

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD.,
AND SAMSUNG ELECTRONICS AMERICA, INC.,
Petitioner,

v.

HANNIBAL IP LLC,
Patent Owner.

Case IPR2025-01190
Patent No. 11,641,661

PATENT OWNER HANNIBAL IP LLC's PRELIMINARY RESPONSE

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PATENT OWNER'S EXHIBIT LIST

Exhibit No.	Description
2008	Ericsson, "Feature lead summary for beam management," 3GPP TSG-RAN WG1 Meeting #94, 2018, Tdoc R1-1809864, pp. 1-26, Gothenburg, Sweden.
2009	<i>Nokia</i> , IPR2021-00533, Ex. 147-1011 (Declaration of Susanna Kallio)

I. INTRODUCTION

Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc.’s (collectively “Petitioner” or “Samsung”) Petition for inter partes review (“IPR”) of U.S. Patent No. 11,641,661 (“the ’661 Patent”) fails to establish a reasonable likelihood that any challenged claim is unpatentable. Specifically, the Petition relies on a 3GPP working group proposal (Ex. 1006) that Petitioner failed to qualify as prior art. Indeed, Petitioner relies solely on the opinion of its expert—who has no personal knowledge—to attempt to establish the authenticity and accessibility of this reference. But the expert’s testimony simply parrots inadmissible hearsay and presents no admissible evidence sufficient to establish the document as prior art as a matter of law. 37 C.F.R. § 42.62(a) (“the Federal Rules of Evidence shall apply to a proceeding.”); FED. R. EVID. 901(a)(1) (requiring testimony of a witness *with knowledge* to authenticate an item of evidence); *Orion IP, LLC v. Hyundai Motor America*, 605 F.3d 967, 974 (Fed. Cir. 2010) (To “qualify as a printed publication, the [reference] must have been disseminated or otherwise made accessible to persons interested and ordinarily skilled in the subject matter to which [the reference] relates prior to the critical date.”).

Even assuming Petitioner adequately qualified the reference as prior art—which it did not—the combination of references Samsung relies on fail to disclose the requirements of the independent claims of the ’661 Patent. Petitioner fails to

address the deficiencies or relies solely on the *ipse dixit* of its technical expert to improperly fill the voids. *See* 37 C.F.R. § 42.104(b)(4).

Finally, the references relied on in the Petition are the same or substantially the same as references reviewed during prosecution. For all these reasons, Hannibal IP LLC (“Hannibal” or “Patent Owner”) respectfully requests that the Director decline to institute this inter partes review.

II. THE ’661 PATENT DISCLOSES NOVEL TECHNIQUES FOR BEAM MANAGEMENT

A. The ’661 Patent

The ’661 Patent issued on May 2, 2023, and claims priority to U.S. Patent Application No. 62/754,165, filed on November 1, 2018. The ’661 Patent is directed to solving the problem of unfavorable beam switching in 5G wireless communication when User Equipment (UE) is configured with multiple CORESETs. The ’661 Patent provides a unique solution to this problem through the strategic application of Quasi-Co-Location (QCL) assumptions, among other things.

The inventions of Independent Claims 1 and 9 provide a novel and non-obvious equipment and method for managing beam operations. Specifically, both claims require the user equipment to: “monitor at least one of a plurality of Control Resource Sets (CORESETs) configured for the UE within an active Bandwidth

Part (BWP) of a serving cell in a time slot;” “receive/obtain Downlink Control Information (DCI) scheduling a Downlink (DL) Reference Signal (RS), wherein a scheduling offset between an end of a last symbol of a Physical Downlink Control Channel (PDCCH) carrying the DCI and a beginning of a first symbol of a resource carrying the DL RS is less than a threshold; and to “apply a first Quasi Co-Location (QCL) assumption of a first CORESET of a set of one or more of the monitored at least one of a plurality of CORESETs to receive a DL RS....” Ex. 1031 at Claim 1, 9.

