

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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ERICSSON INC.,  
Petitioner

v.

MOTOROLA MOBILITY LLC,  
Patent Owner

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Case IPR2025-00174  
Patent No. 11,184,130

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**PATENT OWNER'S PRELIMINARY RESPONSE**

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**PATENT OWNER’S EXHIBIT LIST**

| <b>Exhibit</b> | <b>Description</b>                                                                                                                                                                                                                                    |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ex. 2001       | Certain Cellular Base Station Communication Equipment, Components Thereof, and Products Containing Same, Inv. No. 337-TA-1388, Order No. 6, “Adopted Procedural Schedule” (U.S.I.T.C. Feb. 21, 2024)                                                  |
| Ex. 2002       | Internet Archive search for <a href="https://www.3gpp.org/3gpp-groups/radio-access-networks-ran/ran-wg1">https://www.3gpp.org/3gpp-groups/radio-access-networks-ran/ran-wg1</a>                                                                       |
| Ex. 2003       | Internet Archive search for <a href="http://www.3gpp.org:80/ftp/tsg_ran/WG1_RL1/TSGR1_AH/NR_AH_1706/Docs">http://www.3gpp.org:80/ftp/tsg_ran/WG1_RL1/TSGR1_AH/NR_AH_1706/Docs</a>                                                                     |
| Ex. 2004       | Internet Archive search for 3gpp.org                                                                                                                                                                                                                  |
| Ex. 2005       | Internet Archive search for <a href="https://portal.3gpp.org/Meetings.aspx#/meeting?MtgId=18512">https://portal.3gpp.org/Meetings.aspx#/meeting?MtgId=18512</a>                                                                                       |
| Ex. 2006       | Certain Cellular Base Station Communication Equipment, Components Thereof, and Products Containing Same, Inv. No. 337-TA-1388, Order No. 3, “Initial Determination Setting a Target Date” (U.S.I.T.C. Jan. 31, 2024) (not reviewed by the Commission) |

## I. PRELIMINARY STATEMENT

The Board should deny institution for multiple, compounding reasons.

*First*, all grounds but one rely on references that have not been established as prior art. *Infra* at II. Because nearly all of the grounds cannot have a reasonable likelihood of success, the Board should exercise its discretion to deny institution. *Chevron Oronite Co. LLC v. Infineum USA L.P.*, Case IPR2018-00923, Paper 9 (Nov. 7, 2018) (informative on insufficient number of proposed grounds/challenges to claims meet reasonable likelihood standard).

*Second*, the remaining ground relies not only on multiple, conclusory inherency arguments but also often relies on only a parroting expert disclosure for support. The Board's precedent finds such arguments insufficient to establish a reasonable likelihood of success. *Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9 (Aug. 24, 2022) (precedential as to holding declaration is entitled to little weight when it contains an exact restatement of the petition's unsupported, conclusory assertions without any additional supporting evidence or reasoning). Such weak arguments also cannot outweigh the reasons to discretionarily deny, as discussed below.

*Third*, Ericsson delayed filing of its Petition until after the corresponding hearing at the ITC. Ex. 2001; *see also Telefonaktiebolaget LM Ericsson v. Lenovo (United States)*, 5:23-cv-00569-BO-RJ (E.D.N.C.) (stayed pending resolution of the

ITC proceeding). While a memo from the previous Director reasons that *Fintiv* itself only addressed parallel District Court litigations so a *Fintiv* denial cannot be made based on ITC proceedings, the formal rulemaking promised by that memo never occurred. Director Vidal Memo, *Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation*, June 21, 2022, pp. 2, 3, 5-7 (“Vidal Memo”). Nevertheless, filing an IPR petition after an ITC hearing represents an extreme example of an unnecessary duplication of judicial and party efforts that the Board should consider under its general *Fintiv* policies.

Here, there has not only been substantial investment in the parallel ITC proceeding—because the ITC completed the evidentiary hearing before the Petition was filed—but this Petition also attempts a second bite at the apple rather than providing an alternative to litigation. Indeed, an Initial Determination is due long before institution. Ex. 2001.

## **II. FOUR OUT OF FIVE GROUNDS RELY ON REFERENCES THAT HAVE NOT BEEN SHOWN TO BE PRIOR ART**

Two of the three applied references were prepared for a conference held **after** the June 26, 2017, priority date of the ’130 patent. Exhibits 1004 (R1-1710789) and 1005 (R1-1710294)—which Petitioner relies on in Grounds 2 through 5—both state that they were related to a conference held on June 27-30, 2017. Petitioner appears to acknowledge that these dates are too late to qualify as prior art, as it attempts to

establish pre-conference public accessibility through the 900-page declaration (including appendices) of Craig Bishop.

