, we find unavailing Patent Owner's arguments, which rely on its proposed claim construction for "primary" and "non-primary," with which we decline to adopt. Prelim. Resp. 15–18.

Having reviewed all of Petitioner's assertions regarding this claim limitation, as well as all supporting evidence, we determine on this preliminary record that Petitioner has made a sufficient showing Ericsson in view of TS 25.331 teaches "receive a message on the primary cell . . . including an indication of at least one of . . . non-primary cells from which the WTRU is to receive a downlink shared channel transmission," and "in response to the received message, receive and process the downlink shared channel transmission," as recited in claim 1.

f) Motivation to combine Ericsson and TS 25.331

Petitioner contends that a "POSITA would have been motivated to combine Ericsson and TS 25.331 because they are directed to similar technologies and a skilled artisan would have understood the benefits of combining these two references," and "would have understood that there was a high likelihood of success in making the combination." Pet. 34 (citing Ex. 1003 ¶¶ 156–157). In particular, the references "are both reasonably pertinent to the problem faced by the inventor, namely protocols for handover in a telecommunications system." *Id.* (citing Ex. 1003 ¶ 158). According to Petitioner, the combination "involves the predictable use of interchangeable prior art elements according to their established functions"

(*id.* at 35), and "would have yielded predictable results and required nothing more than routine engineering." *Id.* at 37 (citing Ex. 1003 ¶ 174).

At this stage of the proceeding, Patent Owner does not present arguments in the Preliminary Response addressing the specific merits of Petitioner's contentions with respect to the motivation to combine Ericsson and TS 25.331. *See generally* Prelim. Resp. 15–18.

We find availing Petitioner's contention that Ericsson and TS25.331 are "directed to similar technologies," and that a "skilled artisan would have understood the benefits of combining these two references." Pet. 34. On this preliminary record, we are persuaded that Petitioner has made a sufficient showing that a POSITA would have had a reason to combine the teachings of Ericsson and TS 25.331.

g) Conclusion

For the foregoing reasons, we determine the evidence and arguments presented show a reasonable likelihood Petitioner would prevail in establishing that claim 1 would have been obvious over Ericsson and TS 25.331.

5. Independent claim 7, claims 2, 5, and 6 depending from claim 1, and claims 8, 11, and 12 depending from claim 7, as obvious over Ericsson and TS 25.331

Independent claim 7 is directed to a "method" and recites substantially similar limitations as those recited in independent claim 1. *Compare* Ex. 1001, 11:10–26, *with id.* at 10:38–56. Petitioner contends "Ericsson and TS 25.331 include teachings and suggestions of performing a method" as recited in independent claim 7 (Pet. 57), and repeats its contentions with respect to claim 1. *Id.* at 57–58.

Petitioner then presents arguments and supporting evidence showing how the combination of Ericsson and TS 25.331 teaches or renders obvious claims 2, 5, 6, 8, 11, and 12 respectively depending from claims 1 and 7. Pet. 51–59 (citing Ex. 1005, 4; Ex. 1003 ¶¶ 231–232, 235, 239, 241–244, 246–248, 252, 254–258).

At this stage of the proceeding, Patent Owner does not provide arguments for claims 2, 5–8, 11, and 12 separate from those of claim 1. *See* Prelim. Resp. 15–18.

Having reviewed all of Petitioner's assertions regarding the limitations in these claims, as well as all supporting evidence, we determine on this preliminary record that Petitioner has made a sufficient showing that the combination of Ericsson and TS 25.331 teaches the limitations of claims 2, 5–8, 11, and 12. For the foregoing reasons, we determine the evidence and arguments presented show a reasonable likelihood Petitioner would prevail in establishing that claims 2, 5–8, 11, and 12 would have been obvious over Ericsson and TS 25.331.

6. Claims 5, 6, 11, and 12 as obvious over Ericsson, TS 25.331, and Sebire

Petitioner contends that Ericsson and TS 25.331 in further combination with Sebire also teaches or renders obvious dependent claims 5, 6, 11, and 12. Pet. 60–68 (citing Ex. 1007, 2, 4–5, 18; Ex. 1003 ¶¶ 235, 252, 275–278, 28–282, 285–286, 289–290, 292, 297–299). Petitioner contends that a POSITA would have been motivated to combine Sebire with the Ericsson-TS 25.331 combination "because they are directed to similar technologies," a skilled artisan "would have understood the benefits of combining these three references," and there was "a high likelihood of

success in making the combination." *Id.* at 60–62 (citing Ex. 1007, 2, 4–5; Ex. 1003 ¶¶ 274–278, 280–282).

