

**UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

MASSIVELY BROADBAND LLC

Plaintiff,

v.

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

Defendants.

Case No. 2:25-cv-00608-JRG

**PLAINTIFF’S FIRST SET OF COMMON INTERROGATORIES TO  
DEFENDANTS (NOS. 1-17)**

Pursuant to Rules 26 and 33 of the Federal Rules of Civil Procedure, Plaintiff MASSIVELY BROADBAND LLC (“MBB”), through its undersigned counsel, propounds this First Set of Interrogatories directed to Defendants Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc. to be answered fully and separately in writing and under oath within thirty (30) days of service hereof.

**DEFINITIONS**

For the purposes of these Interrogatories, the following terms have the meanings set forth below.

1. “SEC” shall mean Defendant Samsung Electronics Co., Ltd. and all subsidiaries, affiliates, segments or divisions, whether or not organized under the laws of the United States, board members, officers, directors, agents, employees, attorneys, accountants, persons or entities acting or purporting to act on its behalf, or entities authorized to act on its behalf, including any predecessors in interest.

2. “SEA” shall mean Defendant Samsung Electronics America, Inc. and all subsidiaries, affiliates, segments or divisions, whether or not organized under the laws of the United States, board members, officers, directors, agents, employees, attorneys, accountants, persons or entities acting or purporting to act on its behalf, or entities authorized to act on its behalf, including any predecessors in interest.

3. “Samsung” and “You” shall mean SEC and SEA and are intended to be interpreted in the manner which leads to the broadest scope of information responsive to the category in which the terms appear and should be understood to include any individuals involved in or responsible for the functionality identified in MBB’s Infringement Contentions served on September 16, 2025.

4. “Asserted Patents” shall mean U.S. Patent Nos. 7,676,194 (“194 Patent”), 8,923,754 (“754 Patent”), 9,667,337 (“337 Patent”), 10,224,999 (“999 Patent”), 10,797,783 (“783 Patent”), 8,350,763 (“763 Patent”), 8,593,358 (“358 Patent”), 11,063,625 (“625 Patent”), 11,876,548 (“548 Patent”), 8,224,794 (“794 Patent”), 8,515,925 (“925 Patent”) and 8,725,700 (“700 Patent”).

5. “Accused Instrumentalities” shall mean the Samsung products identified by MBB pursuant to P.R. 3-1(a) as infringing the Asserted Patents in Section I.B of Plaintiff’s Disclosure of Asserted Claims and Infringement Contentions served on September 16, 2025.

6. “Litigation” shall mean the above-captioned case.

7. “Hotspot Instrumentality” shall mean a product made, sold, or offered for sale in, or imported into, the U.S., by Samsung that (a) includes Wi-Fi hotspot functionality including products that can operate as hotspots per Paragraphs 123-25 of Samsung’s Answer (Dkt. 16), and (b) where the product is capable of transmitting or receiving wireless data, via Wi-Fi or cellular

data channels, (i) at a data rate between 100 Mbps and 480 Mbps or (ii) over communication channels occupying an overall bandwidth of 100 MHz to 500 MHz, including, but not limited to, through carrier aggregation of multiple component carriers.

8. “RAN Instrumentality” shall mean a product made, sold, or offered for sale in, or imported into, the U.S., by Samsung that provides the radio interface between cellular network infrastructure and end-user devices, where the product is operable with, or compliant with, 4G LTE-Advanced (with carrier aggregation) or 5G NR, including but not limited to: Massive MIMO Radios, Citizens Broadband Radio Service (CBRS) Radios, Compact Macro Radios, and Link Cells, including products that consist of radio access network equipment and components per Paragraphs 157-58 of Samsung’s Answer (Dkt. 16), and the product is capable of transmitting or receiving wireless data (i) at a data rate between 100 Mbps and 480 Mbps or (ii) over communication channels occupying an overall bandwidth of 100 MHz to 500 MHz, including, but not limited to, through carrier aggregation of multiple component carriers.

9. “Half-duplex communication mode” shall mean a wireless communication modality that is capable of a wireless transmission and a wireless reception at different times.

10. “Full-duplex communication mode” shall mean a wireless communication modality that is capable of a wireless transmission and a wireless reception at the same time.

11. “Knox Instrumentality” shall mean a product made, used, sold, or offered for sale in, or imported into, the U.S., that includes one or more of the Samsung Knox services, including (a) Knox Suite per Paragraphs 217-19 of Samsung’s Answer (Dkt. 16), (b) Knox Mobile Enrollment (KME), (c) Knox Manage per Paragraphs 221 of Samsung’s Answer (Dkt. 16), (d) Knox Enterprise Firmware Over the Air (E-FOTA), (e) Knox Asset Intelligence (KAI) per Paragraph 222 of Samsung’s Answer (Dkt. 16), (f) Knox Configure, (g) Knox Guard, (h)

Samsung Care+ for Business, (i) Knox Managed Service Provider (MSP), (j) Knox Agent, (k) Knox Platform for Enterprise (KPE), (l) Knox Remote Support, (m) Knox Capture, (n) Knox Authentication Manager, or (o) Knox Deployment Program.

