

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

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

Petitioners,

v.

APEX BEAM TECHNOLOGIES, LLC,

Patent Owner.

Patent No. 10,462,767
Filing Date: April 18, 2018
Issue Date: October 29, 2019

Inventor: Xiaobo Zhang
Title: METHOD AND DEVICE IN UE AND BASE STATION
USED FOR PAGING

PATENT OWNER'S PRELIMINARY RESPONSE

Case No. IPR2023-00598

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2001	Samsung's Invalidity Contentions for U.S. Patent No. 10,462,767, <i>Apex Beam Technologies LLC v. Samsung Electronics Co., Ltd., et al.</i> , Case No. 2:22-cv-00188-JRG, served March 2, 2023
2002	Docket Control Order, Dkt. 37, <i>Apex Beam Technologies LLC v. Samsung Electronics Co., Ltd., et al.</i> , Case No. 2:22-cv-00188-JRG (E.D. Tex. February 6, 2023)
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I. INTRODUCTION

On February 28, 2023, Samsung Electronics Co., Ltd., and Samsung Electronics America Inc. (collectively, “Samsung” or “Petitioner”) filed a Petition requesting *inter partes* review of claims 1-20 (“Challenged Claims”) of U.S. Patent No. 10,462,767 (“the ’767 Patent”) (Ex. 1001). Paper 1 (“Petition” or “Pet.”). The declaration of Dr. Harry V. Bims (Ex. 1002) accompanied the Petition. On April 7, 2023, the Board issued a Notice of Filing Date Accorded for the Petition and set the time for filing patent owner’s preliminary response. Paper 6.

The Board should deny Samsung’s Petition because its prior art references fail to disclose or render obvious the key limitations and concepts of the Challenged Claims. In particular, Samsung’s combination does not disclose or render obvious key limitations of the Challenged Claims, including “the frequency domain resource used for transmitting the first signaling belongs to a first subband; the first subband comprises a positive integer number of consecutive subcarriers in frequency domain.”

Moreover, the Board should exercise its discretion to deny institution, as trial in the concurrent litigation shall be completed long before the Board issues a Final Written Decision.

II. THE '767 PATENT

The '767 Patent, was filed on April 18, 2018, claiming priority to Chinese Patent Application No. 2017 1 0255811 filed April 19, 2017, and issued on October 29, 2019.

The '767 Patent discloses and claims methods and devices for paging transmissions. The '767 Patent “determines the transmission opportunities of paging according to the numerology employed by the paging” thereby minimizing power consumption and ensuring that “paging capacity basically remains the same” when multiple numerologies are employed in connection with 5G NR networks. '767 Patent, 2:1-15. Unlike legacy LTE systems which utilized fixed timings for Paging Frames (PF) and Paging Occasions (PO), and if applied to multiple numerology schemes would “detect the paging message different times for different numerologies within the 1 millisecond [subframe]” resulting in “greatly increased [power consumption],” the invention of the '767 Patent can utilize subcarrier spacings to schedule paging across multiple numerologies. *Id.* at 1:45-67. The invention can further utilize a frequency domain resource for transmitting a first signaling belonging to a first subband, based on which time intervals for paging are determined. In one embodiment, FIG. 6 “illustrates an example of a diagram for a relationship between Z time windows and Q subbands . . . [a]t least one of {location

of the subband #1 in frequency domain, subcarrier spacing of subcarriers included in the subband #1} is used for determining the X1 time intervals.” *Id.* at 17:44-62.