Ericsson attempts to incorporate paragraphs to support statements that the Exhibits 1004 and 1005 were “publicly accessible as of the date they were uploaded to the 3GPP FTP server.” Pet., 11 (citing Ex. 1008, ¶¶37-40, 70-76); Pet., 12 (citing Ex. 1008, ¶¶37-40, 70-76). Ericsson also alleges that “[s]uch documents can be located by the public based on the website’s indexing scheme.” Pet., 11 (citing Ex. 1008, ¶¶42, 44, 49); Pet., 12 (same). Because the Federal Circuit has held that an upload date of a file to a known folder of an FTP server alone is not sufficient, these statements fall short of establishing public accessibility. *SRI Int’l, Inc. v. Internet Sec. Sys., Inc.*, 511 F.3d 1186, 1197 (Fed. Cir. 2008) (holding that “[t]he FTP server directory structure (/pub/emerald/) of a well-known institution in the intrusion detection community and the acronym of ‘ndss98.ps’ might have hinted at the path to the Live Traffic paper; however, an unpublicized paper with an acronym file name posted on an FTP server” was insufficient to show public accessibility).

Starting with the sections specific to Exhibits 1004 and 1005, the Bishop declaration also contains several errors. In those sections, the Bishop declaration cites no evidence dated prior to the critical date—indeed, it mostly relies on present-day paths to the documents. When addressing how to locate the asserted prior art, Mr. Bishop chose to use the modern website using the following procedure: “I

navigated to the 3GPP website at <http://www.3gpp.org>, selected ‘3GPP Groups’ from the menu bar, and then selected ‘RAN WG1’ from the dropdown menu.”

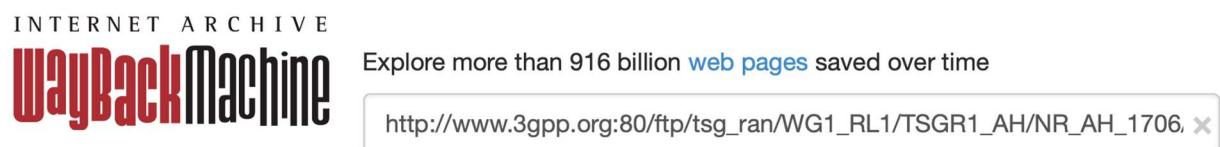
Ex. 1008, ¶¶72, 79. This process results in the following URL:

“<https://www.3gpp.org/3gpp-groups/radio-access-networks-ran/ran-wg1>”.

Submitting this URL in Archive.org shows that the location was first archived in 2022—years after the 2017 priority date:

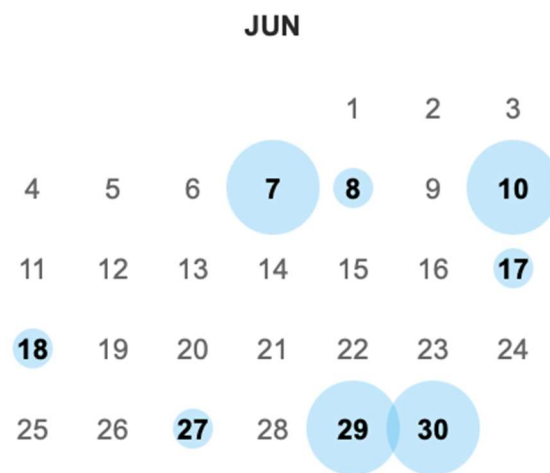


Ex. 2002. Moreover, the URL for the FTP folder cited in the declaration for Appendix 23 (Ex. 1008, 441) was also in Archive.org. But once again the first archive date was after the priority date:



Ex. 2003.

The decision to use present-day rather than archived versions of the website is surprising for two reasons. First, the Bishop declaration regularly relies on Archive.org for archives of the 3GPP website. Ex. 1008, 43-45 (relying on 13 archives from Archive.org). Second, Archive.org shows regular archival of the 3GPP website in the critical window, as shown below:



Ex. 2004. The graphic above shows that the 3gpp.org was crawled three times between the purported public accessibility date and before crawling located the relevant portion of the FTP site. Accordingly, Mr. Bishop's choice not to use archived versions of these webpages appears to have been intentional, and is an implicit acknowledgement that these paths were unavailable to the public at the critical time. Regardless of why Mr. Bishop decided to omit this Archive.org data, the fact remains that the data undermines the conclusions he was hired to reach.

