

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AT&T MOBILITY LLC, AT&T SERVICES INC., ERICSSON INC.,
NOKIA OF AMERICA CORPORATION, AND T-MOBILE USA, INC.,
PETITIONERS,

v.

DAINGEAN TECHNOLOGIES LTD.,
PATENT OWNER.

CASE IPR2024-00402
PATENT 10,841,958

PATENT OWNER'S REPLY TO OPPOSITION TO
REVISED NON-CONTINGENT MOTION TO AMEND
37 C.F.R. § 42.121

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CURRENT EXHIBIT LIST

No.	Brief Description
1001	U.S. Pat. No. 10,841,958 (“’958 Patent”)
1002	Expert Declaration of Dr. Wayne Stark
1003	Curriculum Vitae of Dr. Wayne Stark
1004	U.S. Pat. Publication No. 2019/0158988 (“Lee”)
1005	U.S. Pat. Publication No. 2015/0382284 (“Brismar”)
1006	U.S. Provisional Patent Application No. 62/334,418 (“Lee Provisional”)
1007	16/597,325 Application that issued as ’958 Patent (“’325 App.”) File History
1008	U.S. Pat. Publication No. 2017/0251500 (“Agiwal”)
1009	Provisional Patent Application No. 62/334,706 (“Agiwal Provisional”)
1010	Second Expert Declaration of Dr. Wayne Stark
1011	Deposition Transcript of Dr. Karthik Sundaresan (Dec. 13, 2024)
2001	Declaration of Mr. Michael McBride in Support of Patent Owner’s Motion for Admission <i>Pro Hac Vice</i> of Michael McBride
2002	Expert Declaration of Dr. Karthikeyan Sundaresan
2003	US20150223148A1 to Shi et al. (“Shi”)
2004	U.S. Patent Pub. No. 2018 0049024 to Schliwa-Bertling <i>et al.</i> (“Schliwa-Bertling”)
2005	ETSI TS 125 211 V3.1.1 (2000-01) Technical Specification, Universal Mobile Telecommunications System (UMTS); Physical channels and mapping of transport channels onto physical channels (FDD) (3G TS 25.211 version 3.1.1 Release 1999)
2006	Second Expert Declaration of Dr. Karthikeyan Sundaresan
2007	’958 Patent’s Parent Application, Application No. 15/659,060 (“’060 App.”)
2008	Provisional Application No. 62/368,126 to which the ’060 App. claims priority (“’126 App.”)

No.	Brief Description
2009	U.S. Patent Application Publication No. US 2018/0288683 to Bendlin <i>et al.</i> (Published Oct. 4, 2018) (“Bendlin”)
2010	LTE; Evolved Universal Terrestrial Radio Access (E-UTRA); Radio Resource Control (RRC); Protocol specification (3GPP TS 36.331 version 13.2.0 Release 13) (Aug. 2016) (“TS 36.331”)
2011	Invalidity Contentions Chart Ex. C-1 re Brismar, <i>Daingean Techs. v. AT&T Corp. et al.</i> , No. 2:23-cv-00123-JRG-RSP (E.D. Tex.)
2012	Invalidity Contentions Chart Ex. C-2 re Lee, <i>Daingean Techs. v. AT&T Corp. et al.</i> , No. 2:23-cv-00123-JRG-RSP (E.D. Tex.)
2013	Invalidity Contentions Chart Ex. C-3 re Bendlin, <i>Daingean Techs. v. AT&T Corp. et al.</i> , No. 2:23-cv-00123-JRG-RSP (E.D. Tex.)
2014	Invalidity Contentions Chart Ex. C-4 re TS 36.331, <i>Daingean Techs. v. AT&T Corp. et al.</i> , No. 2:23-cv-00123-JRG-RSP (E.D. Tex.)