The Examiner expressly found all claims of the ’661 Patent patentable. In describing the cited references during prosecution, the Examiner stated:

The cited references...teach some limitations of the independent claim. However, the examiner disagrees with the assertion...that EACH AND EVERY LIMITATION is taught. In addition, the reference uses terms and language similar to the claimed invention, but leaves a large disconnect in the steps and limitations. The cited Ericsson reference does not fully, clearly and explicitly teach **applying a first QCL assumption** of a **first CORESET of a set** of one or more of the monitored at least one of the plurality of CORESETs to receive a DL RS.¹ Further, Ericsson does not explicitly teach the **first** CORESET is associated with a monitored SEARCH space. Therefore, the examiner maintains his reasons for allowance stated in the office action mailed 6/3/22.

¹ The Ericsson reference, Ex. 2008, stated “[f]or FR2, the NW may schedule an ap-CSI-RS with a shorter delay than a threshold, and the UE applies a *default QCL assumption*.” (emphasis added).

Ex. 1032 at p. 585 (emphasis in original). Like the references cited during prosecution, the combination of references, if they qualify as prior art, fail to disclose or suggest each and every limitation of the claims of the '661 Patent.

B. Overview of the Petition

Petitioner challenges all claims on two obviousness grounds. *See* Petition at 19. Specifically, in Ground 1, Petitioner challenges Claims 1-16 as obvious based on *Guo* (Ex. 1005) in view of *Intel* (Ex. 1006). In Ground 2, Petitioner challenges Claims 1-16 as obvious based on *5G-Standard* (Ex. 1012) in view of *Intel*.

C. Schedule in this IPR Proceeding

Samsung filed its Petition on July 29, 2025, which was accorded that filing date by the Notice of Filing Date Accorded mailed August 12, 2025. Hannibal's Preliminary Response is due November 12, 2025. The Director's decision on institution must be made by February 12, 2026. The Board's Final Written Decision ("FWD") must be issued before February 12, 2027. Notably, the FWD will most likely issue after the jury trial in the Litigation. *See* Section IV.C below.

III. LEVEL OF ORDINARY SKILL IN THE ART

Petitioner provides no analysis regarding its assertion of the level of ordinary skill in the art and relies solely on the conclusory opinion of its technical expert. Petition at 16. For purposes of this Preliminary Response only, Patent Owner does not challenge the definition of the Person of Ordinary Skill in the Art ("POSITA")

provided by Petitioner because the combination of references, if they even qualify as prior art, fail to disclose or render obvious all the requirements of the challenged claims even under Petitioner's assertion of a POSITA.

IV. INSTITUTION OF INTER PARTES REVIEW SHOULD BE DENIED

A. Petitioner Fails to Establish *Intel* as prior art

Petitioner failed to provide competent evidence establishing the publication date and public accessibility of 3GPP working group proposal, *Intel* (Ex. 1006). This reference forms the basis of both Grounds asserted in the Petition.

Samsung relies solely on the testimony of Mr. Friedhelm Rodermund to prove up the authenticity and public accessibility of the *Intel* reference. *See e.g.*, Petition at 17-18; Ex. 1029 at ¶ 2, 25. But Mr. Rodermund's Declaration (Ex. 1029) does not reveal any personal knowledge of the document, the date the purported prior art was available through the 3GPP website, or 3GPP's publication practices after he left ETSI in 2004—and especially not in the relevant time frame of 2018. Further, Mr. Rodermund's declaration fails to establish that the working group proposals were disseminated or otherwise made accessible to skilled artisans before the November 1, 2018 priority date of the '661 Patent.

1. Mr. Rodermund has no personal knowledge regarding the Intel reference or when it was available through the 3GPP website

Mr. Rodermund purports to attest to the authenticity and availability of the *Intel* reference. Ex. 1029 at ¶ 25. But with no relevant personal knowledge, Mr. Rodermund cannot attest to the authenticity of any information from the 3GPP website. FED. R. EVID. 901(a)(1) (requiring testimony of a witness *with knowledge* to authenticate an item of evidence).

