

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 IPR2024-00644
Patent 11,134,400

**PATENT OWNER'S PRELIMINARY RESPONSE UNDER 37
C.F.R. § 42.107 TO PETITION FOR *INTER PARTES* REVIEW**

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Patent Trial and Appeal Board
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Alexandria, VA 22313-1450

EXHIBIT LIST

Exhibit	Description
2001	Declaration of Mr. Michael McBride in Support of Patent Owner's Motion for <i>Pro Hac Vice</i> Admission of Michael McBride
2002	Google Search Results for "SRBs needed for direct RRC from SN", accessed June 3, 2024
2003	Microsoft Bing Search Results for "SRBs needed for direct RRC from SN", accessed June 5, 2024
2004	3GPP TR 33.821, "Rationale and track of security decisions in Long Term Evolution (LTE) RAN / 3GPP System Architecture Evolution (SAE)," https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=2311 , accessed June 6, 2024
2005	3GPP TS 23.401, "General Packet Radio Service (GPRS) enhancements for Evolved Universal Terrestrial Radio Access Network (E-UTRAN) access," https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=849 , accessed June 6, 2024

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I. Introduction

Patent Owner Daingean Technologies Ltd. (“Daingean” or “Patent Owner”) respectfully requests that the Board refuse to institute *inter partes* review of U.S. Patent No. 11,134,400 (“the ’400 Patent”) because Petitioners AT&T Mobility LLC, AT&T Services Inc., Ericsson Inc., Nokia of America Corporation, and T-Mobile USA, Inc. (collectively “Petitioners”) have not shown a reasonable likelihood of prevailing on their challenge to Claims 5, 7, and 8 of the ’400 Patent (the “Challenged Claims”).

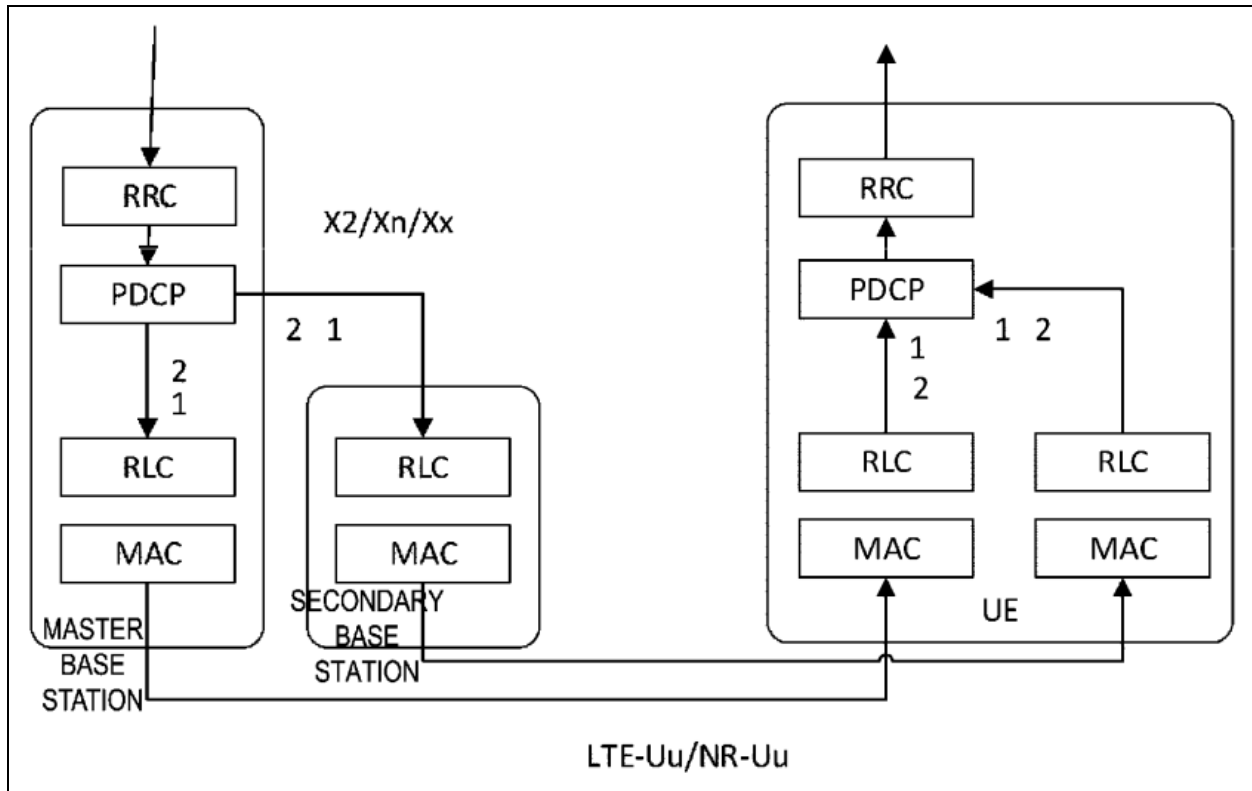
First, Petitioners have failed to show that their primary reference qualifies as a prior art printed publication. This failure is particularly noteworthy given that one of the Petitioners, Ericsson, purportedly created the document in question. Furthermore, even if the document was prior art (it is not), Petitioners’ ground still fails to show a reasonable likelihood of success as to any Challenged Claim. For instance, Petitioners fail to show that the required duplicated SRB is configured to be used for uplink transmission via a secondary cell group (SCG). Petitioners also fail to show the required “reconfiguring” of the claimed duplicated SRBs upon failure. For at least these reasons, the Petition should be denied.

II. Background

A. The '400 Patent

The '400 Patent relates to improvements in wireless communication technologies for applications such as “Ultra Reliable and Low Latency Communications (URLLC).” EX1001 at 1:6-9, 1:21-25. URLLC is “characterized by use cases with stringent requirements for latency, reliability and high availability. Examples include vehicle-to-vehicle communication involving safety, wireless control of industrial equipment, remote medical surgery, and distribution automation in a smart grid.” EX1008 at 531-532.