I. REVISED AMENDED CLAIMS ARE NOT BROADENING

Petitioners argue Patent Owner broadens limitations 7g/8e because “the revised substitute claim language requires a determination based on ‘a value tag associated with the group containing the second type SIB’ and not a determination based on ‘a value tag associated with the second type SIB.’” Paper 26 (“Opp.” or “Opposition”) at 3. However, “associated” generally means “connected or related.” *See, e.g., Apple Inv. v. Arrendi S.A.R.L.*, IPR2014-00207-32, at 8 (PTAB June 9, 2015). So, a value tag “connected or related” with a group containing a second type SIB is also “connected or related” with the second type SIB, because the second type SIB is, by definition, in the group “containing the second type SIB.”

Petitioners say that “the revised substitute claims may be practiced when the original claims were not, rendering the substitute claims broader in scope,” but do not point to an instance where this is the case. Opp. 4. Instead, Petitioners argue by analogy that the “United States Patent and Trademark Office, for example, is associated with the United States, but is not also associated with each individual state or territory included in the United States.” *Id.* First, this is a misaligned analogy. A closer analogy would start with the premise that the USPTO is associated with the country containing the state of Texas and ask whether the USPTO could be associated with the United States but not Texas. Second, even under Petitioners’ analogy, the USPTO is “associated with the United States” because this is the agency designated to

handle U.S. patents and trademarks for this country. And, of course, the country is made up of its constituent states and territories, so, the USPTO is also the agency designated to handle U.S. patents and trademarks for these states and territories, and is, therefore, also associated with the states and territories for the same reason.

In reality, the original claims required determining whether a second type SIB changed “based on a value tag,” *see, e.g.*, original Limitation 1g, and the new revised amended claims still require determining whether a second type SIB changed “based on a value tag,” *see, e.g.*, Limitation 7g. There are now just further limitations on the second type SIB and the value tag. So, practicing the original claims by determining whether a second type SIB changed based on a value tag associated with the second type SIB would also practice the amended claims by determining whether a second type SIB changed based on a value tag if the second type SIB was also part of the recited group and the value tag was also associated with the group containing the second type SIB.

Petitioners also assert that limitations 7h/8f broaden the original claims because “original claim limitations 1c and 3b required an on-demand second-type SIB to *be provided* by broadcast upon a change to that second-type SIB.” Opp. 4. (emphasis added). This is untrue. Limitations 1c/3b only required *information indicating* that the second type SIB is provided by broadcast by the base station. *See, e.g.*, original limitation 1c (“[I]nclude[ing] in the first type SIB

the *information* associated with the second type SIB *indicating* that the second type SIB is provided by broadcast.” Only one original dependent claim, claim 4, required “*transmitting* the second type SIB by broadcast after the change” (emphasis added).

Petitioners tacitly acknowledge this is the case but argue that if the second type SIB was not actually broadcast then the indication that the second type SIB “would be provided by broadcast . . . would not actually [so] indicate.” Opp. 5 n.1. This is faulty reasoning. An indication that *x* is going to happen does not stop being such an indication, even if *x* never happens.

Based upon the incorrect assumption that the original independent claims required the second type SIB actually be broadcast, Petitioners go on to explain that the “limitations 7h and 8f recite that the changed second type SIB is *not* broadcast” (emphasis added) and therefore broadening. Opp. 5. But there was no requirement to transmit any portion of a second type SIB in the original independent claims, so that there is still no requirement to transmit a complete second type SIB is merely consistent with the fact that the claims have not been broadened.

Additionally, Petitioners argue that a “partial broadcast [of a second type SIB] would not have practiced the original claims.” This too is wrong. The original claims are comprising claims, and “[b]ecause ‘comprise’ is inclusive or open-ended, the use of the term does not exclude unrecited elements.” *Regeneron Pharms., Inc. v. MERUS NV*, 864 F.3d 1343, 1352 (Fed. Cir. 2017). If all the recited limitations

occurred or were present, the claims would be practiced, even if the *unrecited* partial broadcast of a second type SIB occurred.

