

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC, CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS, T-MOBILE USA, INC., AT&T SERVICES, INC., NOKIA OF AMERICA, CORP.,
AND ERICSSON INC.,
Petitioners,

v.

PEGASUS WIRELESS INNOVATION LLC,
Patent Owner.

Case IPR2025-00290
U.S. Patent No. 10,721,118

PATENT OWNER'S PRELIMINARY SUR-REPLY¹

¹ The Board terminated this matter on June 26, 2025. Patent Owner is filing this authorized sur-reply on its due date to complete the record.

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PATENT OWNER'S EXHIBIT LIST

Exhibit No.	Description
2001	Memorandum Opinion and Order in <i>Pegasus Wireless Innovation LLC v. Verizon Communications Inc. et al.</i> , Nos. 2:23-cv-00640, 2:23-cv-00638, 2:23-cv-00639 (E.D. Tex Dec. 11, 2024)
2002	Memorandum Opinion and Order in <i>Pegasus Wireless Innovation LLC v. Verizon Communications Inc. et al.</i> , Nos. 2:23-cv-00640, 2:23-cv-00638, 2:23-cv-00639 (E.D. Tex Dec. 23, 2024)
2003	Reserved
2004	Defendants' Preliminary Invalidity Contentions in <i>Pegasus Wireless Innovation LLC v. Verizon Communications Inc. et al.</i> , Nos. 2:23-cv-00640, 2:23-cv-00638, 2:23-cv-00639 (E.D. Tex May 17, 2024)
2005-2017	Reserved
2018	Comparison of Districts Within the Fifth Circuit — 12-Month Period Ending September 30, 2024 (available at https://www.uscourts.gov/sites/default/files/2025-02/fcms_na_distcomparison1231.2024.pdf)
2019-2049	Reserved
2050	Defendants' Amended Invalidity Contentions in <i>Pegasus Wireless Innovation LLC v. Verizon Communications Inc. et al.</i> , Nos. 2:23-cv-00640, 2:23-cv-00638, 2:23-cv-00639 (E.D. Tex November 1, 2024)
2051	Defendants' Amended Invalidity Contentions in <i>Pegasus Wireless Innovation LLC v. Verizon Communications Inc. et al.</i> , Nos. 2:23-cv-00640, 2:23-cv-00638, 2:23-cv-00639 (E.D. Tex December 23, 2024)
2052	Defendants' Motion for Leave to Amend Invalidity Contentions in <i>Pegasus Wireless Innovation LLC v. Verizon Communications Inc. et al.</i> , Nos. 2:23-cv-00640, 2:23-cv-00638, 2:23-cv-00639 (E.D. Tex. January 24, 2025)
2053	Appendices to Defendants' Preliminary Invalidity Contentions in <i>Pegasus Wireless Innovation LLC v. Verizon Communications Inc. et al.</i> , Nos. 2:23-cv-00640, 2:23-cv-00638, 2:23-cv-00639 (E.D. Tex November 1, 2024)
2054	Exhibits to Appendices of Defendants' Preliminary Invalidity Contentions in <i>Pegasus Wireless Innovation LLC v. Verizon</i>

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	<i>Communications Inc. et al.</i> , Nos. 2:23-cv-00640, 2:23-cv-00638, 2:23-cv-00639 (E.D. Tex November 1, 2024)
2055-2099	Reserved
2100	U.S. Pat. 10,952,099 (Futaki counterpart)
2101-2203	Reserved
2204	Fifth Amended Docket Control Order, issued April 14, 2025

Patent Owner's Preliminary Sur-Reply was authorized by the Board via email on June 2, 2025.

I. FUTAKI'S X2 MESSAGE IS NOT A DETERMINATION TO ADD A SECONDARY BASE STATION SRB

Each independent claim of the '118 patent (claims 1, 7, and 10) requires that a secondary base station determines whether to add a secondary base station signaling radio bearer (SRB) to user equipment. In Petitioners' lead reference, it is Futaki's *master base station*, not its secondary base station, that determines whether to add a secondary base station SRB to user equipment. As Patent Owner argued in its Preliminary Response ("POPR"), Futaki discloses a step 802 where master base station "initiates" a procedure to add (or modify) a secondary base station SRB by sending a signal to the secondary base station. POPR, 2, 14-16 (discussing Futaki, [0079]-[0082]).

Petitioners dispute this technical point, arguing in their Reply that they will explain how Futaki's 5G specific eNB decides "to add the secondary base station SRB by transmitting a first request to notify the master base station (i.e., an LTE+ eNB) regarding the new 5G cell," and how a secondary base station then configures "the secondary base station SRB, thus 'determining' whether to add a secondary SRB to a UE." Reply, 1. Oddly, Petitioners' attempt to explain this process is buried on Reply page 4, and reflects a flawed understanding of Futaki.