The only other evidence cited in the document-specific sections is Appendix 24. But it also does not help. Appendix 24 is simply another document from after the critical date that suggests the documents were presented at a conference that took place after the critical date. It is a report of a meeting listed as having occurred on August 21-25, 2017. Ex. 1008, 504 (“3GPP TSG RAN WG1 Meeting #90” in “Prague, Czech Rep, 21<sup>st</sup> – 25<sup>th</sup> August 2017”). It does not show public accessibility prior to the conference, or on June 17, 2017. Appendix 24 simply lists these documents within the meeting minutes for the conference that occurred after the critical date, but it does not say when they were made available to public. *See* Ex. 1008, 547-549 (Appendix 24 at 44-46).

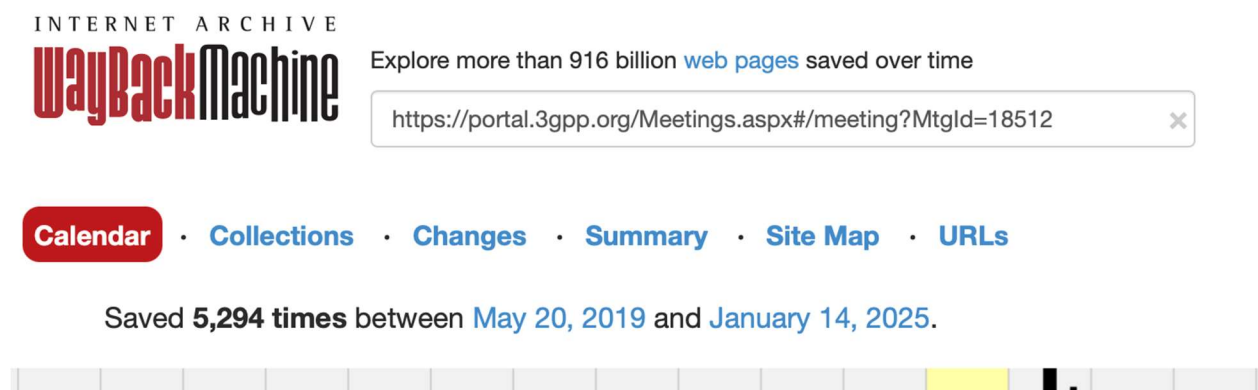
The sections not specific to Exhibits 1004 and 1005 have similar problems. *First*, when Archive.org was used, the Bishop declaration almost always uses July 2017 versions of the website—a date after the priority date of the ’130 patent, which is June 26, 2017. Ex. 1008, 247-262 (Appendices 14-19<sup>1</sup>). This is reflected in the URLs shown in those exhibits, which have the date portions of their paths begin with 201707, indicating the sites were archived in July 2017. *See, e.g.*, Ex. 1008, 248 (Appendix 14 providing a URL with “20170718” in the path, indicating an archive

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<sup>1</sup> Appendix 19 is misdated as April 2016 in the Bishop declaration’s list of appendices. Ex. 1008, 44. The Archive.org URL, however, shows a July 2017 date.

date of July 18, 2017). The declaration offers no express guidance why this date was picked. But this date seems to have been picked because it is just after the date of the email referenced in the Bishop declaration noting that all exhibits had been uploaded. Ex. 1008, 266 (Appendix 21's July 3, 2017, email indicating that all contributions have been uploaded to the 3GPP ftp). That email, again, is dated after the priority date of the '130 patent.

*Second*, when the declaration references the meeting description in Appendix 29, the paragraphs cite to a post-meeting description from 2024. Ex. 1008, 644 (Appendix 29 listing a copyright date of 2024). The corresponding URL was not archived until 2019—long after the priority date in 2017:



Ex. 2005.

*Third*, the declaration claims that each of 3GPP Technical Documents, or T-Docs, would have been indexed but does not say when. It did provide an example in Appendix 31(a). Ex. 1008, 837-890. But that index does not include Exhibits 1004

or 1005. *See id.* And the FTP printout from the declarant allegedly showing dates RAN documents were available shows the indexing spreadsheet for Exhibits 1004 and 1005 having first been uploaded in September 2017, months after the priority date.

11/4/24, 8:32 AM

Directory Listing /ftp/tsg ran/WG1 RL1/TSGR1 AH/NR AH 1706/Docs

|                                                                                   | sort by name/desc                                | sort by date/desc | sort by size/desc |
|-----------------------------------------------------------------------------------|--------------------------------------------------|-------------------|-------------------|
|  | <a href="#">TDoc_List_Meeting_RAN1-NR#2.xlsm</a> | 2017/09/04 9:17   | 457 KB            |
|  | <a href="#">TDoc_List_Meeting_RAN1-NR#2.xlsx</a> | 2022/01/10 16:43  | 454,7 KB          |
|  | <a href="#">TDoc_List_Meeting_RAN1-NR#2.zip</a>  | 2018/01/10 16:45  | 794,9 KB          |

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2070 items.