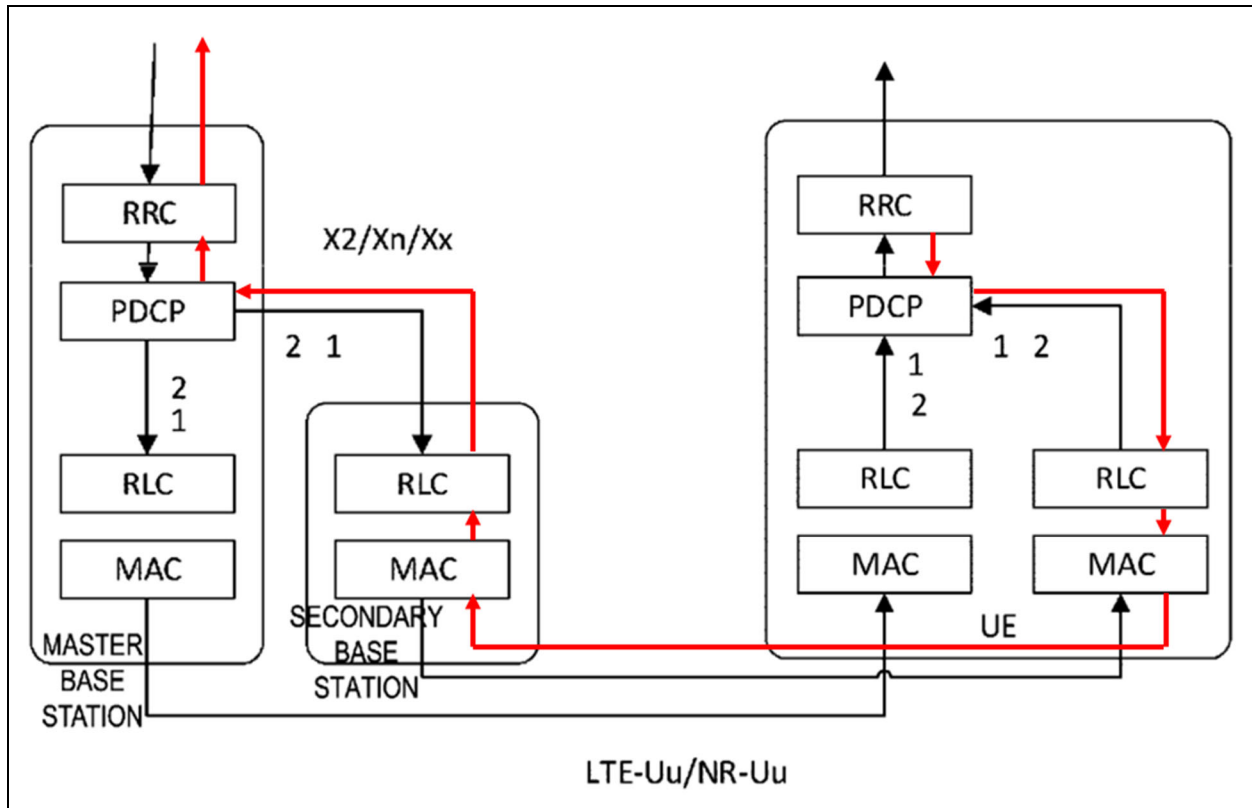
In order to provide the necessary latency, reliability, and availability for those use cases, it is sometimes necessary to rely on “multi-connectivity.” EX1001 at 1:26-52; *see also* EX1008 at 565. Multi-connectivity allows user equipment (“UE”) to maintain multiple simultaneous connections to base stations providing network access. An example of this can be seen in '400 Patent Figure 1:



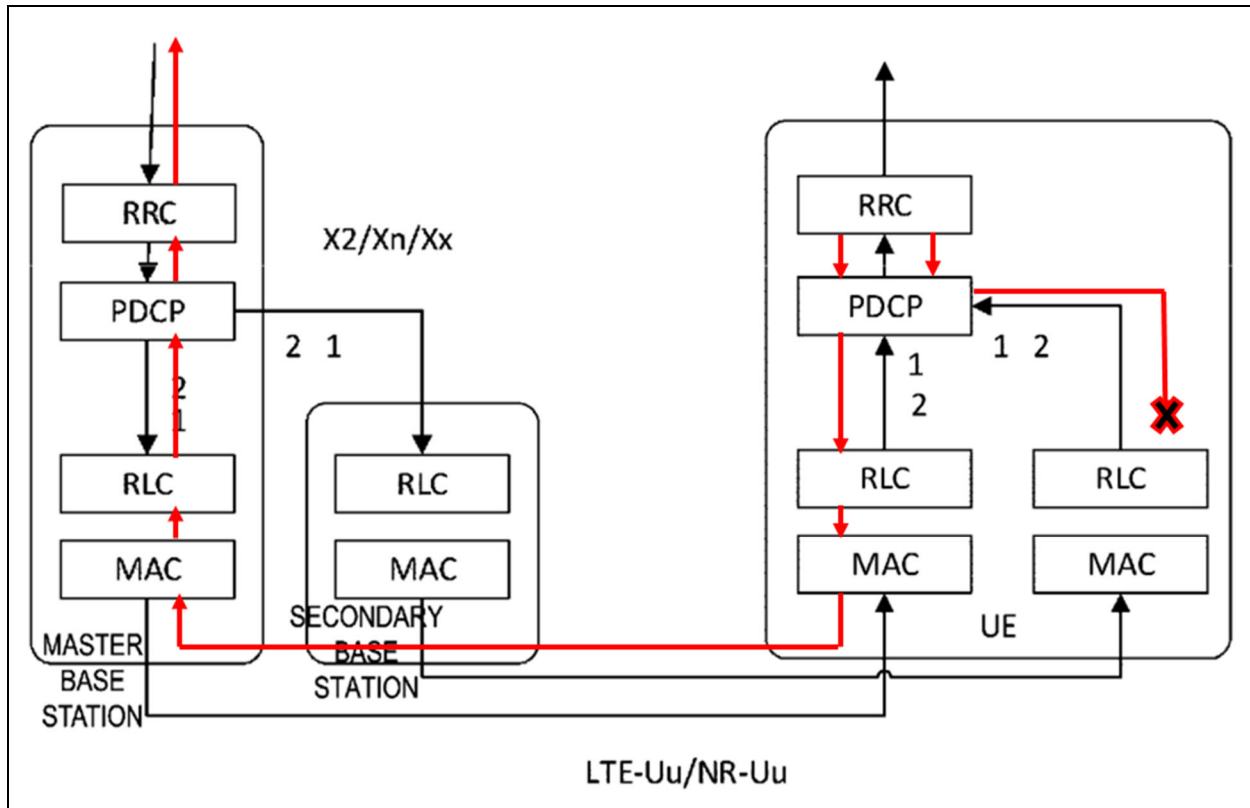
“FIG. 1 is a schematic diagram illustrating downlink transmission...between a base station and User Equipment (UE) in dual-connectivity.” EX1001 at 6:9-12. “As shown in FIG. 1, data...is transmitted over two wireless protocols...by using resources of a master base station and a secondary base station.” *Id.* at 6:17-22. This approach can achieve improved reliability and lower latency by duplicating packets and sending them to the UE from both the Master Base Station as well as the Secondary Base Station. For example, if the packet from one base station is lost then the UE still receives a copy from the other base station (improving reliability and overall latency).

The inventors of the '400 Patent recognized that for URLLC and other similar applications, use of multi-connectivity still may not provide the required reliability because each separate link used is still susceptible to failure, and the loss of a single link can potentially have dire effects in the scenarios in which URLLC is used. *See* EX1001 at 1:48-52; EX1008 at 531-532. Furthermore, many different multi-connectivity approaches are available that are not necessarily mirrored in both directions. For example, a system can be configured such that an MCG duplicated SRB is used for downlink transmission from the base station to the user equipment via both the MCG and SCG, while uplink from the user equipment to base station may be configured to use just the MCG or SCG in order to save power or processing overhead. *See* EX1001 at 6:61-64. Additionally, an *uplink* failure through an MCG or SCG does not necessarily mean that a failure has occurred on the *downlink* path. Thus, the '400 Patent inventors recognized that there are situations in which reliability can be improved by specifically reconfiguring an *uplink* SRB on the fly under certain conditions.