Mr. Rodermund does not assert that he has personal knowledge of the reference, the submission of the reference to 3GPP, or the posting of this reference to 3GPP's website. Mr. Rodermund is not an author or contributor to *Intel*. Nor does Mr. Rodermund testify that he received, reviewed, or even knew of *Intel* before November 1, 2018, the priority date of the '661 Patent.² See Ex. 1029. Indeed, Mr. Rodermund makes no contention that he has any personal knowledge of this document. *See id.*

Further, Mr. Rodermund has no personal knowledge of the creation of date stamps, metadata, and other information associated with the *Intel* reference from 3GPP's FTP server. Mr. Rodermund does not testify that he uploaded the information to the 3GPP's FTP server, nor does he identify any individuals who

² Petitioner does not challenge the priority date of the '661 Patent.

did. Similarly, Mr. Rodermund does not have personal knowledge of whether the document was available for download before the critical date. He does not testify that he, nor any other individual, downloaded or otherwise accessed the *Intel* reference via 3GPP's FTP server before November 1, 2018. At best, Mr. Rodermund merely parrots inadmissible hearsay from the 3GPP website. *See e.g., id.* at ¶ 63 (“Based on my personal knowledge *and my review of 3GPP's business records*”) (emphasis added);³ ¶ 64 (“*On its face*, R1-1808197 refers to the RAN WG1 meeting #94 held on August 20th-24th, 2018...*this information tells me* that R1-1808197 was available either prior to or during or shortly after that meeting to at least all attending 3GPP members”) (emphasis added); ¶ 65 (“public availability of the document is confirmed by the date stamp [on the 3GPP FTP server]”). Mr. Rodermund is not the custodian of these records and has not been employed by 3GPP or ETSI for over twenty years. *See e.g., Ex. 1029* at ¶ 3 (confirming employment only between 1998 to 2004); ¶¶ 109-117 (basing entire opinion on information from 3GPP website). Mr. Rodermund has no ability to confirm the accuracy or reliability of the date information provided by the 3GPP website, let alone as of the priority date for the '661 Patent.

³ Mr. Rodermund's personal knowledge is limited to “3GPP's standard business and records keeping practices” from June 1998 through December 2004. *See Ex. 1029* at ¶ 3.

Moreover, Mr. Rodermund's assertions are directly contradicted by 3GPP and ETSI's own official statements. Indeed, 3GPP and ETSI expressly disclaim the accuracy or reliability of any information contained on the 3GPP Website. *See* Ex. 2004 (3GPP Terms of Use) at 3. In its Terms of Use for the 3GPP website, ETSI provides an express disclaimer and states that it "makes no representations or warranties as to the accuracy, reliability or completeness of any information incorporated thereto and contained on the 3GPP Website." *Id.* Mr. Rodermund purports to attest to the accuracy of information that even the company providing the information would not do.

As set forth above, Mr. Rodermund's testimony is speculative and merely parrots inadmissible hearsay. Accordingly, Petitioner fails to provide sufficient evidence to reasonably show that *Intel* qualifies as prior art. *See e.g.*, FED. R. EVID. 901, 802. Without this reference, Petitioner cannot reasonably prevail under either Ground in the Petition.

2. Petitioner fails to show a reasonable likelihood that *Intel* was publicly accessible

To "qualify as a printed publication, the [reference] must have been disseminated or otherwise made accessible to persons interested and ordinarily skilled in the subject matter to which [the reference] relates prior to the critical date." *Orion IP*, 605 F.3d at 974. And "[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. Sec. Sys., Inc.*, 511 F.3d 1186, 1194 (Fed. Cir. 2008) (quoting reference omitted). For electronic documents, whether such documents were indexed or catalogued, or if there were other tools for customary and meaningful research are factors relevant to the determination of public accessibility. *See id.* at 1196.

Mr. Rodermund opines that the *Intel* reference was publicly available based on its alleged inclusion on the 3GPP ftp server. Ex. 1029 at ¶ 117. But Mr. Rodermund fails to provide any evidence that the reference or 3GPP’s ftp server was indexed, catalogued, or included other tools for customary and meaningful research to show public accessibility. *SRI Int’l*, 511 F.3d at 1196. Mr. Rodermund’s testimony is that these working group proposals are maintained on the 3GPP ftp server by their temporary document (TDoc) number (*e.g.*, R1-1810751). *See e.g.*, Ex. 1029 at ¶ 111. But there is no evidence that before the critical date the 3GPP ftp server included any mechanism to meaningfully search for relevant documents. Even now, a skilled artisan without prior knowledge of 3GPP’s practices and nomenclature would have to comb through thousands of unindexed and uncatalogued documents to locate allegedly relevant working group proposals such as *Intel*. It would be unlikely that a person of skill in the art exercising reasonable

diligence would locate these references. Importantly, there is no evidence to the contrary and, therefore, there is no evidence that the references were publicly accessible. *Samsung Elecs. Co. v. Infobridge Pte. Ltd.*, 929 F.3d 1363, 1372 (Fed. Cir. 2019) (“A work is not publicly accessible if the only people who know how to find it are the ones who created it.”).