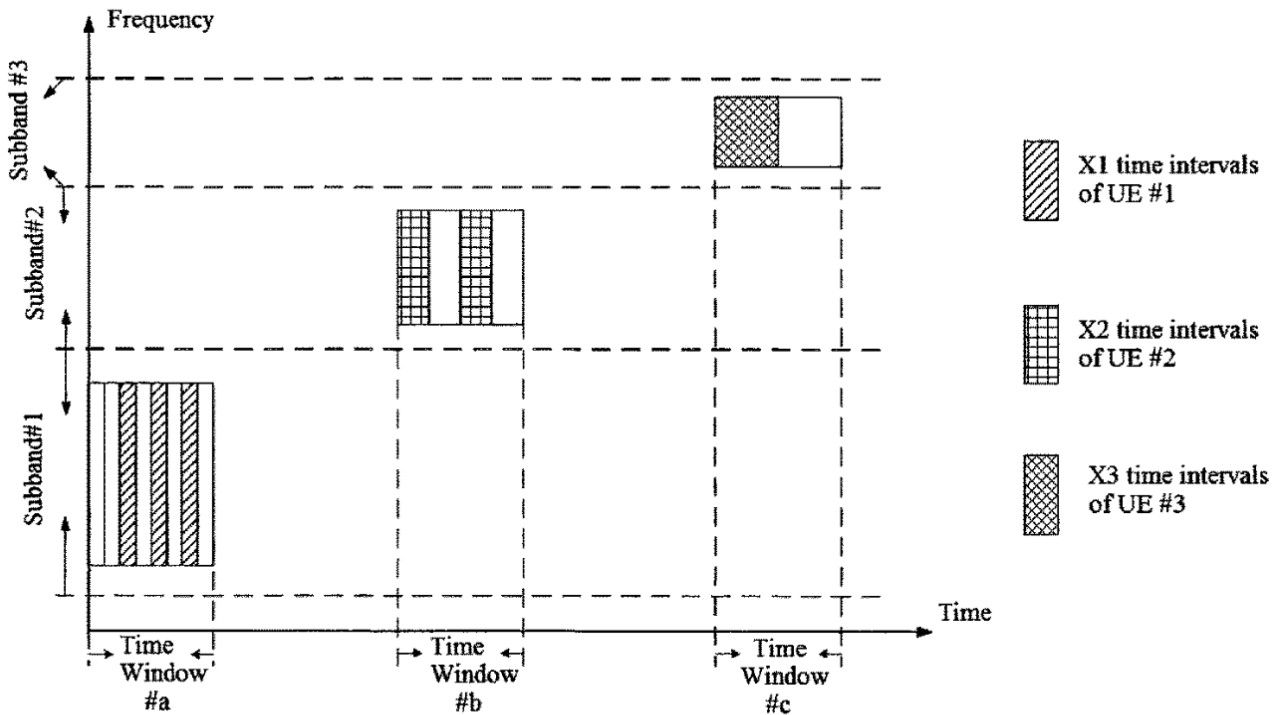


FIG. 6

Id. at FIG. 6.

III. THE RELEVANT ALLEGED PRIOR ART

A. WO 2017/052199 (“You”)

You (Ex. 1005) was filed on September 21, 2016 and published on March 30, 2017. You discusses a “control channel within a UE-specific search space (USS)” that a UE may attempt to receive “by assuming that the USS is configured in accordance with the configuration of the CSS.” You, Abstract.

B. WO 2018/126401 (“Liu”)

Liu (Ex. 1006) was filed on January 5, 2017 and published July 12, 2018. Liu discusses “methods and apparatuses for downlink control information (DCI) transmission and receiving in a wireless communication system.” Liu, Abstract.

IV. CLAIM CONSTRUCTION

As discussed below, Patent Owner believes that You fails to disclose the “subband” limitation under the plain and ordinary meaning of that term. However, to the extent that the Board finds claim construction necessary to resolve this issue, Patent Owner respectfully submits that the term “subband” should be construed as “one of a plurality of subsets of a frequency band.”

The specification of the ‘767 Patent defines the term subband to refer to one of a plurality of subsets of a frequency band by stating that “[h]erein, the second signaling is used for determining Q subbands, Q being a positive integer; *The first subband belongs to one of the Q subbands; Any one of the Q subbands* includes a positive integer number of consecutive subcarriers; The feature ID of the monitor of the first signaling is used for determining *the first subband in the Q subbands*,” (‘767 Patent, 6:2-8) and that “[h]erein, the second radio signal is used for determining at least one of {*location of the first subband in frequency domain, subcarrier spacing of subcarriers included in the first subband*}.” *Id.*, 5:27-30. These statements constitute lexicography, and require that, as used “herein,” the term

subband refers to *one of Q subbands* (using the plural, *subbands*), which are located in the frequency domain.