At this stage of the proceeding, Patent Owner does not provide arguments with respect to the combination of Ericsson and TS 25.331 in further view of Sebire separate from the Ericsson-TS 25.331 ground. *See* Prelim. Resp. 15–18.

Having reviewed all of Petitioner's assertions regarding the combination of Ericsson, TS 25.331 and Sebire, as well as all supporting evidence, we determine on this preliminary record that Petitioner has made a sufficient showing that the combination of Ericsson and TS 25.331 in further view of Sebire teaches the limitations of claims 5, 6, 11, and 12, and that one of ordinary skill in the art would have combined the teachings of the separate references.

For the foregoing reasons, we determine the evidence and arguments presented show a reasonable likelihood Petitioner would prevail in establishing that claims 5, 6, 11, and 12 would have been obvious over Ericsson, TS 25.331 and Sebire.

E. Claims 1, 5–7, 11, and 12 as obvious over TS 36.300, TS 36.321, and TS 36.331

Petitioner contends that TS 36.300, TS 36.321, and TS 36.331 render obvious claims 1, 5–7, 11, and 12 of the '803 patent. Pet. 21–33. In response, Patent Owner contends that TS 36.300, TS 36.321, and TS 36.331 are not prior art to the '803 patent, and Petitioner fails to establish that the effective filing date of the challenged claims post-dates these references. *See* Prelim. Resp. 8–15.

We briefly summarize TS 36.300, TS 36.321 and TS 36.331 a below.

1. TS 36.300

TS 36.300, titled, "3GPP TS 36.300 v10.60)," published November, 2011, is a technical specification produced by the 3rd Generation Partnership Projects (3GPP), and "provides an overview and overall description of the [Evolved Universal Terrestrial Radio Access Network] E-UTRAN radio interface protocol architecture." Ex. 1008, at 12–13. In particular, TS 36.300 is directed to E-UTRAN radio interface implementing Carrier Aggregation (CA) for a Long-Term Evolution Advanced (LTE-A) radio communication. *Id.* at 13.

2. TS 36.321

TS 36.321, titled, "3GPP TS 36.321 v10.6.0," published September, 2012, is a technical specification produced by 3GPP, and "specifies the E-UTRA [Medium Access Control] MAC protocol." Ex. 1009, at 5–6. TS 36.321 teaches that, "[i]f the UE is configured with one or more SCells, there are multiple DL-SCH . . . on the PCell, one DL-SCH and zero or one UL-SCH for each SCell." *Id.* at 9.

3. TS 36.331

TS 36.331, titled, "3GPP TS 36.331 v10.6.0," published June, 2012, is a technical specification produced by 3GPP, and "specifies the Radio Resource Control protocol for the radio interface between UE and E-UTRAN" as well as for "the radio interface between [Relay Node] RN and E-UTRAN." Ex. 1010, at 13–14. TS 36.331 teaches that "the PCell can be changed using an *RRCConnectionReconfiguration* message including the *mobilityControlInfo* (handover), whereas the SCell(s) can be changed using the RRCConnectionReconfiguration message either with or without the *mobilityControlOInfo*." *Id.* at 35.

4. TS 36.300, TS 36.321 and TS 36.331 are allegedly prior art

Petitioner contends that TS 36.300, TS 36.321 and TS 36.331 are prior art references because "[t]he challenged '803 patent claims lack written description in any of the applications to which priority is claimed." Pet. 9. In particular, Petitioner contends that claim 1 of the '803 patent recites, inter alia, "causing a WTRU to 'receive configuration information for the primary cells and the one or more non-primary cells,'" and while "the parent applications describe handover and softer handover methods," "[t]hey do not describe receiving configuration information for primary and non-primary cells." *Id.* (citing Ex. 1003 ¶ 113).