II. REVISED AMENDED CLAIMS ARE NOT INDEFINITE AND DO NOT LACK WRITTEN DESCRIPTION OR ENABLEMENT

Petitioners argue that the claims are indefinite based on the “lack of any requirements for the second type SIBs,” that “the second type SIB could include any kind of information,” “the first type SIB could also be a second type SIB,” and that “the claims fail to define what is or is not a ‘second type SIB.’” Opp. 6–7. Under the correctly applied *Phillips* standard, none of Petitioners’ premises are true. Viewing the entire patent as an integrated document would inform those skilled in the art with reasonable certainty that second type SIBs are all SIBs that are not first type SIBs, i.e., that do not have “essential system information” as defined in the specification. Paper 24 (“RMTA”) § III(A); *see also* Ex. 1011 at transcript page number 49, lines 7–13 (“So the first type are the essential SIBs and the second type are the ones that are carrying the nonessential SIB information.”).

While Petitioners focus on one embodiment, the ’958 Patent actually uses the terms second type system information and non-essential system information interchangeably. *See, e.g.,* Ex. 1001 at abstract (“... especially in conjunction with *second type system information or non-essentially* [SIC] *type system information.*”) (emphasis added); 11:41–43 (same); *see also SciMed Life Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1342 (Fed. Cir. 2001)

(restricting limitation considering the abstract because “from the outset the specification” characterized the limitation as having a restriction).

Petitioners also say that a “second type system information block” of the claims is different than “second type of system information” discussed in the specification, Opp. 8–9, but this is a meaningless distinction given that a second type system information block is simply a block of second type system information.

The prosecution history also indicates that “second type SIB” is not indefinite. The Examiner never issued an indefinite rejection. *See generally* Ex. 1007. And the Examiner had no problem identifying a second type SIB in the prior art. *See, e.g., id.* at 0718 (the last four Bates number digits).

It is telling that Petitioners also did not contest that ***Petitioners had no problem*** identifying the second type SIBs in Petitioners’ invalidity analysis. *See* RMTA 13 (citing Paper 22 at 13). And Petitioners ***still have*** no problem identifying second type SIBs. Opp. §§ III(C)(1)–(2); *see also Enzo Biochem, Inc. v. Applera Corp.*, 599 F.3d 1325, 1332 (Fed. Cir. 2010) (noting that without a discernable claim construction no anticipation analysis can be performed).

Indeed, the prior art Petitioners rely upon also shows that “second type,” referred to as “second category,” is a well-known moniker that a POSITA would understand. *See, e.g.,* Ex. 1008 at [0048] (“System information (SI) is categorized into two categories: The first category (also referred [to] as minimum SI or essential

SI) . . . [and] [t]he second category (also referred as Other SI).”); *see also In re Cortright*, 165 F.3d 1353, 1358 (Fed. Cir. 1999) (“Prior art references may be ‘indicative of what all those skilled in the art generally believe a certain term means . . . [and] can often help to demonstrate how a disputed term is used by those skilled in the art.’”) (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1584 (Fed. Cir. 1996)).

Instead, Petitioners attempt to justify the position that a POSITA could not identify the scope of a second type SIB—that Petitioners themselves have no problem identifying—by invoking a wrong claim construction standard and misapplying the correct claim construction standard. First, Petitioners invoke the incorrect BRI claim construction standard. Opp. 8. The Board judges amended claims under *Phillips*. 37 C.F.R. § 42.100(b).

Second, Petitioners put forth the uncontroversial proposition that a claim should generally not be limited to specific examples, Opp. 9, but then erroneously conclude that absent an explicit “disclaimer” that, for example, the second type SIB does not include a first type SIB, the first type SIB must also be encompassed by the second type SIB, *see* Opp. 6–7 (“[T]he first type SIB could also be a second type SIB”). This anything-not-explicitly-disclaimed-is-included claim construction standard is not correct under BRI, much less under the more restrictive *Phillips* standard. *See, e.g. In re Power Integrations, Inc.*, 884 F.3d 1370, 1377 (Fed. Cir.

2018) (“The correct inquiry in giving a claim term its broadest reasonable interpretation in light of the specification is **not** whether the specification proscribes or **precludes** some broad reading of the claim term adopted by the examiner.”) (emphasis added and citation omitted).