Ex. 1008, 502.

Not only does the cited evidence fail to show the asserted prior art was publicly accessible, it shows that Petitioner's declarant conducted an analysis that was either incomplete or ignored the bad facts in the cited evidence. Regardless of whether these shortcomings were intentional omissions, due to a lack of competence, or were simply repeated oversights, they make the declaration unreliable.

Accordingly, Petitioner has not met its burden of demonstrating that the asserted prior art in Grounds 2-5 is in fact prior art.

### **III. INDEPENDENT CLAIM 11 IS NOT ANTICIPATED OR RENDERED OBVIOUS BY TR 38.912**

Ericsson's Ground 1 fails because the Petition fails to establish that TR 38.912 discloses at least the following claim elements required by independent claim 11 and the corresponding features of independent claim 18: 1) "a processor that determines a

demodulation reference signal configuration for a physical downlink shared channel carrying remaining minimum system information”; and 2) “a transmitter that transmits the demodulation reference signal based on the demodulation reference signal configuration.”

Instead of providing evidentiary support to explain how TR 38.912 teaches these claim elements, Ericsson repeatedly relies on its expert declaration as a wholesale substitute for reasoned analysis and evidentiary support. However, the expert declaration largely mirrors the conclusory statements of the Petition without providing independent analysis, and thus should be given little or no weight.

Therefore, Ericsson has not established a reasonable likelihood that it will prevail on this ground.

**A. The Petition fails to show that TR 38.912 teaches or suggests “a processor that determines a demodulation reference signal configuration for a physical downlink shared channel carrying remaining minimum system information”**

The first element (element [11a]) of claim 11 requires an apparatus comprising “*a processor* that determines a demodulation reference signal configuration for a physical downlink shared channel carrying remaining minimum system information.” (emphasis added). The Petition fails to show that TR 38.912 teaches or suggests a processor that determines a demodulation reference signal configuration

(“DM-RS”) for a physical downlink shared channel carrying remaining minimum system information.

Ericsson concedes that TR 38.912 does not explicitly disclose such a processor, instead arguing that its disclosure is inherent or would have been obvious to add by a person of ordinary skill in the art. *See* Pet. 14 (“the gNB ***inherently*** would have a processor”) (emphases added); 17 (“the processor in the gNodeB ***inherently*** must determine the demodulation reference signal configuration . . . and ***it would be obvious to a POSITA*** to use a processor for this purpose . . . . ***it would be obvious to a person of ordinary skill in the art*** for the processor in the gNodeB to determine the demodulation reference signal configuration”) (emphases added). Both arguments are contrary to law.

Regarding inherency, TR 38.912, at most, teaches that a gNodeB transmits a demodulation reference signal. *Id.* at 14 (“given TR 38.912’s disclosure that a demodulation reference signal is sent on the downlink, it would be obvious to a person of ordinary skill in the art for the processor in the gNodeB to determine the demodulation reference signal configuration”). But transmitting a signal does not necessarily mean there is a processor that determines the configuration of the signal. For example, the signal’s configuration may be fixed by hardware, such that there is no need for a processor to “determine” that signal’s configuration as claimed. Or a demodulation reference signal configuration may be specified externally via an input

that is not part of the claimed apparatus, so any alleged processor in TR 38.912 would not necessarily “determine a demodulation reference signal configuration for a physical downlink shared channel carrying remaining minimum system information,” as claimed. These alternatives demonstrate that the claimed feature is not necessarily present in TR 38.912, so Ericsson has not carried its burden of demonstrating inherency. As the Federal Circuit has explained, “mere possibility is not enough” to establish inherency. *PersonalWeb Techs., LLC v. Apple, Inc.*, 917 F.3d 1376, 1382 (Fed. Cir. 2019).

Regarding obviousness, the Federal Circuit has repeatedly held that it is improper to use a person of ordinary skill’s common knowledge to supply a wholly missing claim limitation without evidentiary support. *See DSS Tech. Mgmt. Inc. v. Apple Inc.*, 885 F.3d 1367, 1377 (Fed. Cir. 2018) (the Board may not “rel[y] on ‘ordinary creativity’ ‘as a wholesale substitute for reasoned analysis and evidentiary support’ ‘when dealing with a limitation missing from the prior art references specified’”); *Arendi SARL v. Apple Inc.*, 832 F.3d 1355, 1362-63 (Fed. Cir. 2016) (holding that “references to ‘common sense’—whether to supply a motivation to combine or a missing limitation—cannot be used as a wholesale substitute for reasoned analysis and evidentiary support, especially when dealing with a limitation missing from the prior art references specified . . . . In cases in which ‘common sense’ is used to supply a missing limitation, as distinct from a motivation to

combine, moreover, our search for a reasoned basis for resort to common sense must be searching”); *see also KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”). Ericsson’s conclusory allegation that a person of ordinary skill would have filled the processor gap in TR 38.912 to supply this missing claim limitation is contrary to law.