Mr. Rodermund does not testify otherwise. Indeed, while Mr. Rodermund testifies that for Technical Specifications “a person without prior knowledge of 3GPP and/or the technical specification (TS) number would have been able to easily find the TS for download via internet search,” he makes no such claim for the working group proposals such as *Intel. Compare* Ex. 1029 at ¶¶ 169-173 (for Technical Specifications) with ¶¶ 109-117 (for *Intel*). Nor does his testimony discuss search capabilities before the critical date. Thus, there is no evidence that a skilled artisan exercising reasonable diligence, could have located *Intel* through the 3GPP FTP server or other search before November 1, 2018.

The Board, in a nearly identical circumstance, found that a working group proposal “was not publicly accessible through the 3GPP ftp server.” *Nokia of America v. IPCOM, GmbH & Co. KG*, IPR2021-00533, Paper 10 at 30 (P.T.A.B. Aug. 12, 2021).⁴ In *Nokia*, petitioner, in a challenge brought in 2021, sought to rely

⁴ *Compare* Ex. 2009 (*Nokia*, IPR2021-00533, Ex. 147-1011 (Declaration of Susanna Kallio)) with Ex. 1029 (Declaration of Mr. Rodermund).

on a working group proposal purportedly submitted to a 3GPP working group in 1999. *Id.* at 6, fn. 5. Petitioner relied on the declaration of Ms. Susanna Kallio in support of its contention that the working group proposal was publicly accessible in late May 1999. *Id.* at 22-23. Ms. Kallio purported to have had years of experience with working groups, and allegedly had knowledge regarding how such working group proposals are “drafted, distributed, stored and made available to the public.” Ex. 2009 at ¶ 3. (*Nokia*, IPR2021-00533, Ex. 147-1011). Ms. Kallio’s declaration discussed the general practices of 3GPP relating to its working groups, 3GPP documents, and purported to describe how proposals were allegedly published to 3GPP’s ftp server. *See id.* at ¶¶ 6-24. She relied on a final meeting report and date stamp from the 3GPP ftp server to support her contention that the working group proposal was publicly available. *Id.* at ¶¶ 26-28, 30.

The Board first determined that the relevant working group proposal could have been publicly accessible in two ways: (1) if it was sufficiently disseminated at or around the time of the 3GPP meeting; or (2) “made available to the extent that persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence, can locate it.” *Nokia*, IPR2021-00533, Paper 10 at 27.

In addressing dissemination at the 3GPP meeting, the petitioner there asserted that the working group proposal was provided to attendees of the relevant meeting based on an email attaching the final meeting report. *See id.* at 24. But the

Board in *Nokia* found that the “final meeting report [was] not disseminated because there is no persuasive evidence that [it was] provided to those of ordinary skill in the art.” *Id.* at 28. Importantly, the Board found no evidence showing to whom, if anyone, the final meeting report was sent to. *Id.*

With respect to whether the working group proposal was “available to the extent persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence, can locate it,” the petitioner in *Nokia* asserted that the proposal was available because it was on the 3GPP ftp server. *Id.* at 30. The Board, however, found that the working group proposal was not publicly accessible. *Id.* The Board determined that there was no evidence that the 3GPP ftp server included the necessary “index, catalog, or other tools for meaningful search” to sufficiently show that the reference was publicly accessible through the ftp server. *Id.* at 30-31. For the above reasons, the Board determined that the petitioner failed to show the working group proposal was publicly accessible under either analysis.⁵ *Id.* at 31.