12. “Mobile Device” shall mean a smartphone or tablet computer, in either case having Wi-Fi or cellular communication functionality.

13. “Multi-Band Antenna Instrumentality” shall mean a Mobile Device made, sold, or offered for sale in, or imported into, the U.S. by Samsung and that includes (i) at least one antenna that is tunable to operate at two or more different frequency bands, whether concurrently or by retuning between bands, including but not limited to bands selected from Wi-Fi, cellular, Bluetooth, or GPS frequency bands, or any combination thereof, or (ii) a wireless device that can operate at multiple frequencies and includes antennas, one or more RF front-end modules, and/or modems per Paragraphs 176-80 of Samsung’s Answer (Dkt. 16).

14. “RF front-end chip or chipset” shall mean any integrated circuit, module, or group of circuits that performs one or more radio frequency front-end functions, including but not limited to power amplification, filtering, switching, or antenna tuning, whether sold or described as a chip, chipset, module, or otherwise.

15. “Obstacle Avoiding Wireless Instrumentality” shall mean a Mobile Device that (i) is made, sold, or offered for sale in, or imported into, the U.S. by Samsung, (ii) is capable, via one or more on-board sensors, of detecting an orientation of the Mobile Device, (iii) includes at least one antenna that radiates wireless communication signals in a frequency range of 10 GHz to 500 GHz, including, but not limited to, one or more 5G cellular FR2 band(s), and (iv) is capable of adjusting, controlling, or directing a radiation pattern or beam transmission from the at least one antenna.

16. “Standard” shall mean any and all public scientific or technical standards that relate to the subject matter of any Asserted Patent, including but not limited to standards published by ETSI, 3GPP, IEEE, and similar organizations.

17. “Essential” means necessary for implementation of any Standard, such that the Standard, or some part of the Standard, could not be practiced without infringing a patent or technology to which “essential” refers.

18. “Identify,” when referring to an individual or individuals, shall mean to state the current name, address and telephone number of the individual about whom the information is sought. Please state the name of the individual’s present or last known employer, their office or title, if any, and their job description. Also, please state the nature and dates of their affiliation with any party to this litigation and their office or title, job description and duties during such affiliation.

19. “Identify,” when used with respect to an act (including an alleged omission), communication, occurrence, statement or conduct (herein collectively called “act”), shall mean to:

- (a) describe the substance of the event or events constituting such act and state the date when such act occurred;
- (b) identify each and every individual participating in such act;
- (c) identify all other individuals (if any) present when such act occurred;
- (d) state whether any minutes, notices, memoranda, or other record of such act was made;
- (e) state whether such record now exists; and
- (f) identify the individual or individuals presently having possession, custody or control of each such record.

20. “Identify,” when referring to a document, shall mean to provide, as to each such document, the following information:

- (a) its date;
- (b) its title, if it has one; all identifying numbers, if any; all other identifying or categorizing designations; and a brief description of it (such as letter, memorandum, manuscript, notes, etc.);
- (c) its subject matter;
- (d) the name, title and address of each individual who wrote, signed, initialed, dictated or otherwise participated in the creation of the document;
- (e) the name, title and address of each addressee, and of each other individual receiving a copy of it;
- (f) its present location, and the name and address of its present custodian;
- (g) if the document is not an original, the name and address of the custodian of the original; and
- (h) any other designation necessary to sufficiently identify the document so that a copy of it may be ordered or obtained from its custodian.

If any such document was, but is no longer, in Your possession, custody or control, or in existence, state its present location or the date and manner of its disposition.

21. “Identify,” when referring to a corporate entity or entities, shall mean to state the full corporate name and the date and place of incorporation, if known, and its present address and telephone number.

22. “Including” shall mean including, but not limited to.

23. “Document[s]” is synonymous in meaning and equal in scope to the usage of this term in Rule 34 of the Federal Rules of Civil Procedure and all applicable case law, including electronically stored information and the definitions set forth in Rule 1001 of the Federal Rules of Evidence. Any document bearing marks, including initials, stamped initials, comments, or

notations not a part of the original text or photographic reproduction thereof, is a separate document. A draft or non-identical copy is a separate document within the meaning of this term.

24. “Person” shall mean any natural person, agency, association, corporation, firm, individual, joint venture, organization, proprietorship, partnership, trust, or entity.

25. “Communication” shall mean any disclosure, transfer, transmission or exchange of information, in whatever form, by whatever means, Including oral, written, face-to-face, telephone, facsimile, network transfer, electronic mail, personal digital assistant messages, smart phone messages, voice-mail, text messages, postal mail, personal delivery, or otherwise.

## INSTRUCTIONS

1. With respect to each of the following Interrogatories, unless otherwise stated in a particular Interrogatory, the information sought is that which is current as of the date of Your answer thereto. Furthermore, these Interrogatories are of a continuing nature. You are required to serve supplement responses in accordance with Rule 26(e) of the Federal Rules of Civil Procedure.