This lexicography is consistent with embodiments and examples of subbands throughout the specification. For example, Figure 6 illustrates that a subband refers to one of a plurality of subbands in the frequency domain:

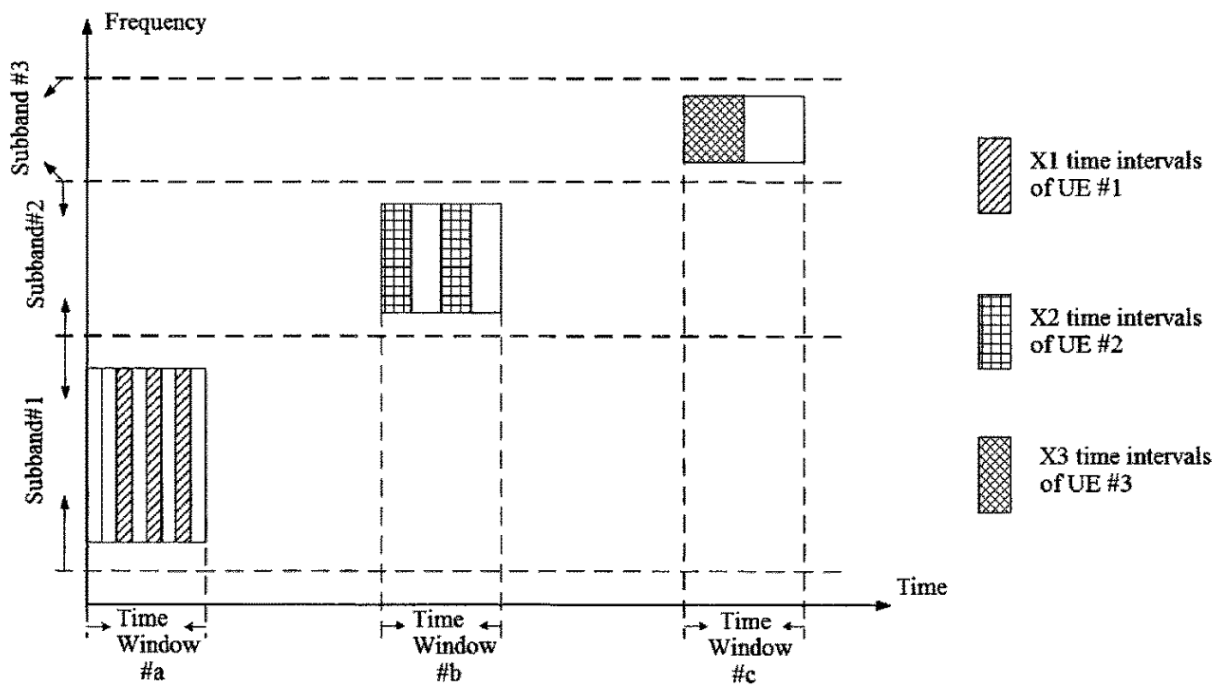


FIG. 6

Id. at FIG. 6.

All of the embodiments in the specification similarly contemplate that a subband is one subset out of a plurality (*i.e.* “a first subband,” “any one of the Q subbands,” “any two of the Q subbands”) in the frequency domain, variously stating that:

- “In one embodiment, the location of the first subband in frequency domain refers to the location of the first subband in a carrier where the first subband is located.” ‘767 Patent, 3:30-32.
- “In one embodiment, the location of the first subband in frequency domain refers to the location of a carrier where the first subband is located in frequency domain.” *Id.* at 3:33-35.
- “In one embodiment, the location of the first subband in frequency domain refers to a subband index of the first subband in a carrier where the first subband is located.” *Id.* at 3:36-38.
- “In one embodiment, the location of the first subband in frequency domain refers to the location of the first subband in a frequency resource corresponding to a band where the first subband is located.” *Id.* at 3:39-42.
- “In one embodiment, in any one of the Q subbands, all the included subcarriers have an equal subcarrier spacing.” *Id.* at 6:9-10.
- “In one embodiment, in any two of the Q subbands, the subcarriers have different subcarrier spacings.” *Id.* at 6:11-12.
- “In one embodiment, in two of the Q subbands, the subcarriers have an equal subcarrier spacing.” *Id.* at 6:13-14.

- “In one embodiment, any two of the Q subbands have an equal frequency domain width.” *Id.* at 6:15-16.
- “In one embodiment, two of the Q subbands have different frequency domain widths.” *Id.* at 6:17-18.
- “In one embodiment, the Q subbands all belong to one same carrier.” *Id.* at 6:19-20.
- “In one embodiment, two of the Q subbands belong to different carriers.” *Id.* at 6:21-22.