For example, downlink SRB communication from base station to user equipment could be configured using dual-connectivity as shown using black arrows in '400 Patent Figure 1, while uplink for the same SRB is configured via the SCG (shown in red below):



EX1001 Fig. 1 (annotated). If the uplink connection via the SCG fails, then the UE reports the failure to the base station, which reconfigures the SRB to receive uplink via the MCG instead:



EX1001 Fig. 1 (annotated). In this way, the fault can be quickly worked around without abandoning dual connectivity on the downlink, causing the least interruption of service and highest reliability.

The '400 Patent claims systems and methods for dealing with link failure, and specifically for reconfiguring the system to work around the link failure in an improved way. For example, '400 Patent Claim 5 recites:

[5pre1] A method for a base station, wherein the base station includes a Master Cell Group (MCG) base station and

[5pre2] communicates with User Equipment (UE) over a first MCG duplicated Signaling Radio Bearer (SRB) and a second MCG duplicated SRB, and

[5pre3] the first MCG duplicated SRB is associated with the MCG and a Secondary Cell Group (SCG) and configured to be used for uplink transmission via the SCG, the method comprising:

[5a] receiving, from the UE, a report of an SCG failure;

[5b] reconfiguring the first MCG duplicated SRB to receive uplink transmission via the MCG; and

[5c] reconfiguring the second MCG duplicated SRB to receive uplink transmission via the MCG.

These limitations are explained in additional detail below.

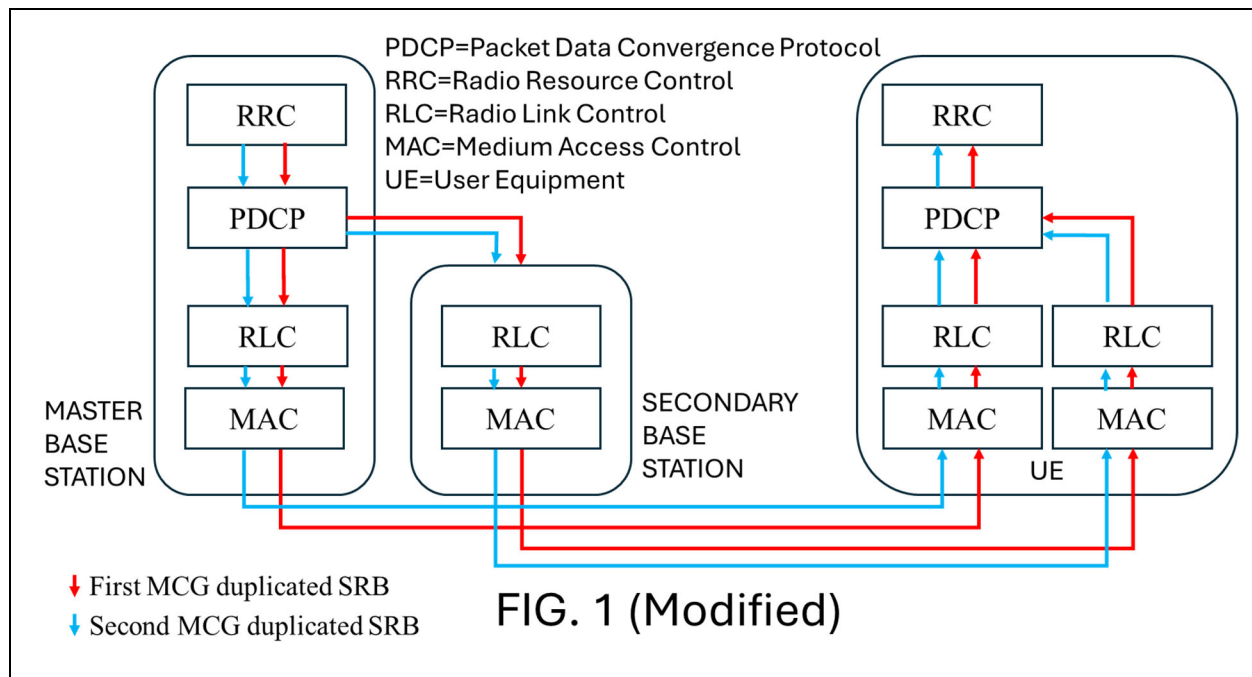
1. [5pre1] A method for a base station, wherein the base station includes a Master Cell Group (MCG) base station and

The claimed base station includes a “Master Cell Group (MCG).” The ’400 Patent explains that a MCG is “a group of serving cells associated with a master base station[] comprising a PCell and 0, 1, or a plurality of SCells.” EX1001 at 4:16-21. A PCell is a Primary Cell “that operates on a primary frequency,” and a SCell is a Secondary Cell “that operates on a secondary frequency.” *Id.* at 3:6566; 4:8-9.

2. [5pre2] [wherein the base station...] communicates with User Equipment (UE) over a first MCG duplicated Signaling Radio Bearer (SRB) and a second MCG duplicated SRB, and the first MCG duplicated SRB is associated with the MCG and a Secondary Cell Group (SCG), and

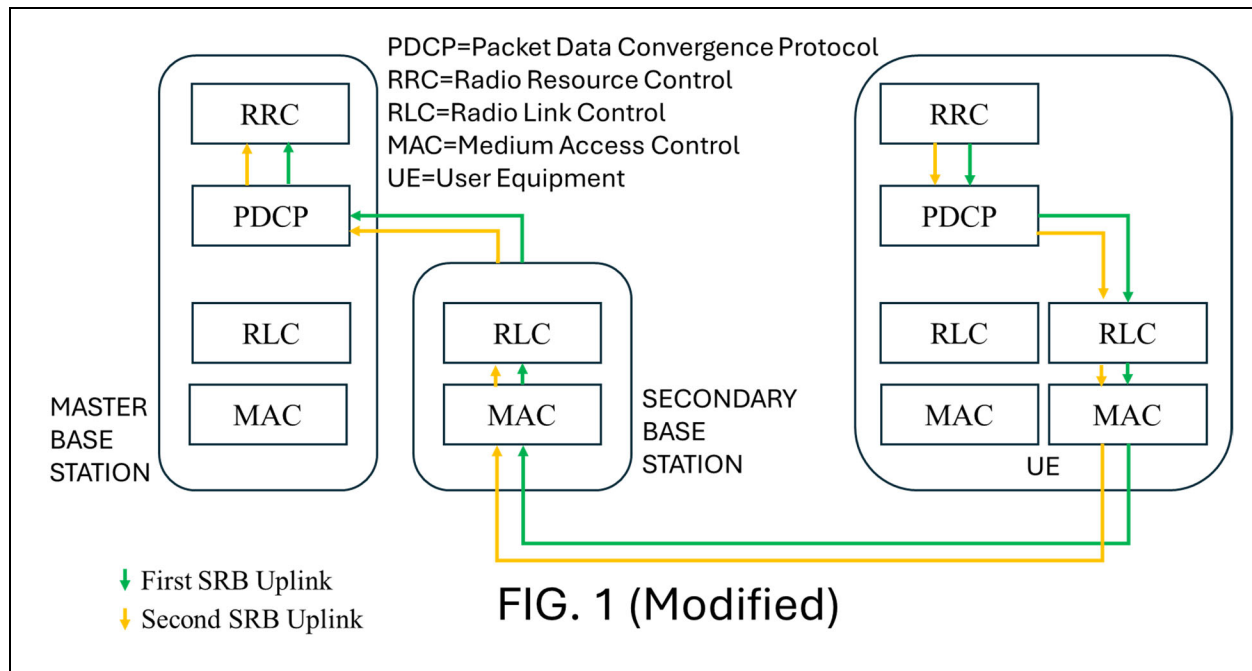
The base station communicates with a UE over (1) a first MCG duplicated SRB and (2) a second MCG duplicated SRB. An SRB is a radio bearer used for