Per the Reply, the "master base station only acts 'in response to' a message

(i.e., the X2 message) from the secondary base station.” Reply, 4. Based on this disclosure, Petitioners allege that master base station makes no determination to initiate the SeNB Modification procedure, and is just responding to the X2 message from the secondary base station. But Petitioners confuse mandatory and permissive actions. Per Petitioners’ translations of Futaki in both Ex. 1007 and Ex. 1008, Futaki discloses a permissive initiation; namely “[i]n response to receiving the X2 message, the LTE+ eNB 5 *may initiate* a SeNB Modification procedure.” Ex. 1007, [0080] (emphasis added); *see also* Ex. 1008, [0080] (“LTE+eNB5 *may initiate* a SeNB Modification procedure in response to receiving the X2 message. For example, LTE+ eNB 5 *may send* a SeNB Modification Request message (RRC Container: SCG-ConfigInfo) to 5G specific eNB6 (step 802).”) (emphasis added). Futaki does not require the master base station to initiate a SeNB Modification procedure in response to receiving the X2 request, and Petitioners present no evidence to the contrary. Instead, Futaki indicates that the master base station may or may not initiate the SeNB Modification procedure, and therefore the master base station determines whether to perform the initiation.

Even the Petition refers to the messages sent from secondary base station to the master base station in steps 801A and 801B as *requests*, describing these messages as an “Initial *request* transmitted by secondary base station to add its own SRB.” Pet., 37 (annotating Futaki’s Fig. 8) (emphasis added). Where a

request is sent to the master base station, and the master base station determines whether to send the SeNB Modification Procedure message after receiving the request, it is the master base station that is making the determination, not the secondary base station. Petitioners' spin of Futaki the other way is unavailing.

II. FUTAKI'S CONFIGURATION PROCESS IS NOT A DETERMINATION TO ADD A SECONDARY BASE STATION SRB

Petitioners also contend that “Futaki clearly discloses that *the New RRC layer provided by the 5G specific eNB* (i.e., the secondary base station) ‘determines’ the addition of the secondary base station SRB at least because Futaki states that the New RRC layer of the secondary base station configures and/or sets up the signaling radio bearer with the UE.” Reply, 2 (emphasis in original). But this assertion requires the Board to conclude that *configuring or setting up* a signaling radio bearer (SRB) is the same thing as *determining* to add a secondary base station SRB. This argument should be rejected for many reasons, including first that it depends on a claim construction that Petitioners did not properly advance in the Petition. *See* Pet., 15-16 (failing to present any claim construction for “wherein the addition of the secondary base station SRB is determined by the secondary base station” as recited in claim 1 and as similarly recited in claims 7 and 10); 37 C.F.R. § 42.104(b)(3) (a petition must include “[h]ow the challenged claim is to be construed.”). Petitioners' argument that “‘configuring’ is encompassed by ‘determining’” in the ’118 patent notably lacks expert support,

and improperly confuses the separate concepts of “configuring” an SRB versus “determining” to add an SRB. The fact that the ’118 patent discloses both concepts does not eliminate the difference between them.

In addition to failing on procedure, this argument also fails for lack of merit. The keystone of Petitioners’ argument—that configuring or setting up a signaling radio bearer is the same thing as determining to add a secondary base station SRB—is that “the ’118 Patent specification and prosecution history” support the characterization of “configuring” to be tantamount to “determining.” Reply, 1-2; *see also* Pet., 35 (“Futaki discloses the secondary base station determining the addition of the secondary base station SRB by newly configuring the New 5G specific SRB.”). The Reply refers to the Petition’s discussion of this topic, without addressing the mistakes made there. Reply, 1 (citing Pet., 36-38); *see also id.*, 3 (citing Pet., 36-38). As noted in the POPR, the Petition (*see* Pet. 36 (citing ’118 patent, 6:63-64; 6:60-66)) failed to realize that it was discussing quoted disclosure from the ’118 patent that described “typical technology” and ***not the disclosed improvement in the ’118 patent***. *See* ’118 patent, 6:60-61. The Reply fails to even address this mistake. The Petition’s discussion of the ’118 patent’s specification and prosecution history falls far short of supporting Petitioners’ characterization. Pet., 36-38.

As also noted in the POPR, “adding” and “configuring” are different terms

in the '118 patent claims. Petitioners' argument that Futaki discloses configuring or setting up a secondary base station SRB does not answer the question of which component of Futaki "determines" to add a secondary base station SRB.

Finally, as also noted in the POPR, the '118 patent fully describes and supports the claimed feature of a secondary BS determining whether to add the secondary BS SRB to the UE. In step S210, a UE configuring dual connectivity may add and configure a secondary BS signaling radio bearer (SRB). '118 patent, 9:50-52. The secondary BS may determine whether to add the secondary BS SRB to the UE. '118 patent, 9:57-60. In step S220, the UE may receive a radio resource control (RRC) message including radio resource configuration information on the secondary BS through the secondary BS SRB. '118 patent, 10:1-12. If the UE is unable to comply with radio resource configuration information included in an RRC message, the UE may transmit a failure information message to the master BS, as shown in step S230. '118 patent, 10:19-30. Petitioners' attempt to undercut this clear disclosure with a tortured reading of the prosecution history and background discussions cannot redefine the claim terms at issue.

III. CONCLUSION

For these reasons, the Grounds are deficient and Patent Owner asks that the Petition be denied.

Dated: June 30, 2025

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CERTIFICATE OF SERVICE

Petitioner has consented to e-mail service in this proceeding. Pursuant to 37 C.F.R. §42.6, the undersigned certifies that on June 30, 2025, a copy of the foregoing document was served by email upon the following counsel at the below email addresses:

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