Accordingly, to the extent that the Board finds claim construction necessary to resolve whether *You*’s single “MTC subband” for the entire system band at Fig. 6(a) constitutes a subband, the term subband should be construed as “one of a plurality of subsets of a frequency band.”

V. LEVEL OF ORDINARY SKILL IN THE ART

For the purposes of this Preliminary Response only, Patent Owner utilizes Petitioner’s proposed level of skill in the art—“at least a master’s degree in electrical engineering or a related field, and five years of work/research experience in the field of wireless networking.” Pet. at 22.

VI. ARGUMENT

A. GROUND 1: You and Liu Do Not Render Obvious Claims 1, 4-6, 9-11, 14-16, and 19-20

1. Samsung's Combination Does Not Disclose “the frequency domain resource used for transmitting the first signaling belongs to a first subband; the first subband comprises a positive integer number of consecutive subcarriers in frequency domain” as Required by Claims 1, 6, 11, and 16

Independent claims 1, 6, 11, and 16 each require “the frequency domain resource used for transmitting *the first signaling belongs to a first subband; the subband* comprises a positive integer number of *consecutive subcarriers in the frequency domain.*” Petitioner relies solely on *You* for these limitations and does not otherwise argue obviousness in view of Liu. Pet. at 42-43. Nor does Samsung argue single reference obviousness or attempt to combine embodiments within *You. Id.* But *You* does not disclose any subband which comprises a “positive integer number of consecutive subcarriers in the frequency domain, *and* to which a “first signaling” belongs.

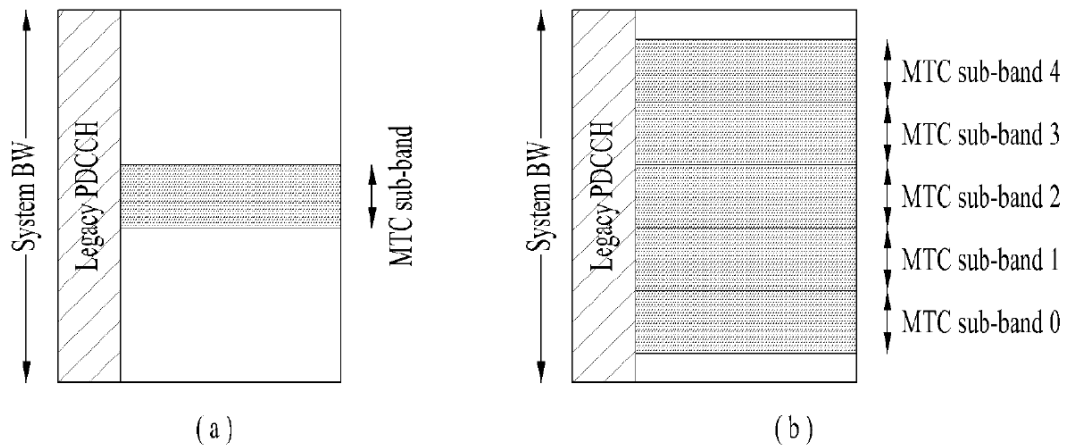
Samsung cannot prevail in showing disclosure of these limitations because it inconsistently maps portions of distinct embodiments within *You* in an attempt to satisfy the “first subband,” “first signaling” and “the first subband comprises a positive integer number of subcarriers” limitations. *See In re Stepan Co.*, 868 F.3d 1342, 1346 n.1 (Fed. Cir. 2017) (Whether a combination “is based on combining

disclosures from multiple references, combining multiple embodiments from a single reference, or selecting from large lists of elements in a single reference, there must be a motivation to make the combination and a reasonable expectation that such a combination would be successful, otherwise a skilled artisan would not arrive at the claimed combination.”); *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1371 (Fed. Cir. 2008) (“Thus, it is not enough that the prior art reference . . . includes multiple, distinct teachings that the artisan might somehow combine to achieve the claimed invention.”). Samsung relies on *You*’s “MTC subband” as the claimed “first subband,” relies on *You*’s “M-PDCCH” as the claimed “first signaling,” and relies on *You*’s physical resource blocks (“PRB”), as the claimed consecutive subcarriers in the frequency domain. Pet. at 42 (citing *You* at [175]-[177] and Fig. 6), 43 (citing *You* at [62], [176]. But *You* does not disclose any case in which a subband with an M-PDCCH comprises any PRB; instead, *You* discloses one distinct embodiment (at Fig. 6(a)) where an “MTC subband” may include PRB, and another where “MTC subbands” may include an M-PDCCH (at Fig. 6(b)). *You* does not disclose any MTC subband with **both** features, and Samsung does nothing to remedy or even address this deficiency.