transmitting messages such as resource control (RRC) and authentication (NAS) messages. EX1001 at 4:64-5:13. The downlink SRBs of Claim 5 are MCG duplicated SRBs, meaning the packets are duplicated to be transmitted by both the master and secondary base station. *See id.* at 6:48-53 (“[A]n MCG split SRB configured with packet duplication is referred to as an MCG duplicated SRB . . .”). The first MCG duplicated SRB is associated with both the MCG as well as a SCG. An SCG is a cell group associated with a secondary base station. EX1001 at 4:22-26. This results in duplicate downlink signals being sent to the UE for each SRB, as shown in the modified version of Figure 1 below:



3. [5pre3] [the first MCG duplicated SRB is] configured to be used for uplink transmission via the SCG, the method comprising:

The first MCG duplicated SRB is configured to be used for uplink transmission via the SCG (through the secondary base station), as shown by the green line in the modified¹ version of '400 Patent Fig. 1 below:



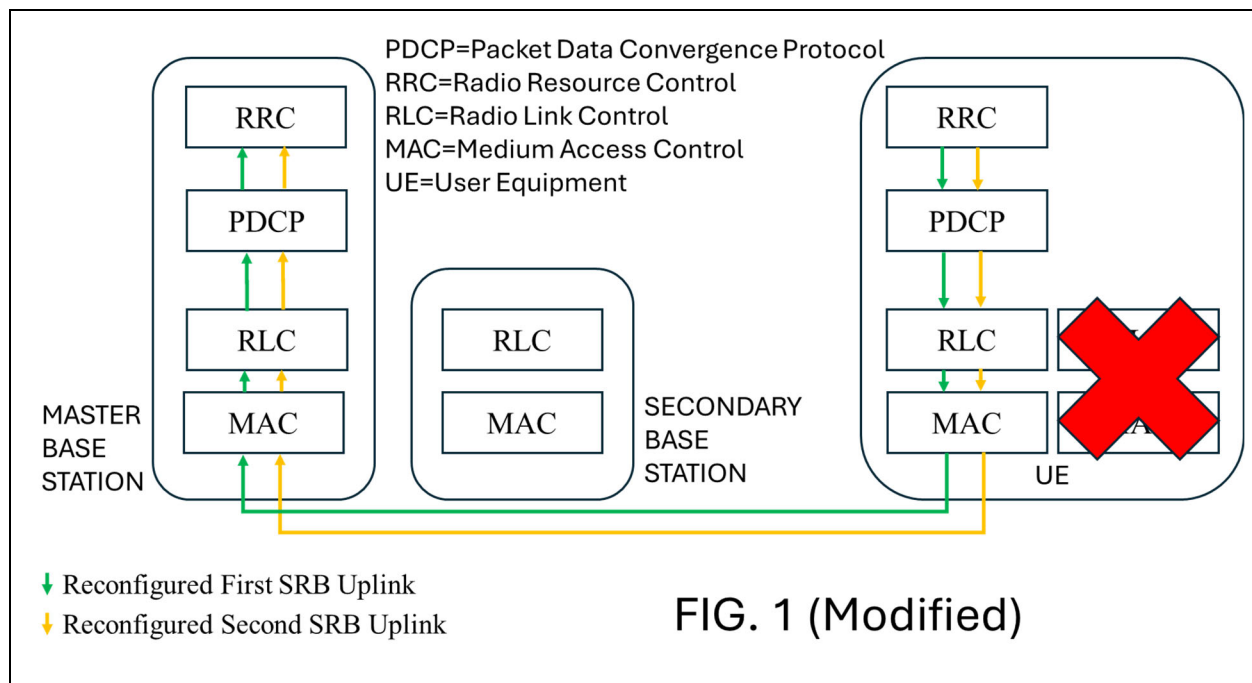
¹ The figure also shows a second SRB in orange configured to be used for uplink transmission via the SCG. The illustration of the second SRB is exemplary—the claim itself does not require that it be initially configured for uplink transmission via the SCG.

4. [5a] receiving, from the UE, a report of an SCG failure;

When an SCG failure occurs, the claimed base station receives a report of an SCG failure from the UE. *See, e.g.,* EX1001 at 14:12-20, 14:39-47.

5. [5b] reconfiguring the first MCG duplicated SRB to receive uplink transmission via the MCG; and [5c] reconfiguring the second MCG duplicated SRB to receive uplink transmission via the MCG.

After receiving the failure report from the UE, the base station reconfigures both the first (green line below) and second (orange line below) MCG duplicated SRBs to receive uplink transmission via the MCG:



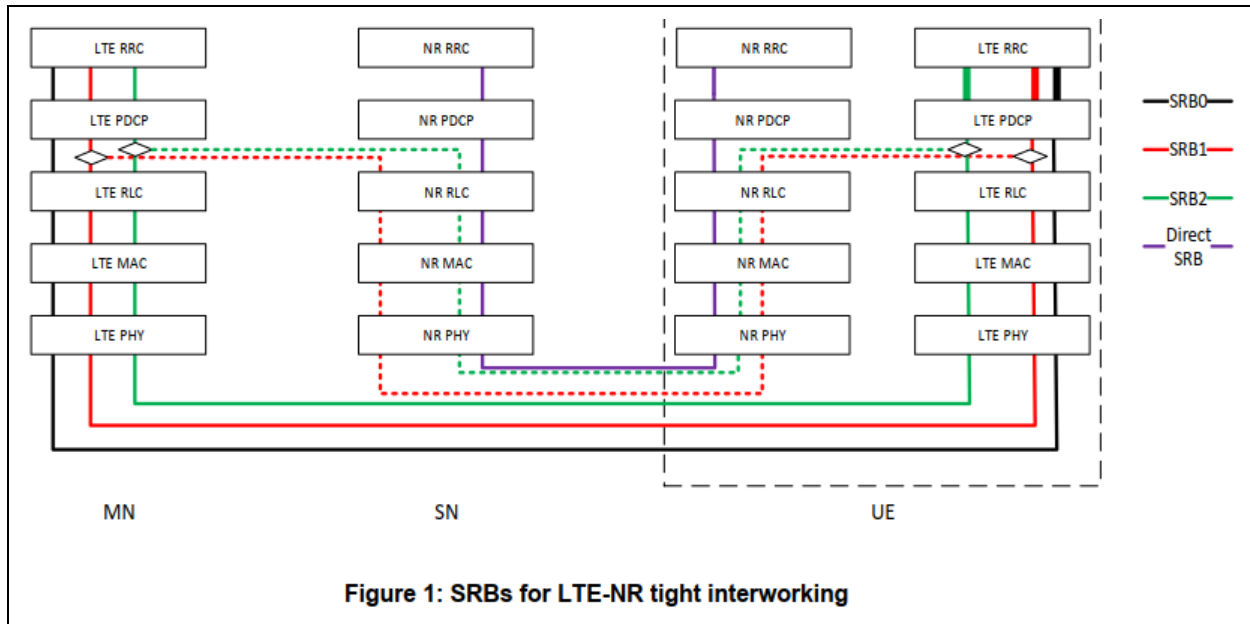
By reconfiguring the SRBs to receive uplink transmissions via the MCG upon failure of the SCG (rather than, for example, terminating and re-initiating all connections