While there is “a fine line between reading a claim in light of the specification, and reading a limitation into the claim from the specification,” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005) (en banc) (citation omitted), the Federal Circuit has laid out and confirmed again and again that claims nonetheless “*must be* read in view of the specification” (emphasis added) to determine their meaning because the claims are part of an integrated written instrument and the specification is the “single best guide to the meaning of a disputed term” and usually dispositive, *id.* at 1315 (quotation and citation omitted). That is, just because a court should not read an embodiment into the claims, does not mean that a court should not look to the specification to understand the claims. *Trs. of Columbia Univ. v. Symantec Corp.*, 811 F.3d 1359, 1364 (Fed. Cir. 2016) (“We have also found [under *Phillips*] that a patent applicant need not expressly state ‘my invention does not include X’ to indicate his exclusion of X from the scope of his patent because ‘***the patentee’s choice of preferred embodiments can shed light on the intended scope of the claims.***’”) (emphasis added).

Finally, Petitioners argue that “limitations 7h and 8f introduce a new type of SIB—a ‘compressed’ SIB.” Opp. 10. This is facially untrue. These limitations specify the *format of transmission* for the *previously recited* group containing the second type SIB. See, e.g., limitation 7h (“ . . .transmit . . . the group containing the second type SIB in compressed format .”) (emphasis added).

Properly applying the *Phillips* standard to discern the limitation’s meaning in the context of the patent—which is “[u]ltimately, the only thing that matters,” *Ruckus Wireless, Inc. v. Innovative Wireless Sols., LLC*, 824 F.3d 999, 1003 (Fed. Cir. 2016) (citation and quotation omitted)—informs a POSITA with “reasonable certainty” that first type SIBs have essential system information and that second type SIBs are all SIBs that are not first type SIBs. If the Board is nonetheless unsure, the Board should still adopt Patent Owner’s construction to preserve validity, because “second type SIB” is the same language in the issued patent, and Patent Owner’s proffered meaning is “practicable” based on sound claim construction principles. *Phillips*, 415 F.3d at 1327.

Petitioners argue that limitations 7h/8f are indefinite as “contract[ing] the requirements of limitations 7b and 8a . . . and . . . 7c and 8b,” because “the second type SIB is not provided by broadcast if some or none of its constituent system information is actually broadcast.” Opp. 10–11. If Petitioners meant to say the latter limitations “contradict” the former, this is incorrect, as the argument is based upon

the implied premise that limitations 7a/8a and 7c/8b require sending a second type SIB, and as explained above this is not the case. If Petitioners really mean “contracting,” there is nothing problematic with a latter limitation contracting a previous limitation. This is how claims are generally written. *See, e.g.*, original claim limitation 8b (specifying what happens “upon a change of a second type SIB”) and original claim limitation 8e (further “contracting” (i.e., limiting) how one detects a change (“[W]hether or not the second type SIB has changed is determined . . .”).

And, again, Petitioners undercut their argument by showing they have no issue understanding limitations 7h/8f in their unpatentability analysis. *Opp.* §§ III(C)(1)–(2); *Enzo Biochem*, 599 F.3d at 1332.

Petitioners argue there is no written description support or enablement for limitations such as 7h, “transmitting by broadcast after the change the group identifier and the group containing the second type SIB in compressed format including only changed ones of plural parameters of the group containing the second type SIB based on a comparison of the value tag, associated with the group containing the second type SIB, stored in the wireless terminal, and the value tag included in the first type SIB corresponding to the group containing the second type SIB.” *Opp.* 11. But Patent Owner took the language almost verbatim from the ’958 Patent specification, so, there is clearly written description support:

[T]he example embodiment and mode of FIG. 14 and

FIG. 16 involves, e.g., *generating the value tag to be associated with a group of plural second type system information blocks* . . . Act 17-1 comprises changing the value tag when content changes for at least one block of the group and storing a block identifier for the at least one block for which content changes. Act 17-2 comprises receiving a wireless terminal-reported value tag in the request message. Act 17-3 comprises making a comparison of the terminal-reported value tag with the value tag. Act 17-4 *comprises preparing the response message to include only changed ones of the plural blocks of the group based on the comparison of the value tag relative to the terminal-reported value tag*.