You discloses two distinct embodiments with an “MTC subband”: one at FIG. 6(a), in which a “subband (narrowband) for operating the MTC UE may always be located at the center (e.g. **6 center PRBs**)” and a second at FIG.6(b) in which

“several subbands for MTC may be provided for one subframe to multiplex MTC UEs . . . whereby the UEs may use their respective subbands different from other UEs . . . *not the subband of 6 center PRBs.*” *You*, [176], Fig. 6 (reproduced below).

[Fig. 6]



Samsung and its expert rely on *You*’s disclosure at [176] for the proposition that *You*’s “MTC subband” at Fig. 6(a) include the PRBs, on which they rely for the “consecutive subcarriers” limitation. They do not argue that *You* contains any other disclosure of PRBs within a “subband,” nor do they argue that it would somehow be obvious or inherent for *You*’s “MTC subbands” to include PRBs. Pet. at 43; Ex. 1002 at ¶ 138.

Unlike the embodiment Fig. 6(a), only *You*’s multiplexed embodiment Fig. 6(b) utilizes the M-PDCCH on which Samsung relies for its “first signaling”. *You* is clear that, *instead of* it’s proposed “M-PDCCH”, the implementation of FIG. 6(a) still uses “legacy PDCCH transmitted through a full system band normally” or

“PDCCH for the MTC UE from an OFDM symbol region within the legacy PDCCH.” *You*, [177] (“In this case, the MTC UE cannot receive a legacy PDCCH transmitted through a full system band normally, and transmission of PDCCH for the MTC UE from an OFDM symbol region within the legacy PDCCH is transmitted may not be preferable due to multiplexing issue with a PDCCH transmitted to another UE. As one method for solving this, it is required to introduce a control channel transmitted within a subband where MTC is operated for the MTC UE ... M-PDCCH for the MTC UE which is a control channel ... may be introduced.). Samsung and its expert again rely on this exact disclosure. Pet. at 42; Ex. 1002 at ¶ 137. They do not argue that *You* contains some other teaching of an M-PDCCH in the embodiment of Fig. 6(a), nor do they argue that it would be somehow obvious or inherent for the MTC subband of Fig. 6(a) to include an M-PDCCH. *Id.*

In addition to failing to show that these limitations are disclosed in any embodiment of *You*, Samsung inappropriately relies on conclusory expert opinion that merely parrots its Petition. *Compare* Pet. at 42-43 with Ex. 1002 at ¶¶ 137-138. *See Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9 (P.T.A.B. Aug. 24, 2022) (“We have reviewed this excerpt from Dr. Jones’ declaration and note that it merely repeats verbatim, the conclusory assertion for which it is offered to support. . . Dr. Jones does not cite to any additional supporting evidence or provide any technical reasoning to support his statement. Thus, the cited declaration

testimony is conclusory and unsupported, adds little to the conclusory assertion for which it is offered to support, and is entitled to little weight.”) (citing 37 C.F.R. § 42.65(a) (“Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight.”); *Upjohn Co. v. Mova Pharm. Corp.*, 225 F.3d 1306, 1311 (Fed. Cir. 2000) (“Lack of factual support for expert opinion to factual determinations, however, may render the testimony of little probative value in a validity determination.”)). Dr. Bims does not address that Samsung relies on distinct embodiments for these limitations, does not argue they are somehow inherent or obvious, and his conclusory assertion that they are (somehow) disclosed based on the above cited portions of *You* merely parrot the Petition verbatim. His opinion should therefore not be given any weight.

Samsung also fails to identify, and *You* does not disclose, any situation in which an “MTC subband” is associated with **both** an M-PDCCH (Samsung’s “first signaling” and a PRB (Samsung’s “consecutive subcarriers”), as required even under Samsung’s argument. Samsung instead attempts to use *You*’s disclosure regarding FIG. 6(a) for the “multiple consecutive subcarrier in the frequency limitation” while using *You*’s disclosure regarding FIG. 6(b) for the “first signaling” limitation. But *You* does not disclose that the embodiment of Fig. 6(a) includes any M-PDCCH (Samsung’s “first signaling”), nor that the embodiment of FIG. 6(b) includes any PRD (which include Samsung’s “consecutive subcarriers”). To the contrary, *You*

teaches that the MTC subbands of Fig. 6(b) do **not** use “the subband of 6 center PRBs,” while the subband of FIG. 6(a) uses a legacy PDCCH or a PDCCH within the symbol region of the legacy PDCCH **instead of** an M-PDCCH. Samsung does not attempt to remedy or even address these deficiencies.