for the SRBs associated with the SCG), the claimed invention makes the wireless system more robust and allows it to more rapidly recover from an uplink failure.

B. Petitioners' Reference: R2-1702708 [EX1005]

Petitioner's sole proposed invalidity ground is based on a three-page document titled "SRBs needed for direct RRC from SN." EX1005 at 1. The document does not bear any indices that suggest it has ever been published or otherwise made generally accessible to the public (nor has the document been indexed by search engines such as Google or Bing). *See* EX2002; EX2003. The document purportedly refers to a 3GPP meeting in "Spokane, USA" on April 3-7th of 2017. The document further indicates it is for "Discussion, Decision," however Petitioners have not submitted any evidence demonstrating that the document was discussed at the meeting identified (or anywhere else). As addressed in more detail below, Petitioners have failed to meet their burden to show that this document is prior art to the '400 Patent.

The purpose of the document is to "discuss which of the different SRBs (SRB0, SRB1, SRB1bis and SRB2) that are currently defined in LTE specifications are required for the communication needs of this agreed upon direct RRC connection between the UE and SN." EX1005 at 1. The document never addresses the concepts of uplink versus downlink in regard to SRBs. The lone figure on which Petitioners rely does not identify whether it represents an uplink or downlink configuration:



EX1005 at 3. As discussed in more detail below, this document fails to teach or render obvious multiple limitations regarding the specific link direction requirements in the Challenged Claims, as well as the “reconfiguring” limitations.

III. Legal Standards

An IPR should not be instituted unless Petitioner has shown a likelihood of success on the invalidity grounds *presented in the petition*. See *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1381 (Fed. Cir. 2016) (“[T]he Board must base its decision on arguments that were advanced by a party, and to which the opposing party was given a chance to respond.”).

“In an IPR, the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3)).

This burden of persuasion never shifts to the patent owner. *See Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015).

“To satisfy its burden of proving obviousness, a petitioner cannot employ mere conclusory statements. The petitioner must instead articulate specific reasoning, based on evidence of record, to support the legal conclusion of obviousness.” *In re Magnum Oil Tools Int’l*, 829 F.3d at 1380.

IV. Level of Ordinary Skill in the Art

For purposes of this Preliminary Response, Patent Owner does not contest Petitioners’ recitation of the level of skill in the art (*see* Pet. at 9) because even under Petitioners’ proposed level of skill, the Petition fails to demonstrate a reasonable likelihood of success. Patent Owner reserves the right to propose its own definition of a person of ordinary skill in the art (“POSITA”) in the future if necessary.

V. Claim Construction

Claims are construed according to *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). *See* 37 C.F.R. § 42.100 (b).

Petitioners state that “no terms need to be construed to resolved the issues raised in this Petition.” Pet. at 8. For purposes of this Preliminary Response, Patent Owner does not propose any constructions because the Petition fails to present a

reasonable likelihood of prevailing under the apparent claim interpretations relied on by Petitioners.²

Patent Owner notes (and the Petition does not dispute) that the preambles of Challenged Claims 5 and 8 are limiting. “A preamble limits the invention if it recites essential structure or steps, or is necessary to give life, meaning, and vitality to the claim.” *Acceleration Bay, LLC v. Activision Blizzard, Inc.*, 908 F.3d 765, 770 (Fed. Cir. 2018) (internal quotes and citations omitted). The preambles of Claims 5 and 8 provide the antecedent basis for multiple elements (MCG, SCG, UE, first MCG duplicated SRB, second MCG duplicated SRB) as well as providing essential structure and steps (such as specifying the initial configuration of the first MCG duplicated SRB—i.e., that it is “configured to be used for uplink transmission via the SCG”). Thus, the preambles of Challenged Claims 5 and 8 should be treated as limiting.

VI. Argument

A. Petitioners Have Not Shown That R2-1702708 Is Prior Art

First, Petitioners’ challenge fails because they have failed to demonstrate that R2-1702708 is a prior art patent or printed publication. The scope of prior art in IPRs is limited to “patents or printed publications.” 35 U.S.C. § 311(b). R2-1702708 is

² Patent Owner may propose its own constructions if the Petition is instituted.

clearly not a patent (nor do Petitioners suggest otherwise), which means that Petitioners have the burden of proving that R2-1702708 is a prior art printed publication. Yet, the document does not bear any indices that suggest it has ever been published or otherwise made into a printed publication. Nor do Petitioners provide any evidence that would support such a conclusion. Quite the contrary—despite Petitioner Ericsson being the purported original “Source” of the document, EX1005 at 1, Petitioners have submitted no testimony or evidence from anyone with knowledge of either the document itself or the proceeding for which it was supposedly created. In fact, Petitioners’ evidence does no more than suggest that the document was present in a nondescript zip file in an unindexed and uncataloged FTP location as of March 5, 2024—well after the priority date of the ’400 Patent. This alone is enough to reject Petitioners’ challenge.

At the institution phase, “a petitioner is required to present evidence and arguments sufficient to show that it is reasonably likely that it will prevail in showing the unpatentability of the challenged claims.” *Hulu, LLC v. Sound View Innovations, LLC*, IPR2018-01039, Paper 29 at 13. (PTAB Dec. 20, 2019) (precedential) (citing 35 U.S.C. §§ 312(a)(3), 314(a)). With respect to purported prior art references, “the petition must identify, with particularity, evidence sufficient to establish a reasonable likelihood that the reference was publicly accessible before the critical date of the challenged patent and therefore that there is a reasonable likelihood that

it qualifies as a printed publication.” *Id.* This burden falls on petitioner, and “[t]here is no presumption in favor of finding that a reference is a ‘printed publication.’” *Id.* at 16.

“A given reference is ‘publicly accessible’ upon a satisfactory showing that such document has been disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence, can locate it.” *SRI Int’l, Inc. v. Internet Sec. Sys., Inc.*, 511 F.3d 1186, 1194 (Fed. Cir. 2008). Here, Petitioners’ evidence fails to provide anything beyond conclusory statements from a declarant without any relevant knowledge or experience.