⁵ The Board further determined that petitioner failed to show a reasonable likelihood that the challenged claims were unpatentable over this working group proposal. But the Board instituted because petitioner had shown a reasonable likelihood of prevailing on another ground. Here, all grounds are based on working group proposals.

Here, like the petitioner in *Nokia*, Samsung fails to show that the *Intel* reference was publicly accessible. First, there is no evidence that the reference was disseminated to anyone during a 3GPP meeting. Just like in *Nokia*, Samsung's expert, Mr. Rodermund, cannot identify any individuals who purportedly were provided with these references during the meeting. *See* Ex. 1029 at ¶ 116. There is no evidence that *Intel* was disseminated to any attendee.

Further, Petitioner fails to show that the reference was publicly accessible through the 3GPP ftp server. Just like in *Nokia*, there is no evidence, here, that *Intel* was indexed or catalogued on the ftp server or that the ftp server included tools for customary and meaningful search such that a person of ordinary skill could locate it. Indeed, the proposal is identified on the 3GPP ftp server only by its file name, R1-1810751. *See id.*; Ex. 1029 at ¶ 111. And just like the witness's declaration in *Nokia*, here, Mr. Rodermund presents no testimony that a person of ordinary skill in the art was aware of 3GPP's nomenclature or would have understood the contents of the working group proposals based on the filename. *Nokia*, IPR2021-00533, Paper 10 at 30. Thus, Petitioner fails to show that *Intel* was "sufficiently accessible to the public interested in the art," which is fatal to the Petition. *Orion IP*, 605 F.3d at 974.

For the reasons above, Petitioner fails to show that the *Intel* reference qualifies as prior art. *See id.*; *Nokia*, IPR2021-00533, Paper 10 at 31. And without

Intel as prior art, Petitioner cannot show a reasonable likelihood that Petitioner would prevail on any claim challenged in the Petition.

B. The Combination of References Fail to Disclose or Render Obvious Any Claim of the '661 Patent

- 1. Ground 1: Neither *Guo* nor *Intel* teaches or suggest “a scheduling offset between an end of a last symbol of a Physical Downlink Control Channel (PDCCH) carrying the DCI and a beginning of a first symbol of a resource carrying the DL RS is less than a threshold”**

In Ground 1, Petitioner asserts that Claims 1-16 of the '661 Patent are obvious based on the combination of *Guo* and *Intel*. Petition at 19. Among other things, independent claims 1 and 9 (the two independent claims in the '661 Patent) require “wherein a scheduling offset between an end of a last symbol of a Physical Downlink Control Channel (PDCCH) carrying the DCI and a beginning of a first symbol of a resource carrying the DL RS is less than a threshold.” Ex. 1031 at claims 1, 9. Petitioner relies on its expert to support its contention, but Dr. Bims is wrong. Petition at 28-31; Ex. 1003 at ¶¶ 127-131.

First, *Intel* does not disclose the required scheduling offset. *Intel* expressly describes a scheduling offset “between the *reception* of the DL DCI and the corresponding PDSCH,” not between the required “last symbol of a Physical Downlink Control Channel (PDCCH) carrying the DCI and a beginning of a first symbol of a resource carrying the DL RS.” Ex. 1006 at 2 (emphasis added).

Similarly, *Guo* also fails to disclose the specific offset required by the claims. Like *Intel*, the offset disclosed by *Guo* is also “between *reception* of the DL DCI and the corresponding PDSCH.” Ex. 1005 at ¶ 134 (emphasis added). Accordingly, neither *Guo* nor *Intel* disclose the required offset.

Dr. Bims appears to recognize the flaws of both references and attempts to fill the void with a mischaracterization of *Guo*. Namely, Dr. Bims wrongly contends that *Guo* “further discloses that the scheduling offset in this circumstance ‘is the minimum time duration this UE needs’ so that this UE can decode the DCI before starting the scheduled transmission.” Ex. 1003 at ¶ 129 *citing Guo* at ¶ 135. But *Guo* makes no such assertion. Indeed, paragraph 135 of *Guo* does not discuss a scheduling offset or even use the word “offset” at all. Ex. 1005 at ¶ 135. Rather, it describes how to calculate threshold “T.” Ex. 1005 at ¶ 135 (“the threshold T can be calculated by the following procedure...”). Further, it discloses that one of the variables used in the algorithm to determine the threshold is T_0 , which is described as “the minimum time duration this UE needs between PDCCH and PDSCH....” *Id.* Contrary to Dr. Bims assertions, *Guo* does not define this minimum as the “threshold,” nor does it describe it as an offset to compare to a threshold. Further, there is no evidence supporting Petitioner and Dr. Bim’s contention that the scheduling offset between the PDCCH and PDSCH is the same as a scheduling offset between the PDCCH and resource carrying the DL RS. *See* Petition at 30;