Moreover, Ericsson does not even cite its expert declaration to support its conclusory statement that the gNodeB includes a processor that determines the demodulation reference signal configuration for a physical downlink shared channel carrying remaining minimum system information. *See* Pet., 17. Even if Ericsson had, the Laneman Declaration largely repeats the same conclusory statements made in the Petition and cites no evidence for support. *See* Ex. 1200, ¶72. An expert declaration that “merely repeats, *verbatim*, the conclusory assertion for which it is offered to support . . . adds little to the conclusory assertion for which it is offered to support, and is entitled to little weight.” *Xerox Corp. v. Bytemark, Inc.* IPR2022-00624, Paper 9, 15 (PTAB Aug. 24, 2022) (precedential) (declining to institute *inter partes* review); *see also TQ Delta, LLC v. CISCO Sys., Inc.*, 942 F.3d 1352, 1360-62 (Fed. Cir. 2019) (reversing obviousness determination because “expert’s conclusory statements and unspecific expert testimony did not qualify as substantial evidence

that could support the Board’s conclusions regarding obviousness”) (internal quotations omitted).

Additionally, TR 38.912 fails to teach “a demodulation reference signal configuration for a physical downlink shared channel carrying remaining minimum system information” required by claim 11. Ericsson does not cite *any* disclosure that the configuration of DM-RS is for the physical downlink shared channel (PDSCH) carrying remaining minimum system information, and rather attempts to glue together various untethered disclosures from TR 38.912. *See* Pet., 15-17 (citing pages 17-18, 28, 31 of TR 38.912).

Ericsson points to page 31 of TR 38.912 regarding the “remaining minimum system information” transmitted via “NR-PDSCH,” but this disclosure is devoid of any reference to the claimed DM-RS or its configuration. The cited excerpt on page 17 that the “NR supports at least functionality where for DL data scheduled for a slot, the DL data DM-RS location in time is not dynamically varying relative to the start of slot” is about “DL data DM-RS location in time,” and is devoid of any disclosure about the claimed determining of DM-RS “configuration,” much less the DM-RS “configuration” which is “for a physical downlink shared channel carrying remaining minimum system information.” Ericsson’s cited excerpts from various portions of TR 38.912 about the alleged ways to configure “DM-RS” are likewise unavailing. *See* Pet., 15-22. Indeed, none of those disclosures expressly teaches, or

even suggests, that the “DM-RS” could be used in connection with “a physical downlink shared channel carrying remaining minimum system information.”<sup>2</sup>

Ericsson’s other arguments for the instant claim element over TR 38.912 are either unsupported or irrelevant. For example, Ericsson also equates the “Data channel” to the NR-PDSCH discussed in TR 38.912 without any explanation. *See* Pet., 15. Further, the cited disclosure on page 18 is for PDCCH (Physical Downlink Control Channel), which is not alleged to be the physical downlink shared channel required by the claim, and is not otherwise pertinent to the claim language.

Without more than conclusory statements, Ericsson has not shown that the prior art teaches or suggests “a processor that determines a demodulation reference

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<sup>2</sup> The claimed “demodulation reference signal configuration for a physical downlink shared channel carrying remaining minimum system information” in [11a] provides antecedent basis for the term “demodulation reference signal configuration” in [11b] and [11c]. Therefore, the Petition also fails to teach the corresponding terms “demodulation reference signal configuration” in [11b] and [11c] because Ericsson does not cite *any* disclosure about how the configuration of DM-RS is for the physical downlink shared channel (PDSCH) carrying remaining minimum system information. *See* Pet., 17-20 (citing pages 13, 17, 27-28, 31-32, 35 of TR 38.912).

signal configuration for a physical downlink shared channel carrying remaining minimum system information,” as recited in claim 11, and institution should be denied.

**B. The Petition fails to show that TR 38.912 teaches or suggests “a transmitter that transmits the demodulation reference signal based on the demodulation reference signal configuration”**

Claim 11 (element [11c]) further recites “a transmitter that transmits the demodulation reference signal based on the demodulation reference signal configuration.”

Here, Ericsson once again relies upon conclusory statements with no supporting evidence or analysis to suggest that this limitation is obvious. As Ericsson concedes, TR 38.912 describes that “[t]he remaining minimum system information is transmitted in shared downlink channel via NR-PDSCH.” Pet., 21. This statement is at most a disclosure about transmitting remaining minimum system information, not about “transmit[ting] the *demodulation reference signal*” required by the claim.