In response, Patent Owner contends that Petitioner fails to establish that the effective filing date of the challenged claims post-dates its prior art. Prelim. Resp. 8–15. In particular, Patent Owner contends that the '803 patent and the '426 application from which priority is claimed disclose that "the WTRU receives configuration information for the relevant cells" as claimed, because the respective specifications describe that "[o]nce the RNC 1006 selects cells for the active set, the RNC 1006 sends messages to the Nodes- Bs 1004a, 1004b and the WTRU 1002 to inform the selected cells for the active set." *Id.* at 13 (quoting Ex. 1001, 9:66–10:2; Ex. 2012 ¶ 57). According to Patent Owner, "any POSITA would know that 'establish[ing] connections with more than one cell [] which are controlled by the same Node-B' . . . requires receiving configuration information for those cells." *Id.* (alterations in original). According to Patent Owner, the '803 patent and the '426 application explain that, in order to implement the claimed scheme, "there is a timing offset between the transmission of the shared channel indicator from the primary cell 808a and the transmission of messages from

non-primary cells 808b," and thus, the '803 patent and the '426 application make clear that "the inventors recognized that the WTRU would 'receive configuration information for the primary cells and the one or more non-primary cells." *Id.* (citing Ex. 1001, 9:10–14; Ex. 2012 ¶ 53).

In its Preliminary Reply, Petitioner responds that the challenged claims of the '803 patent require "'configuration information' in the context of 'soft handover' for a single primary node," wherein "the claims require 'a primary cell is associated with a wireless network node and one or more non-primary cells are associated with the wireless network node.'" Prelim. Reply 2 (citing Ex. 1001, 10:42–45, 11:12–13). According to Petitioner, "[t]wo cells from the same Node-B are used for 'softer handover'" (*id.* (citing Ex. 1001, 8:44–46)), which is "different from 'soft handover' relied on by [Patent Owner]." *Id.* (citing Prelim. Resp. 13). That is, according to Petitioner, Patent Owner relies on a description of "soft handover" from the '803 specification to argue that "'configuration information' is found in the following passage: 'once the RNC 1006 selects cells for the active set, the RNC 1006 sends messages to the Node-Bs 1004a, 1004b and the WTRU 1002 to inform the selected cells for the active set.'" *Id.*; *see* Ex. 1001, 9:66– 10:2, 10:44– 45. Petitioner emphasizes that "'[c]onfiguration information' is not mentioned at all." Prelim. Reply 2. Although Patent Owner argues that "any POSITA would know that 'establish[ing] connections with more than one cell [] which are controlled by the same Node-B' . . . requires receiving configuration information for those cells" (Prelim. Resp. 13) (alterations in original), Petitioner argues that such argument is "unsupported" since "[n]owhere does the specification disclose that a 'timing offset' of a primary and non-primary cell of a single Node-B qualifies as 'configuration information.'" Prelim. Reply 3.

In its Preliminary Sur-reply, Patent Owner argues that the "[i]n a 3GPP scheme, and in the schemes discussed by the '803 Patent and its priority documents, connection is established by receiving configuration information." PO Prelim. Sur-reply 3. Patent Owner contends that, in the '803 patent, "[u]nder the current 3GPP standards, ***the RNC applies RRC radio bearer (RB) control procedures to coordinate active set cells with the WTRU***," wherein "this inherent aspect of establishing a connection would have been known to a POSITA and unnecessary to spell out in *haec verba*." *Id.* at 3–4 (citing Ex. 1001, 2:42–45; Ex. 2012 ¶ 1010).

Resolving the issue of whether the '803 patent is entitled to its priority date, and thus, whether TS36.300, TS 36.321 and TS 36.331 qualify as prior art, would be better after the parties' positions have been developed further at trial, particularly in view of Petitioner's assertion that Patent Owner makes unsupported argument when arguing that a POSITA would know that establishing connections with more than one cell controlled by the same Node-B requires receiving configuration information for the cells.

III. CONCLUSION

Because we determine that Petitioner has demonstrated a reasonable likelihood that it would prevail in showing at least one of the challenged claims is unpatentable, we institute *inter partes* review as to all challenged claims and grounds presented in the Petition. At this stage of the proceeding, we have not made a final determination as to the patentability of any of these challenged claims.

IV. ORDER

For the reasons given, it is

ORDERED that pursuant to 35 U.S.C. § 314, an *inter partes* review is instituted as to claims 1, 2, 5–8, 11, and 12 of the '803 patent to determine whether:

1) claims 1, 5–7, 11, and 12 are unpatentable under 35 U.S.C. § 103 as obvious over TS 36.300, TS 36.321, and TS 36.331;

2) claims 1, 2, 5–8, 11, and 12 are unpatentable under 35 U.S.C. § 103 as obvious over Ericsson and TS 25.331; and

3) claims 5, 6, 11, and 12 are unpatentable under 35 U.S.C. § 103 as obvious over Ericsson, TS 25.331, and Sebire; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial, which commences on the entry date of this Decision.

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