In sum, because Samsung has failed show that *You* discloses any embodiment comprising a subband with both a PRB (on which it relies for consecutive subcarrier symbols) and a M-PDCCH (on which it relies for a first signaling), it cannot demonstrate that *You* discloses “the frequency domain resource used for transmitting ***the first signaling belongs to a first subband; the first subband comprises a positive integer number of consecutive subcarriers in frequency domain***”

Moreover, in addition to failing to disclose any M-PDCCH, *You*’s embodiment at FIG. 6(a) does not disclose a claimed “subband” because its entire system bandwidth only comprises **one** “MTC sub-band.” The Challenged Claims clearly recite a “first” subband as one of a plurality of subbands. *You*’s implementation at FIG. 6(a) cannot disclose a “first subband” in an embodiment with only one subband for its entire system bandwidth. To the extent that claim construction is required to resolve this issue, Patent Owner submits that a subband as claimed in the ‘767 Patent should be construed as “one of a plurality of subsets of a frequency band” as discussed above at Section IV. In either case, Samsung fails to show that *You*’s implementation at FIG. 6(a) discloses a subband as claimed.

For the foregoing reasons, Samsung cannot show a reasonable likelihood that it would prevail with regard to at least one of the claims challenged in its petition because it fails to show that *You* discloses at least “the frequency domain resource used for transmitting the first signaling belongs to a first subband; the first subband comprises a positive integer number of consecutive subcarriers in frequency domain.” The Petition should therefore be denied.

B. GROUND 2: You, Liu, and Mallick Do Not Render Obvious Claims 2-3, 7-8, 12-13, and 17-18

As shown above, You and Liu fail to disclose or render obvious independent Claims 1, 6, 11, and 16 and their dependent claims. Samsung does not argue that Mallick remedies these deficiencies. *See* Pet. at 66-83. Accordingly, Samsung has not shown that any claim is rendered obvious under Ground 2.

VII. THE PETITION SHOULD BE DENIED AT THE DISCRETION OF THE DIRECTOR UNDER 35 U.S.C. § 314(A)

Based on Petitioner’s reasons regarding § 314(a), the Board should exercise its discretion to deny this Petition.

The circumstances of the parallel District Court proceeding necessitate denial of the Petition under the Board’s precedent, as every factor considered in relation to efficiency, fairness, and the merits supports denial. *See Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11, at 6 (P.T.A.B. Mar. 20, 2020) (precedential) (considering (a) “whether the petitioner and the defendant in the parallel proceeding are the same

party”; (b) “overlap between issues raised in the petition and in the parallel proceeding” (c) “proximity of the court’s trial date to the Board’s projected statutory deadline for a final written decision”; (d) “investment in the parallel proceeding by the court and the parties”; (e) “whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted”; and (f) “other circumstances that impact the Board’s exercise of discretion, including the merits.”).

As set forth below, these factors collectively demonstrate that efficiency and integrity of the AIA are best served by denying review. First, the Petitioner is the Defendant in the parallel proceeding. *See infra* Section II.A. Second, the Challenged Claims are all at issue in the District Court Litigation, and Petitioner has raised identical arguments for invalidity there. *See infra* Section II.B. Third, trial in the District Court Litigation is set for June 24, 2024, four months earlier than the projected statutory deadline for a final written decision of this Petition on October 9, 2024. *See infra* Section II.C. Fourth, the parties (and Patent Owner in particular) have invested significant resources on developing legal and factual issues of validity and infringement in the District Court Litigation and will have invested substantially more resources before any decision on this Petition. *See infra* Section II.D. Fifth, the Court has already denied a stay pending this Petition. *See infra* Section II.E. Finally, no other factors favor institution. *See infra* Section II.F.