In addition, none of the cited disclosures from TR 38.912 teach transmitting the demodulation reference signal “*based on the demodulation reference signal configuration*,” as required by the claim. Ericsson relies on the disclosure “where for DL data scheduled for a slot, the DL data DM-RS location in time is not dynamically varying relative to the start of slot,” but this reliance is misplaced. Pet., 21. This disclosure simply states that the DL data DM-RS has a fixed location and says

nothing about transmitting a demodulation reference signal *based on* a specific demodulation reference signal configuration for the PDSCH carrying remaining minimum system information determined by a processor in the base station as argued by Ericsson.

Ericsson's only support for the assertion that, "[a]s a POSITA would readily understand, this means that the DM-RS is transmitted, based on the demodulation reference signal configuration, by the base station," is Dr. Laneman's Declaration. Pet., 21-22 (citing Ex. 1200, ¶¶81-82). Again, however, similar to the expert in *Xerox*, Dr. Laneman "offers only a *verbatim* restatement of the assertion being supported, without any supporting evidence or technical reasoning." *Xerox* at 16. Therefore, as in *Xerox*, Dr. Laneman's Declaration should be given "little weight." *Id.* at 17. TR 38.912 simply lacks any disclosure that "a transmitter that transmits the demodulation reference signal based on the demodulation reference signal configuration."

For these reasons, Ericsson has not shown that TR 38.912 teaches or suggests claim 11.

#### **IV. INDEPENDENT CLAIM 11 IS NOT ANTICIPATED OR RENDERED OBVIOUS BY R1-1710294**

Ericsson's Ground 4 also fails because the Petition fails to establish that R1-1710294 discloses at least the following claim elements required by independent

claim 11 and the corresponding features of independent claim 18: 1) “a processor that determines a demodulation reference signal configuration for a physical downlink shared channel carrying remaining minimum system information”; and 2) “a transmitter that transmits the demodulation reference signal based on the demodulation reference signal configuration.”

Ericsson fails to provide evidentiary support to explain how R1-1710294 teaches these claim elements. Ericsson does not even cite its expert declaration to support the conclusory statements regarding the independent claims. *See* Pet., 44-51. Even if Ericsson had, the expert declaration largely mirrors the conclusory statements of the Petition without providing independent analysis, and thus should be given little or no weight. Therefore, Ericsson has not established a reasonable likelihood that it will prevail on this ground.

**A. The Petition fails to show that R1-1710294 teaches or suggests “a processor that determines a demodulation reference signal configuration for a physical downlink shared channel carrying remaining minimum system information”**

The first element (element [11a]) of claim 11 requires an apparatus comprising “*a processor* that determines a demodulation reference signal configuration for a physical downlink shared channel carrying remaining minimum system information.” (emphasis added). The Petition fails to show that R1-1710294 teaches

or suggests a processor that determines a DM-RS configuration for a physical downlink shared channel carrying remaining minimum system information.

Ericsson concedes that R1-1710294 does not explicitly disclose such a processor, instead arguing that its disclosure is inherent or would have been obvious to add by a person of ordinary skill in the art. *See* Pet., 45 (“Such a determination would ***inherently*** be performed by a processor, and ***a POSITA would find it obvious*** to use a processor to perform this type of configuration”) (emphases added); 47 (“the processor in the gNodeB ***inherently*** must determine the demodulation reference signal configuration . . . and ***it would be obvious to a POSITA*** to use a processor for this purpose . . . . ***it would be obvious to a person of ordinary skill in the art*** for the processor in the gNodeB to determine the demodulation reference signal configuration”) (emphases added). Both arguments are contrary to law.

Regarding inherency, R1-1710294, at most, teaches that “Option 2: Presence of and the number of additional DMRS are configured by gNB.” Pet., 47. This statement is devoid of any disclosure about the claimed processor determining DM-RS “configuration,” much less the DM-RS “configuration” claimed to be “for a physical downlink shared channel carrying remaining minimum system information.”

In addition, transmitting a signal does not necessarily mean there is a processor that determines the configuration of the signal. For example, the signal’s

configuration may be fixed by hardware, such that there is no need for a processor to “determine” that signal’s configuration as claimed. Or a demodulation reference signal configuration may be specified externally via an input that is not part of the claimed apparatus, so any alleged processor in R1-1710294 would not necessarily “determine a demodulation reference signal configuration for a physical downlink shared channel carrying remaining minimum system information” as claimed.