Ex. 1003 at ¶ 129. The lone statement from *Guo* does not support this contention.

Indeed, all *Guo* says is that the DCI can both schedule the PDSCH and trigger CSI-RS resources, it says nothing about the scheduling offset between these resources.

See Ex. 1005 at ¶ 189. Dr. Bims' opinion is completely unsupported by *Guo*.

Neither *Intel* nor *Guo* discloses the required scheduling offset. In fact, the two references disclose the same scheduling offset between “*reception* of the DL DCI and the corresponding PDSCH.” Ex. 1006 at 2; Ex. 1005 at ¶ 134. There is no basis, motivation, or teaching to suggest modifying the offset disclosed in the references to the offset required by the claims of the '661 Patent. Accordingly, Petitioner fails to establish a reasonable likelihood of prevailing on Ground 1.

2. Ground 2: There is no motivation to combine TS 38.214 V15.3.0 and *Intel* as Petitioner suggests

In Ground 2, Petitioner asserts that Claims 1-16 of the '661 Patent are obvious based on the combination of TS 38.214 v15.3.0 (Ex. 1012; referred to herein as *5G-Standard*)⁶ and *Intel*. Petition at 46. Independent claims 1 and 9 require, among other things, “wherein a scheduling offset between an end of a last symbol of a Physical Downlink Control Channel (PDCCH) carrying the DCI and a beginning of a first symbol of a resource carrying the DL RS is less than a

⁶ The Petition refers to this reference as *5G-Standard*. For ease of reference, this POPR will use the same nomenclature, but this reference is merely one version of a Technical Specification describing parts of an overall standard.

threshold,” and “apply[ing] a first Quasi Co-Location (QCL) assumption of a first CORESET of a set of one or more of the monitored at least one of a plurality of CORESETs to receive a DL RS.” Ex. 1031 at claims 1 and 9. Neither reference discloses these requirements, nor does the combination of references disclose these requirements. But as discussed below, Petitioner’s rationale and motivation to combine the two references is based on incorrect information. *See* Petition at 46-48. Because the references belie Petitioner’s assertion, it fails to show any motivation to combine these references.

First, there is no rationale to combine *5G-Standard* and *Intel* as Petitioner contends. Petition at 46 (citing to Ex. 1003 at ¶ 162 and different portions of *5G-Standard*). Petitioner relies on the opinion of Dr. Bims, but his rationale to combine the references is based on the incorrect assertion that “*5G-Standard* disclosed the use of the ‘lowest CORESET-ID’ in the context of a default QCL assumption.” *See* Ex. 1003 at ¶ 162 *citing* Ex. 1012 at 26. *5G-Standard* makes no such assertion. The portion of *5G-Standard* that Dr. Bims cites to at page 26 does not discuss, or even mention, a “default QCL assumption.” Ex. 1012 at 26. And indeed, the authors of *5G-Standard* expressly distinguished between specific QCL assumptions and a default QCL assumption. *See* Ex. 1012 at 26 (applying QCL information of a lowest CORESET-ID in the latest slot); 1012 at 40 (applying default QCL assumption). Further, Dr. Bims admits that he is uncertain of what the

“default QCL assumption” described by *5G-Standard* even refers to. *See* Ex. 1003 at ¶ 117 (“the 5G Standard did not specify what the ‘default QCL assumption’ is”). Dr. Bims’ and Petitioner’s entire premise for a rationale to combine *5G-Standard* and *Intel*, namely that both disclose a “default QCL assumption” is based on a mischaracterization of the references. Accordingly, Petitioner fails to show any reason to combine the references.