Accordingly, the Board should exercise its discretion under § 314(a) and deny the Petition because institution of this proceeding would not be consistent with the objective of the AIA to “provide an effective and efficient alternative to District Court litigation.” *NHK Spring Co. v. Intrix-Plex Techs., Inc.*, IPR2018-00752, Paper 8, at 20 (P.T.A.B. Sept. 12, 2018) (quoting *Gen. Plastic Indus. Co. v. Canon Kabushiki Kaisha*, IPR2016-01357, Paper 19, at 16–17 (P.T.A.B. Sept. 6, 2017) (precedential)).

A. The Parallel District Court Proceeding and the Petition Involve the Same Parties

As noted in Patent Owner’s Mandatory Notice, there exists a parallel District Court proceeding between the same parties regarding the same subject patent (the ’767 Patent). *Samsung Electronics Co., Ltd. et al., v. Apex Beam Technologies LLC*, IPR2023-00598, Paper 5 at 3; Pet. at 85. Accordingly, this factor weighs in favor of discretionary denial.

B. The District Court Litigation Involves Substantially the Same Claims, Grounds, Arguments, and Evidence

This Petition is co-extensive with invalidity arguments that Petitioner has already raised in the District Court Litigation. *See* Ex. 2001 at 53, Invalidity Contentions for U.S. Patent No. 10,462,767 based on *You* alone or in combination with *Liu* and/or *Mallick*, *Apex Beam Technologies LLC v. Samsung Electronics Co., Ltd. et al.*, Case No. 2:22-cv-00188-JRG, served March 2, 2023. “In at least these

ways, the parallel proceedings would duplicate effort. This is an inefficient use of Board, party, and judicial resources and raises the possibility of conflicting decisions.” *Cisco Sys., Inc. v. Ramot at Tel Aviv Univ. Ltd.*, IPR2020-00122, Paper 15 at 10 (P.T.A.B. May 15, 2020). Accordingly, this fact weighs strongly in favor of discretionary denial.

For this reason, denial of institution under § 314(a) is appropriate because the Petition “includes the same or substantially the same claims, grounds, arguments, and evidence as presented in the parallel [District Court] proceeding.” *Apple*, IPR2020-00019, Paper 11, at 12.

C. Proximity of The District Court’s Trial Date

The proximity of the District Court Litigation’s trial date to the Board’s projected statutory deadline for a final written decision strongly weighs in favor of discretionary denial.

The parties’ trial is scheduled for June 24, 2024. Exhibit 2002 (Docket Control Order, Dkt. 37, *Apex Beam Technologies LLC v. Samsung Electronics Co., Ltd., et al.*, Case No. 2:22-cv-00188-JRG (E.D. Tex. February 6, 2023)). Pursuant to 35 U.S.C. §§ 314(b)(1) and 316(a)(11), the projected statutory deadline for a Final

Written Decision of this Petition is October 9, 2024.¹ As the District Court’s trial will be almost four months before the projected statutory deadline, this factor weighs strongly in favor of denying institution. *See Supercell Oy v. Gree, Inc.*, IPR2020-00513, Paper 11 at 10-12 (P.T.A.B. June 24, 2020) (denying institution where the jury trial was scheduled to conclude approximately ten months before the statutory deadline); *Edward LifeSciences Corp. v. Evalve, Inc.*, IPR2019-01479, Paper 7, at 6-13 (P.T.A.B. Feb. 26, 2020) (denying institution where jury trial would conclude more than nine months before a final decision would be due); *Samsung Elecs. Am., Inc. v. Uniloc 2017 LLC*, IPR2019-01218, Paper 7, at 7-10 (P.T.A.B. Jan. 7, 2020) (denying institution where jury selection was scheduled for approximately six months before trial in the Board proceeding would conclude); *Next Caller Inc. v. TrustID, Inc.*, IPR2019-00961, -00962, Paper 10, at 8-16 (P.T.A.B. Oct. 16, 2019) (denying institution where trial was scheduled to conclude “several months,” before

¹ Petitioner incorrectly states that “[a] FWD is anticipated in August 2024, about one month after trial ends.” Pet. at 84. Pursuant to U.S.C. § 314(b)(1), an Institution Decision is due, three months after this Preliminary Response, on October 9, 2023 (since October 7, 2023 falls on a Saturday). Pursuant to 35 U.S.C. § 316(a)(11), a Final Written Decision is due one year after an Institution Decision, on October 9, 2024.

a final decision would be due); *Cisco Sys., Inc.*, IPR2020-00122, Paper 15 at 8 (“Because the trial date is substantially earlier than the projected statutory deadline for the Board’s final decision, this factor weighs in favor of discretionary denial.”).