These alternatives demonstrate that the claimed feature is not necessarily present in R1-1710294, so Ericsson has not carried its burden of demonstrating inherency. *See PersonalWeb*, 917 F.3d at 1382 (explaining “mere possibility is not enough” to establish inherency); *see also DSS Tech. Mgmt*, 885 F.3d at 1377 (the Board may not “rel[y] on ‘ordinary creativity’ ‘as a wholesale substitute for reasoned analysis and evidentiary support’ ‘when dealing with a limitation missing from the prior art references specified’”); *Arendi SARL*, 832 F.3d at 1362-63 (holding that “references to ‘common sense’—whether to supply a motivation to combine or a missing limitation—cannot be used as a wholesale substitute for reasoned analysis and evidentiary support, especially when dealing with a limitation missing from the prior art references specified . . . . In cases in which ‘common sense’ is used to supply a missing limitation, as distinct from a motivation to combine, moreover, our search for a reasoned basis for resort to common sense must be searching”); *KSR Int’l Co*, 550 U.S. at 418 (“[R]ejections on obviousness grounds cannot be sustained

by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”). Ericsson’s conclusory allegation that a person of ordinary skill would have filled the processor gap in R1-1710294 to supply this missing claim limitation is therefore contrary to law.

Moreover, Ericsson does not even cite its expert declaration to support its conclusory statement that the gNodeB includes a processor that determines the demodulation reference signal configuration for a physical downlink shared channel carrying remaining minimum system. *See* Pet., 45-47. Even if Ericsson had, the Laneman Declaration largely repeats the same conclusory statements made in the Petition and cites no evidence for support. *See* Ex. 1200, ¶¶ 143-145. An expert declaration that “merely repeats, *verbatim*, the conclusory assertion for which it is offered to support . . . adds little to the conclusory assertion for which it is offered to support, and is entitled to little weight.” *Xerox*, Paper 9 at 15 (declining to institute *inter partes* review); *see also TQ Delta*, 942 F.3d at 1360-62 (reversing obviousness determination because “expert’s conclusory statements and unspecific expert testimony did not qualify as substantial evidence that could support the Board’s conclusions regarding obviousness”) (internal quotations omitted).

Additionally, R1-1710294 fails to teach “a demodulation reference signal configuration for a physical downlink shared channel carrying remaining minimum

system information,” as required by claim 11. Ericsson does not cite *any* disclosure that the configuration of DM-RS is for the physical downlink shared channel (PDSCH) carrying remaining minimum system information, and rather attempts to glue together various untethered disclosures from R1-1710294. *See* Pet., 45-47.

Ericsson points to the disclosure of “SIB and paging” of R1-1710294 regarding the “remaining minimum system information” transmitted via NR-PDSCH. *See* Pet. 45-46. However, this disclosure is devoid of any reference to the claimed DM-RS configuration for a physical downlink shared channel carrying remaining minimum system information. As explained in the ’130 patent specification and conceded by Ericsson, SIB is not necessarily remaining minimum system information, and could be e.g., OSI (other system information). *See* Pet., 46 (citing Exhibit 1001, 9:53-55 (“system information may be divided into several parts: master information block (‘MIB’), RMSI, and other system information (‘OSI’).”)).

Ericsson’s cited excerpts from various portions of R1-1710294 about the alleged ways to configure “DM-RS” are likewise unavailing. *See* Pet., 45-50. Indeed, none of those disclosures expressly teaches, or even suggests, that the “DM-

RS” could be used in connection with “a physical downlink shared channel carrying remaining minimum system information.”<sup>3</sup>

Without more than conclusory statements, Ericsson has not shown that the prior art teaches or suggests “a processor that determines a demodulation reference signal configuration for a physical downlink shared channel carrying remaining minimum system information,” as recited in claim 11, and institution should be denied.

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<sup>3</sup> The claimed “demodulation reference signal configuration for a physical downlink shared channel carrying remaining minimum system information” in [11a] provides antecedent basis for the term “demodulation reference signal configuration” in [11b] and [11c]. Therefore, the Petition also fails to teach the corresponding terms “demodulation reference signal configuration” in [11b] and [11c] because other than the disclosure of “SIB,” Ericsson does not cite *any* disclosure about the configuration of DM-RS is for the physical downlink shared channel (PDSCH) carrying remaining minimum system information. *See* Pet., 48-51 (citing pages 5-7 of R1-1710294).

**B. The Petition fails to show that R1-1710294 teaches or suggests “a transmitter that transmits the demodulation reference signal based on the demodulation reference signal configuration”**

Claim 11 (element [11c]) further recites “a transmitter that transmits the demodulation reference signal based on the demodulation reference signal configuration.”