Second, Petitioner’s purported motivation to combine the references is also wrong. Petitioner bases its motivation to combine on the premise that both *5G-Standard* and *Intel* disclose the same scheduling offset. They do not. As discussed above, the only offset disclosed by *Intel* is “between the *reception* of the DL DCI and the corresponding PDSCH.” Ex. 1006 at 2 (emphasis added). This is completely different from the offset described in the section of *5G-Standard* Petitioner seeks to rely on, which describes an offset between “the last symbol of the PDCCH carrying the triggering DCI and the first symbol of the aperiodic CSI-RS resources.” Ex. 1012 at 40. Nowhere does Petitioner or its expert, Dr. Bims, identify this distinction and explain why it would be appropriate to mix and match these disclosures. *See e.g.*, Petition at 46-49; Ex. 1003 at ¶¶ 162-171. Again, Petitioner’s basis for asserting a motivation to combine is based on a mischaracterization of the references. Therefore, Petitioner fails to present any

competent evidence supporting a motivation to combine *5G-Standard* and *Intel*.

The Petition should be denied.

Even assuming *Intel* was sufficiently shown to qualify as prior art, the combination of references fails to disclose or render the claims of the '661 Patent obvious under any stated Grounds. Accordingly, the Petition should be denied.

C. Alleged Prior Art Cited by Petitioner is the Same or Substantially the Same Art Already Considered by the USPTO and Cited on the Face of the Patent

The Board may, in its discretion, deny institution of an IPR where the same or substantially the same prior art was previously presented during prosecution of the challenged patent. *Advanced Bionics LLC v. Med-El Elektromedizinische Geräte GmbH* sets forth a two-part framework for this analysis. IPR2019-01469, Paper 6 (P.T.A.B. Feb. 13, 2020) (precedential).⁷ Specifically, under *Advanced Bionics*, the Board must first determine if one of the two following conditions are met:

1(a) whether the same or substantially the same art previously was presented to the Office; or

1(b) whether the same or substantially the same arguments previously were presented to the Office.

⁷ “Previously presented art includes art made of record by the Examiner, and art provided to the Office by an applicant, such as on and Information Disclosure Statement (IDS), in the prosecution history of the challenged patent.” IPR2019-01469, Paper 6 at 7-8.

Id. at 8. If either condition is met, the first part of the framework is satisfied. Next, in that case, the Board must determine:

(2) whether the petitioner has demonstrated that the Office erred in a manner material to the patentability of challenged claims.

Id. at 8. If the petitioner has not demonstrated that the office erred in a manner material to the patentability of the challenged claims, the Board may deny institution of the IPR.

For example, in *Google v. Valtrus Innovations Limited*, the Board denied institution where the petition was based solely on art that was a U.S. counterpart to a European patent application cited during prosecution of the challenged patent. IPR2022-01197, Paper 9 at 20-26 (P.T.A.B. Jan. 3, 2023). There, the Board first determined that the two pieces of art were substantially the same. *Id.* at 22. Having done so, the Board denied institution because petitioner had failed to present any argument on why the USPTO erred in its analysis of the European patent application during prosecution. *Id.* at 25. Of note, other than listing the IDS citing the European patent application as “considered,” the examiner did not say anything about the European application during prosecution of the challenged patent. *Google*, Paper 16 at 4 (P.T.A.B. Apr. 12, 2023).

Here, *Intel* (Ex. 1006), alleged prior art central to both Grounds raised by Petitioner, was considered by the examiner during prosecution and cited on the

face of the '661 Patent. Ex. 1031 at 2; Ex. 1032 at 572-573. Petitioner acknowledges that *Intel* was considered during prosecution. Petition at 18. But Petitioner failed to offer any argument as to why the examiner erred when analyzing *Intel*. Accordingly, Petitioner's challenge should be dismissed. *Advanced Bionics LLC*, IPR2019-01469, Paper 6; *Google*, IPR2022-01197, Paper 9 at 20-26.