Ex. 1001, 14:24–36 (emphasis added). The claimed functionality is also enabled because the specification teaches that to “include only changed ones of the plural blocks” the access node stores the parameters associated with value tag versions. *See, e.g., id.* 13:1–17 (specifying the access node “store[s] a parameter identifier for the at least one of the plural parameters for which content changes”).

III. THE REVISED AMENDED CLAIMS ARE NOT ANTICIPATED OR OBVIOUS IN VIEW OF LEE ALONE OR IN FURTHER VIEW OF AGIWAL

Instead of addressing limitations 7h/8f as written, Petitioners re-write the claim as “require[ing] that, upon an update of non-broadcast system information,

that the changed system information be broadcast without the broadcast of unchanged non-broadcast system information,” and address this rewritten claim. Opp. 16.

Primarily, Petitioners summarily address this strawman claim, stating that “Lee teaches the broadcast of previously non-broadcast system information generally for the same reasons provided for substitute claims 8 and 10, which are now withdrawn, as well as original claims 2 and 4.” *Id.* (citing Ex. 1010 ¶¶ 53, 58; Ex. 1004 at [0167], [0175–78]; Ex. 1002 ¶¶ 132–34, 143; and Paper 2 at 33–34, 37).

First, this is improper incorporation by reference as Petitioners have not explained what the “same reasons” are in the Opposition. 37 C.F.R. § 42.6(a)(3); *3M Co. v. Evergreen Adhesives, Inc.*, 860 F. App’x 724, 728 (Fed. Cir. 2021) (upholding rejection of arguments “present[ed] in the briefing prior to the Final Written Decision only in the form of improper incorporation by reference”). Second, claims 8 and 10 in the Motion to Amend and original claims 2 and 4 do not have the same claim scope, and Petitioners have not addressed the differences, so this statement facially does not meet Petitioners’ burden. *Aqua Prods., Inc. v. Matal*, 872 F.3d 1290, 1296 (Fed. Cir. 2017) (en banc) (“[Section] 316(e) unambiguously requires the petitioner to prove all propositions of unpatentability, including for amended claims.”); 37 C.F.R. § 42.221(d)(2) (“A petitioner bears the burden of persuasion to show, by a preponderance of the evidence, that any proposed substitute

claims are unpatentable.”).

Next, Petitioners continue to address the strawman claim, and argue that because “Lee teaches that ‘when a network changes a particular type of on-demand system information, the network may broadcast the changed system information or all system information during a specified period’ . . . [and this] indicates that one of the options contemplated by this portion of Lee’s disclosure *is the broadcast of only the changed system information following a change in on-demand system information.*” Opp. 16–17 (citing Ex. 1004 at [0167]) (different emphasis). Petitioners do not address the transmission of the group identifier. Petitioners do not address the transmission “in compressed format.” Petitioners do not address “plural parameters” that the ’958 Patent teaches are sub-portions of a single SIB. Ex. 1001, 12:56–57. Thus, Petitioners continue to fail to meet their burden to show Lee teaches or renders obvious the *actual* limitations.

For Petitioners’ Lee-Agiwal combination, Petitioners rely entirely on their Lee argument. Opp. 22 (“Lee alone anticipates or renders obvious limitations 7g and 8f . . . Accordingly, a POSITA would find limitations 7h and 8f obvious over Lee and Agiwal.”). However, as just discussed, Petitioners’ Lee argument addresses a made-up claim, rather than the limitations of the actual claims, so, is facially infirm. Therefore, Petitioners also fail to show the Lee-Agiwal combination renders the claims obvious.

Dated: April 15, 2025

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned certifies that on the fifteenth day of April, 2025, a complete and entire copy of the foregoing “PATENT OWNER’S REPLY TO OPPOSITION TO REVISED NON-CONTINGENT MOTION TO AMEND,” including exhibits, if any, was served on the following counsel of record via email per Petitioners’ consent to electronic service. *See* Paper 2 at 1:

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