Here, Ericsson once again relies upon conclusory statements with no supporting evidence or analysis to suggest that this limitation is obvious. None of the cited disclosures from R1-1710294 teach a transmitter transmitting the demodulation reference signal “based on the demodulation reference signal configuration,” as required by the claim. Ericsson argues R1-1710294 discloses that a “front-loaded DMRS is transmitted using 2 OFDM symbols.” Pet., 51. This statement says nothing about transmitting a demodulation reference signal *based on* a specific demodulation reference signal configuration for the PDSCH carrying remaining minimum system information determined by a processor in the base station, as argued by Ericsson. Ericsson also relies on the disclosure “Alt. 1 of one OFDM symbol in front-load DMRS Configuration 1 is used for the broadcast PDSCH transmission.” Pet., 51. However, this statement is devoid of any disclosure about the determined DM-RS “configuration” which is “for a physical downlink shared channel carrying remaining minimum system information.” In addition, this statement is at most a disclosure about broadcast PDSCH transmission using a fixed configuration, not “based on the

demodulation reference signal configuration” determined by a processor as required by claim 11.

For these reasons, Ericsson has not shown that R1-1710294 teaches or suggests claim 11.

**V. INDEPENDENT CLAIM 18 IS NOT ANTICIPATED OR RENDERED OBVIOUS**

Petitioner does not separately argue independent claim 18 for Grounds 1 and 4. *See* Pet., 30-31, 58-59 (referring back to Petitioner’s analysis for claim 11).

Accordingly, if the Board finds no reasonable likelihood of success for claim 11, it should similarly find no reasonable likelihood of success for claim 18.

**VI. THE BOARD SHOULD EXERCISE ITS DISCRETION TO DENY INSTITUTION**

Given the specific facts of this case, the Board should exercise its discretion to deny institution. Specifically, the combination of these specific facts warrants a discretionary denial:

- 1) The ITC completed the evidentiary hearing before the Petition was filed.
- 2) An Initial Determination is due before institution. Ex. 2006.
- 3) Most of Ericsson’s grounds rely on references that have not been established as prior art.

- 4) The only remaining ground 1 as well as ground 4 are weak because they rely on multiple inherency arguments and rely on conclusory and unsupported expert testimony as discussed above.

The Board's precedent suggests a denial would be appropriate here. First, while the Vidal Memo indicated that "[t]he PTAB will not discretionarily deny petitions based on applying *Fintiv* to a parallel ITC proceeding," p. 7<sup>4</sup>, the Memo only addressed *Fintiv* denials. *Fintiv*, however, is a test for when the Board will exercise its discretion based on a final written decision occurring after trial. The facts here are more extreme: trial has already occurred, and an initial determination is due before institution. Accordingly, the logical reasons for a *Fintiv* denial are all amplified. The investment by the parties has been substantial and this petition is a clear attempt to relitigate validity.

The Board should also deny institution because a majority of the grounds are not viable, with Petitioner failing to establish that the references are prior art in four of the five grounds. *Chevron Oronite Co. LLC v. Infineum USA L.P.*, Case IPR2018-

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<sup>4</sup> The Vidal Memo also recognized that many panels had previously denied IPR's based on corresponding ITC investigations. It did not claim that those were beyond the Board's authority. It only stated that the policy would be not to do so based on *Fintiv*.

00923, Paper 9 (Nov. 7, 2018) (informative on insufficient number of proposed grounds/challenges to claims meet reasonable likelihood standard). And even if there were some likelihood of success on the single remaining ground, a denial would still be appropriate. That remaining ground is at best weak because it repeatedly relies on conclusory and unsupported expert testimony to gap fill. Uncompelling merits favor a discretionary denial. Vidal Memo, pp. 3-5.

Accordingly, based on the specific facts of this case, the Board should deny institution.

## **VII. CONCLUSION**

For the reasons above, Patent Owner requests that institution be denied.

Dated: February 27, 2025

By: /Cory C. Bell/  
Cory C. Bell, Lead Counsel  
Reg. No. 75,096

**CERTIFICATE OF SERVICE**

The undersigned hereby certifies that a copy of the foregoing **Patent Owner's Preliminary Response** was served on February 27, 2025, via email directed to counsel of record for Petitioner at the following:

Christopher P. McNett  
[cmcnett@mckoolsmith.com](mailto:cmcnett@mckoolsmith.com)

Nicholas Mathews  
[nmathews@mckoolsmith.com](mailto:nmathews@mckoolsmith.com)

Matthew T. Cameron  
[mcameron@mckoolsmith.com](mailto:mcameron@mckoolsmith.com)

Casey L. Shomaker  
[cshomaker@mckoolsmith.com](mailto:cshomaker@mckoolsmith.com)

[ericsson\\_lenovo\\_iprs@mckoolsmith.com](mailto:ericsson_lenovo_iprs@mckoolsmith.com)

Dated: February 27, 2025

By: /Lisa C. Hines/  
Lisa C. Hines  
Case Manager  
FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, LLP