Petitioners assert the document “was published on March 25, 2017 in advance of a 3GPP working group meeting that occurred in Spokane, Washington” Pet. at 12. Yet, they cite nothing that shows it was actually published, and nothing demonstrating it was actually discussed at a 3GPP meeting beyond the first page of the document that mentions “Spokane.” An apparent intended date or location for discussion, without more, is insufficient evidence of actual dissemination. *See Norian Corp. v. Stryker Corp.*, 363 F.3d 1321, 1330 (Fed. Cir. 2004) (affirming a holding that an Abstract intended to be distributed at a meeting was a not a “printed publication” in the absence of evidence that distribution actually occurred at the meeting, even given that “it was the general practice at [] meetings for presenters to

hand out abstracts to interested attendees”); *Carella v. Starlight Archery*, 804 F.2d 135, 139 (Fed. Cir. 1986) (noting “a magazine is effective as a printed publication under § 102 on the date it reaches the addressee, not on the date of mailing,” and requiring evidence as to when the public actually received the document in question—not just when it was intended to be sent). Given the document purportedly originated from Petitioner Ericsson, the fact that Ericsson was unable to provide any evidence of actual dissemination speaks volumes as to Petitioners’ inability to demonstrate public availability.

Petitioners cite to their declarant, who concludes (without support or analysis) that the document “was publicly available as of March 25, 2017, when it was uploaded to 3GPP’s public file server.” EX1003 ¶57 (cited by Pet. at 12-13). That conclusion is deficient on several levels. Once again, Petitioners provided no direct evidence that the document was actually uploaded to 3GPP’s public file server (or anywhere else) on March 25, 2017, even though it was one of the Petitioners that supposedly uploaded the document. Pet. at 13. Petitioners’ screenshot (upon which Dr. Mahon appears to base his entire opinion) is dated March 5, 2024. See EX1007. The zip file in the screenshot which purportedly contained the document shows a date of March 25, 2017, but there is nothing which supports the conclusion that this date reflects an upload date—it is just as likely to be the date the zip file was

originally created or modified, which does nothing to indicate when it might have become publicly available (if ever).

Furthermore, it is unclear why Dr. Mahon is even testifying regarding the availability of the document. He does not profess to have any knowledge of the creation or distribution of the document or the Spokane meeting, nor does he profess to have any experience with the 3GPP working group or 3GPP processes in general. In fact, there is nothing in his declaration or CV that suggests he has ever participated in the submission of a technical proposal to a 3GPP meeting or even attended a 3GPP meeting. *See generally* EX1003, EX1004. His testimony supports only the conclusion that a given zip file existed at a given ftp location well after the priority date of the '400 Patent. The fact that Petitioners rely almost solely on his testimony despite his complete lack of relevant knowledge further demonstrates the deficiency of Petitioners' public availability evidence.

Even if Petitioners had carried their burden to show the zip file was uploaded to the ftp server on the asserted date, the mere presence of a zip file in an FTP folder does not make something in the zip file a printed publication. The zip file does not even have a descriptive title which could be used by an interested party to find it. Petitioners' evidence demonstrates only that an uncataloged, unindexed, nondescript zip file identified as "R2-1702708" was deposited in an FTP folder at some point, and there is no evidence that it was ever discussed or even found by an interested

party. The assertion that those facts support a finding of publicly accessible must be rejected under Federal Circuit precedent.

The facts of this case are most similar to *In re Cronyn*, where the Federal Circuit found that an undergraduate thesis that was deposited in a college library open to the public, but not cataloged nor indexed, was not a printed publication because it was not accessible to the public. *In re Cronyn*, 890 F.2d 1158, 1161 (Fed. Cir. 1989). In that case, “the only research aid was the student’s name, which, of course, bears no relationship to the subject of the student’s thesis.” *Id.* Here, the only research aid would have been a letter and series of numbers (R2-1702708)—an indicator which also bears no apparent relationship to the content of the document. Thus, the evidence here cannot support a finding that the asserted reference was publicly available.

Petitioners cite the nonprecedential opinion from *Samsung Electronics Co., Ltd. v. Huawei Technologies Co., Ltd.*, IPR2017-01487, Paper 45 at 13-14 (P.T.A.B. Dec. 10, 2018) for support. Pet. at 12-13. However, that opinion further reinforces just how deficient Petitioners’ evidence is here. Citing the Federal Circuit, the *Samsung* panel noted that two factors considered when addressing public accessibility are whether the document has been cataloged and indexed. Petitioners have presented no evidence that either has occurred for R2-1702708. Regarding cataloging, there is absolutely nothing descriptive about the name of the zip file, and

no metadata describing the contents has been identified in any format available to interested parties (title, topics, etc.). Furthermore, there is no evidence that the document in the zip file was ever indexed. Quite the opposite—even at the time the Petition was filed, search engines such as Google and Bing had not indexed the document despite it purportedly being publicly available for years. *See* EX2002 (searching Google for the title of the document); EX2003 (searching Bing for the title of the document).

The *Samsung* opinion suggests that other factors are also relevant when analyzing the “public accessibility of meeting-distributed documents,” including “(1) the length of time the document was exhibited, (2) the expertise of the target audience (to determine how easily those who viewed the material could retain the information), (3) the existence (or lack thereof) of reasonable expectations that the document would not be copied, and (4) the simplicity or ease with which the document could have been copied.” *Samsung*, Paper 45 at 12 (internal quotes and brackets omitted) (citing *Medtronic, Inc. v. Barry*, 891 F.3d 1368, 1381-82 (Fed. Cir. 2018) and *In re Klopfenstein*, 380 F.3d 1345, 1350 (Fed. Cir. 2004)). Despite citing the *Samsung* opinion, Petitioners did not analyze these factors. And for good reason—Petitioners presented no evidence that the document was ever discussed or exhibited at a 3GPP meeting (or anywhere else), making the analysis irrelevant. While the document bears the location of a meeting at which it may have been

intended to be discussed, even the party that purportedly created the document (Petitioner Ericsson) was apparently unable to identify any evidence to demonstrate it was ever actually shown or discussed at the meeting. Thus, this further demonstrates that Petitioners have failed in their burden.

Furthermore, the challenge in the *Samsung* opinion was based on Technical Report TR 33.821 (Rationale and track of security decisions in Long Term Evolution (LTE) RAN / 3GPP System Architecture Evolution (SAE)) and Technical Specification TS 23.401 (General Packet Radio Service (GPRS) enhancements for Evolved Universal Terrestrial Radio Access Network (E-UTRAN) access)—technical reports/specifications with searchable titles that show up on 3GPP’s website. *See* EX2004; EX2005; *Samsung*, Paper 45 at 8-10. As the *Samsung* panel noted, the evidence in that proceeding showed that the documents were “fully searchable” and “available to users via conventional search engines, such as the Google search engine.” *Samsung*, Paper 45 at 10 (internal quotes omitted). The same is not true here—there is no evidence in the record that R2-1702708 was ever discussed at a 3GPP meeting or reviewed by an interested party, and even at the time the Petition was filed its contents had not been cataloged or indexed for search. *See* EX2002; EX2003.