Further, the examiner also considered art substantially similar to *Guo* (Ex. 1005), which Petitioner relied upon in Ground 1 and which Petitioner argues describes user equipment consistent with *5G Standard* relied on in Ground 2 (Ex. 1012). Petition at 19. Specifically, the examiner considered U.S. Pat. Pub. No. 2019/0190582 ("*Guo et al.*"). Ex. 1032 at 99. Samsung is the applicant for both references and both identify Li Guo as an inventor. Compare Ex. 2005 (*Guo et al.*) with Ex. 1005. And indeed, *Guo et al.* contains nearly all the same relevant disclosures Petitioner relies on from *Guo*. The table below identifies the disclosure from *Guo* Petitioner relies on in its challenge to claim 1 of the '661 Patent and the substantially similar, and mostly identical, disclosures included in *Guo et al.* See Petition at 24-34.

Claim Element	<i>Guo</i>⁸	<i>Guo et al.</i>
1Preamble	Abstract; [0052]; Fig. 1	Abstract; [0065]; Fig. 1
1a	Fig. 3; [0067]; [0071]; [0017]; [0073]	Fig. 2; [0071]; [0075]; [0036]; [0077]
1b	Fig. 3; [0067]; [0073]; [0070]; [0071]	Fig. 2; [0071]; [0077]; [0075]; [0076]
1c	[0044-0048]; [0134]; [0114]; [0147]; [0124]	[0057-0061]; [0249]; [0127]; [0350-0352]
1d	[0189]; [0190]; [0135]; [0189]; [0128]	[0134]; [0135]; [0246]; [0247]
1e	N/A	
1f	N/A	

As set forth above, the references relied on by Samsung in the instant Petition are the same or substantially similar to art considered during prosecution. Because Samsung failed to argue, much less demonstrate, that the examiner erred with respect to its consideration of these references, Petitioner’s challenge should be dismissed. *Advanced Bionics LLC*, IPR2019-01469, Paper 6; *Google*, IPR2022-01197, Paper 9 at 20-26.

⁸ Paragraphs in brackets (“[]”) are cited by Petitioner at pages 24-34 for each limitation. “N/A” refers to the fact that Petition does not include a specific citation to *Guo* for this limitation.

D. Trial Will Likely Occur Before the Projected Final Written Decision

The Director's decision on institution must be made by February 12, 2026.

The Board's Final Written Decision ("FWD") must be issued on or before February 12, 2027.

In the Litigation, the Court previously set the final pretrial conference for November 18, 2026. Ex. 2003, Order. While the District Court did not set a trial date, the Court typically sets jury trials for shortly after the final pretrial conference. *See Stellar LLC v. Motorola Solutions, Inc.*, No. 4:23-cv-750-SDJ, Dkt. 50 (E.D. Tex. Aug. 9, 2024) (setting trial for 10 days after final pretrial conference), Ex. 2006, p. 4. Based on the District Court's usual practice, the jury trial will likely take place in late November or early December of 2026. And the Board has routinely denied institution when the jury trial is at or near the time of the final written decision. *See, e.g., CIPLA Ltd. v. Gilead Sciences, Inc.*, IPR2025-00033, Paper 22 at 9-10, 13 (P.T.A.B. May 15, 2025) (denying institution under 35 U.S.C. § 314 in part because the trial would occur before the FWD); *Google LLC v. Cerence Operating Co.*, IPR2024-01464, Paper 15 at 7-8, 15 (P.T.A.B. Apr. 23, 2025) (similar); *The Hillman Grp., Inc. v. Hy-Ko Prods. Co. LLC*, IPR2022-00169, Paper 8, at 9 (P.T.A.B. May 9, 2022) (similar).

Thus, the fact that trial will likely occur near the time of the FWD favors denial of institution.

V. CONCLUSION

For the reasons set forth above, Hannibal requests that the Director deny institution in this IPR proceeding on the '661 Patent.

Dated: November 12, 2025

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CERTIFICATE UNDER 37 C.F.R. SECTION 42.24

Hannibal certifies that the word count in this Request, as determined by the Microsoft Word word-processing system is 5,413 words. This Request is in compliance with the 14,000-word limit, excluding the parts exempted by 37 C.F.R. §§ 42.24(a)-(b).

CERTIFICATE OF SERVICE

I, Brian A. Carpenter, hereby certify that on the 12th day of November, 2025, the foregoing document was served on the following by email:

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