Petitioner does not contest that the proximity of the trial favors denial of institution. Thus, this factor also weighs in favor of discretionary denial.

D. Significant Investment and Petitioner’s Delay in Filing the Petition

The parties’ investment in the parallel proceeding weighs in favor of discretionary denial.

In the District Court Litigation, the Court has already filed a Docket Control Order (Dkt. 37), Discovery Order (Dkt. 38), and Protective Order (Dkt. 44). Discovery is also well under way. The parties have already exchanged initial disclosures, infringement contentions pursuant to P.R. 3-1 and invalidity contentions pursuant to P.R. 3-3, and a trial date is set for June 24, 2024, which is less than a year away. Ex. 2002.

As noted above, the three references used in the Petition (*You, Liu, and Mallick*) and Petitioner’s corresponding arguments significantly overlap with the claims, references, arguments, and evidence in the District Court Litigation. Petitioner further fails to offer any explanation why the Board should review the same claims on the same grounds which will already have been adjudicated by the

District Court based on the parties' investment. Thus, the parties' and Court's substantial investment in this proceeding weighs in favor of denial of institution under this factor.

E. No Stay of the Parallel District Court Proceeding

There is no stay of the parallel District Court proceeding, and Petitioner's previous motion to stay the case pending *inter partes* reviews, including this *inter partes* review, was denied. Ex. 2003, Order Denying Motion to Stay Pending Inter Partes Review, Dkt. 55, *Apex Beam Technologies LLC v. Samsung Electronics Co., Ltd., et al.*, Case No. 2:22-cv-00188-JRG (E.D. Tex. June 14, 2023). Even if the Petition was instituted and Petitioner filed a motion to stay the District Court Litigation again, prejudice, tactical disadvantage to Patent Owner, the stage of the litigation and the lack of potential simplification would weigh strongly against such a motion. *See Lennon Image Techs., LLC v. Macy's Retail Holdings, Inc.*, 2:13-CV-00235-JRG, 2014 WL 4652117, at *1 (E.D. Tex. Sept. 18, 2014); *see Intell. Ventures v. FedEx Corp.*, No. 2:16-cv-00980-JRG, Dkt. 141 at 4-5 (E.D. Tex. Oct. 24, 2017) ("The Court agrees that the Parties have already invested substantial effort and resources during discovery and in preparing claim construction briefing. . . . These circumstances weigh against staying this case").

Moreover, a stay would not decrease the burden on the Court and the parties since the instituted IPRs cover only three out of at least 20 references that Petitioner

raised in the District Court Litigation for both anticipation and obviousness, and challenges under § 112 and § 101. Ex. 2001, at 53. *Intell. Ventures*, No. 2:16-cv-00980-JRG, Dkt. 141 at 3-4 (“[T]he instituted IPRs only cover a narrow slice of the invalidity arguments Defendants have raised in this case. For example, Defendants have argued that the ’715 Patent is invalid under § 102 with respect to at least eight references . . . under § 103 with respect to at least twenty-six combinations . . . under § 112 [], and under § 101.”).

Accordingly, it would be unlikely for the Court to hold that a stay would streamline the litigation and this factor supports denial of institution.

F. Other Factors Favor Discretionary Denial

Petitioner does not present a strong case on the merits, further supporting denial of institution. *See supra* Section VI. Petitioner also does not identify any other factors which weigh against discretionary denial. Pet. at 67-69.

Thus, when viewing the factors together, the Petition should be denied in the Director’s discretion under 35 U.S.C. § 314(a).

VIII. CONCLUSION

As discussed above, Samsung’s combination fails to disclose key limitations of each claim of Ex. 1001, and therefore, does not anticipate or render obvious any claims. The Board should, therefore, deny the Petition.

Respectfully submitted,

Dated: July 7, 2022

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CERTIFICATE OF WORD COUNT

The undersigned hereby certifies that the portions of the above-captioned Patent Owner's Preliminary Response has 4,372 words in compliance with the 14,000 word limit set forth in 37 C.F.R. § 42.24. This word count was prepared using Microsoft Word for Office 365.

Respectfully submitted,

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CERTIFICATE OF SERVICE

A copy of the foregoing Patent Owner's Preliminary Response and Exhibits

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