Thus, Petitioners’ evidence falls far short of the kind of showing necessary to demonstrate that R2-1702708 qualified as a printed publication as of the August 10,

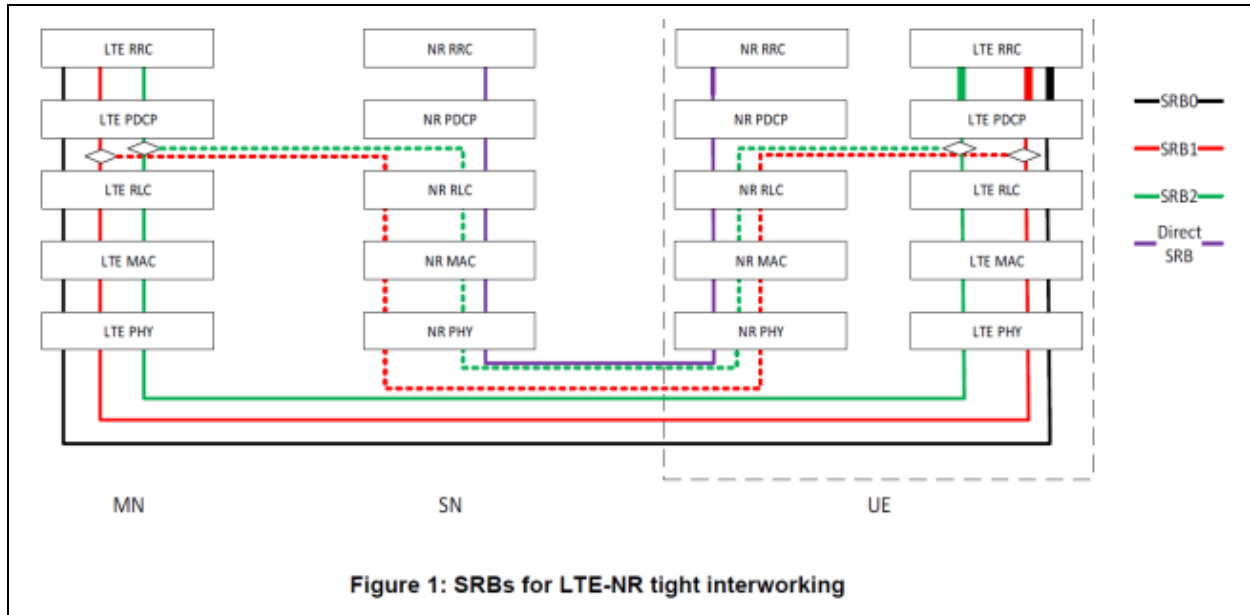
2017 priority date of the '400 Patent. As a result, Petitioners have failed to satisfy their burden of demonstrating a reasonable likelihood of success, and the Petition should be denied.

B. The Petition Ground Fails to Teach or Render Obvious “the first MCG duplicated SRB...configured to be used for uplink transmission via the SCG”

The Petition fails to present a reasonable likelihood of teaching or rendering obvious “the first MCG duplicated SRB...configured to be used for uplink transmission via the SCG.” As discussed above in Section II.A, uplink and downlink are not required to be (and often not even expected to be) reciprocal in regard to duplicating packets in multi-connectivity setups. Petitioners’ own reference confirms this, noting that in some LTE wireless systems the use of multi-connectivity transmissions was limited to the downlink direction only. *See* EX1008 at 377 (“In release 12, split bearers are supported in the downlink only....”); EX1003 ¶46 (Petitioners’ expert addressing EX1008 at 377, and conceding it is describing dual connectivity in the downlink direction).

For demonstrating “the first MCG duplicated SRB...configured to be used for uplink transmission via the SCG,” Petitioners rely on Figure 1 of R2-1702708, concluding “[a]s shown in the figure [1], SRB1 is split between the MN and the SN and thus allows the network to receive uplink transmissions from the UE via both

nodes.” Pet. at 14-15. Yet, R2-1702708 Figure 1 contains no indication of communication direction:



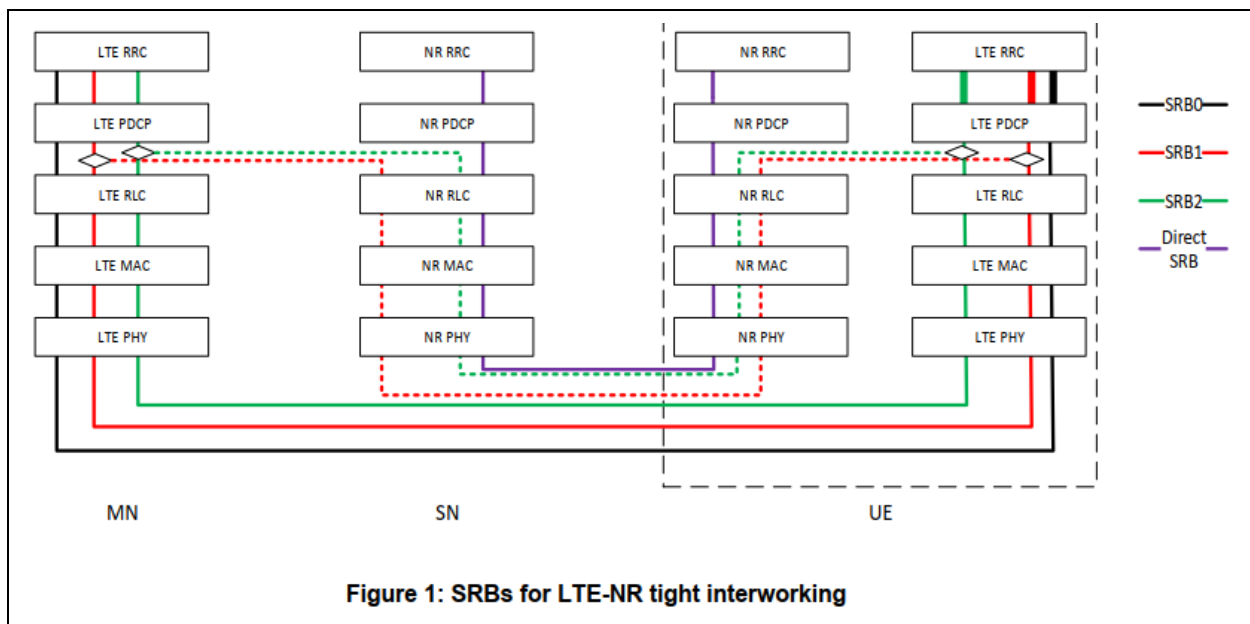
EX1005 at 3. Nor do Petitioners or their expert provide any reasoned analysis as to why a POSITA would understand the SRBs in this Figure to necessarily be duplicated uplink SRBs, rather than duplicated downlink SRBs (which Petitioners’ own references suggest are more common). Petitioners cannot substitute conclusory statements for gaps in the asserted reference, and the asserted ground therefore cannot present a reasonable likelihood of teaching or rendering obvious this limitation.

C. The Petition Ground Fails To Teach or Render Obvious “reconfiguring the first MCG duplicated SRB to receive uplink transmission via the MCG”

All Challenged Claims require (a) a first MCG duplicated SRB configured to be used for uplink transmission via the SCG, and (b) reconfiguring the first MCG

deduplicated SRB to receive uplink transmission via the MCG after receiving a report of an SCG failure from a UE. *See* EX1001 Claim 5 at 17:11-19, Claim 8 at 18:11-23. Petitioners’ challenge fails to present a reasonable likelihood of prevailing at least because R2-1702708 does not teach or render obvious these requirements.

Petitioners assert that “the red line (labeled ‘SRB1’ [in Figure 1]) is the claimed ‘first MCG duplicated SRB.’” Pet. at 14.



EX1005 Fig. 1.

Yet, R2-1702708 never teaches or suggests anything which could render obvious “reconfiguring the first MCG duplicated SRB to receive uplink transmission via the MCG.” Recognizing this, Petitioners’ lead argument for that limitation is a strained assertion that the ’400 Patent admitted that “the claimed ‘reconfiguring’ step was well known in the prior art.” Pet. at 16. Yet, the portions of the ’400 Patent that Petitioners cite relate specifically to *configuring* an SRB during initial setup, not *re-*

configuring an existing SRB in response to a reported failure of the SCG. The '400 Patent Background section expressly notes the need to solve the problem of a previously configured SRB in the event of an SCG failure—it does not assert that reconfiguring an existing SRB in the claimed manner was well known in the prior art. EX1001 at 1:48-52.

Petitioners next point to language relating to “SN RRC reconfigurations” in R2-1702708, but every mention of “reconfigurations” in R2-1702708 addresses reconfiguration of the SN, MN, or UE, rather than reconfiguration of specific existing MCG duplicated SRBs. Petitioners then suggest that the reconfiguring limitation would have been obvious to a POSITA because “R2-1702708 discloses that in response to receiving the *SCGFailureInformation* message, ‘the MN can decide to *release* or/and change the *SN*’ to address the failed connection between the UE and the SN.” Pet. at 17 (quoting EX1005 at 1). But the cited statement again fails to address reconfiguring an **SRB**. At best, the cited portion addresses management between the MN and SN—it does not even mention SRBs.

Petitioners then cite to their expert and suggest “it would have been obvious to POSITA to use an RRC reconfiguration message (such as those expressly taught in R2-1702708) ‘to release . . . the SN’ when there is a radio link failure between the UE and the SN.” Pet. at 17-18 (citing EX1003 ¶¶71-72). Petitioners concede this is not actually taught by the reference, but instead suggest it is “an obvious

modification to R2-1702708 based on the ordinary common sense of a POSITA.” Pet. at 19. However, Petitioners cannot simply use “common sense” to fill in all limitations missing from the prior art. As the Federal Circuit explained, “invoking common sense to supply a limitation that was admittedly missing from the prior art should generally only be done when the missing limitation in question is unusually simple and the technology particularly straightforward.” *Koninklijke Philips N.V. v. Google LLC*, 948 F.3d 1330, 1338 (Fed. Cir. 2020) (internal quotes, citations, brackets, and ellipses omitted). Petitioners have presented no evidence that reconfiguring an existing MCG duplicated SRB to receive uplink transmission via the MCG after receiving a report of an SCG failure from a UE is “unusually simple,” or that error recovery in a multi-connectivity wireless setting is a “particularly straightforward” technology (nor could they). At bottom, Petitioners’ proposed obviousness theory eschews the more simple and straightforward solution of simply terminating the previous links and setting up new ones in the event of an error, and instead proposes that reconfiguring an existing MCG duplicated SRB is somehow obvious (despite failing to identify any prior art which taught such a reconfiguration).

Furthermore, under Petitioners’ interpretation of the reference, the reference actually teaches away from reconfiguring the purported first MCG duplicated SRB. Petitioners assert that in R2-1702708, SRB1 is the first MCG duplicated SRB. Pet.

at 13-14. Even assuming that SRB1 is configured to be used for uplink transmission to the SCG (which the reference never addresses), the reference would teach away from reconfiguring it to use the MCG. The reference notes that “it is very clear that SRB1 is needed for transporting [] messages between the UE and SN.” EX1005 at 2-3. Even if that is referring to uplink communication (an arrangement Petitioners’ ground would require but the reference itself never addresses), it would teach away from reconfiguring SRB1 for uplink via the MCG because the reference specifically states it is needed for communication with the SN, which includes the SCG. *Id.* Therefore, the Petition ground fails to present a reasonable likelihood of teaching or rendering obvious “reconfiguring the first MCG duplicated SRB to receive uplink transmission via the MCG.”

D. The Petition Ground Fails To Teach or Render Obvious “reconfiguring the second MCG duplicated SRB to receive uplink transmission via the MCG”

For the reasons discussed above regarding “reconfiguring the first MCG duplicated SRB to receive uplink transmission via the MCG,” the Petition also fails to present a reasonable likelihood of teaching or rendering obvious “reconfiguring the second MCG duplicated SRB to receive uplink transmission via the MCG.”

VII. Conclusion

Patent Owner respectfully requests that the Board refuse to institute *inter partes* review for the reasons stated herein.

Dated: July 15, 2024

Respectfully submitted,

By: / R. Allan Bullwinkel /
R. Allan Bullwinkel (Reg. No. 77,630)
Attorney for Patent Owner
Daingean Technologies Ltd.

CERTIFICATE OF SERVICE

The undersigned certifies that pursuant to 37 C.F.R. § 42.6(e), a copy of the foregoing was served via email to lead and backup counsel of record for Petitioners as follows:

Lead Counsel for Petitioner
Matthew T. Cameron Reg. No. 74,179 ATT_Daingean@mckoolsmith.com mcameron@McKoolSmith.com MCKOOL SMITH P.C. 303 Colorado Street, Suite 2100 Austin, TX 78701 Telephone: 512.692.8700 Facsimile: 512.692.8744
Back-Up Counsel for Petitioner
Nicholas Mathews Reg. No. 66,067 ATT_Daingean@mckoolsmith.com nmathews@McKoolSmith.com MCKOOL SMITH P.C. 300 Crescent Court, Suite 1500 Dallas, TX 75201 Telephone: 214.978.4241 Facsimile: 214.978.4044

Dated: July 15, 2024

Respectfully submitted,

By: / R. Allan Bullwinkel /
R. Allan Bullwinkel (Reg. No. 77,630)
Attorney for Patent Owner
Daingean Technologies Ltd.

CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24(d), the undersigned hereby certifies that this brief complies with the type-volume limitation of 37 C.F.R. § 42.24 because this brief contains 5,117 words.

Dated: July 15, 2024

Respectfully submitted,

By: /R. Allan Bullwinkel/
R. Allan Bullwinkel (Reg. No. 77,630)
Attorney for Patent Owner
Daingean Technologies Ltd.