2. Answers are to be provided by You under oath.

3. With respect to the answer to each Interrogatory or subpart thereof, identify the source of the information given therein, with as much particularity as is reasonably possible, Including the identification, nature, designation, and location of any Documents that contain such information and the custodian of the Documents.

4. If You elect to avail Yourself of the procedure for answering any Interrogatory pursuant to Rule 33(d) of the Federal Rules of Civil Procedure, for each Interrogatory and subpart thereof, specify by Bates number the particular Documents responsive to that specific

Interrogatory and subpart thereof and.

5. In order to bring within the scope of these Interrogatories any and all conceivably relevant information which might otherwise be construed to be outside the scope:

- (a) The singular of each word shall be construed to include its plural and vice versa;
- (b) “And” as well as “or” shall be construed both conjunctively and disjunctively as necessary to make each interrogatory inclusive rather than exclusive. For example, “A or B” shall be read to include A alone, B alone, or both A and B;
- (c) “Each” shall be construed to include “every” and vice versa;
- (d) “Any” shall be construed to include “all” and vice versa;
- (e) The present tense shall be construed to include the past tense and vice versa; and
- (f) The masculine shall be construed to include the feminine and vice versa.

6. If you object to a particular Interrogatory, state the grounds for objection in the response to such Interrogatory. If you object that a term or phrase is vague, ambiguous, or indefinite, provide your understanding of the term or phrase and respond accordingly.

7. In the event You object to any Interrogatory on the basis of privilege or that the requested information otherwise is not discoverable, You shall provide (1) the nature of the claimed privilege or immunity; (2) the type of Communication, Document, electronically stored information, or thing (e.g., email, letter, or memorandum) (collectively, the “Privileged Material(s)”); (3) the general subject matter of the Privileged Material; (4) the creation or occurrence date of the Privileged Material; (5) the present custodian of the Privileged Material; and (6) all other Persons who know of, were part of, or received the Privileged Material or have been told about any aspect of the Privileged Material.

8. To the extent that You feel it necessary to conduct a meet and confer before

answering any Interrogatory, please contact counsel for MBB as soon as possible (and before Your deadline to provide a response to Interrogatories) to schedule a time to meet and confer.

### **INTERROGATORIES**

**Interrogatory No. 1:** Identify all Hotspot Instrumentalities, RAN Instrumentalities, Knox Instrumentalities, Multi-Band Antenna Instrumentalities, and Obstacle Avoiding Wireless Instrumentalities, including but not limited to the Accused Instrumentalities, that You have made, used, sold, or offered for sale in, or imported into, the United States, and, for each product identified, (i) state whether it is a Hotspot Instrumentality, RAN Instrumentality, Knox Instrumentality, Multi-Band Antenna Instrumentality, and/or Obstacle Avoiding Wireless Instrumentality; (ii) identify the specific component(s) (e.g., software modules, firmware on chips, specific hardware chips, or modules) that implement the functionalities identified in the corresponding Instrumentality definitions (*see* Definition Nos. 7, 8, 11, 13, and 15 above); (iii) explain in detail how each identified component contributes to those functionalities; and (iv) provide the pertinent technical identifiers for the implementing component(s), including, where applicable, software version numbers, firmware version numbers, and hardware build version numbers. Your response should also Identify the Persons most knowledgeable with respect to the subject matter of this Interrogatory.<sup>1</sup>

### **RESPONSE:**

**Interrogatory No. 2:** Identify all current and future models, variations, future planned

<sup>1</sup> If You respond to the Interrogatory by referencing tables, charts, or spreadsheets, Your response should explain how that information is organized. For example, how to match chipset information or build identifiers (including make and model number) to internal Samsung product identifiers and public product identifiers.

revisions, future generations of existing models and the like for each product You identified in response to Interrogatory No. 1 and explain the differences, as between all versions of those products, that You contend are relevant to infringement of the Asserted Claims in this case and describe how each such difference affects infringement.

**RESPONSE:**

**Interrogatory No. 3:** Identify, by product name, model number, and any other designation used by Samsung in marketing, sales, or technical documentation, each Hotspot Instrumentality and, for each Hotspot Instrumentality identified: (i) identify the specific component(s) (e.g., software modules, firmware on chips, specific hardware chips, or modules) that implement the Wi-Fi hotspot functionality, and explain in detail how each identified component contributes to that functionality, and (ii) provide the pertinent technical identifiers for the implementing component(s), including, where applicable, software version numbers, firmware version numbers, and hardware build version numbers. Your response should also Identify the Persons most knowledgeable with respect to the subject matter of this Interrogatory.

**RESPONSE:**

**Interrogatory No. 4:** Identify, by product name, model number, and any other designation used by Samsung in marketing, sales, or technical documentation for each RAN Instrumentality and, for each RAN Instrumentality identified, (i) identify the specific component(s) (e.g., software modules, firmware on chips, specific hardware chips, or modules) that implement the wireless access and communication functionality of the RAN

Instrumentality, and explain in detail how each identified component contributes to that functionality; and (ii) provide the pertinent technical identifiers for the implementing component(s), including, where applicable, software version numbers, firmware version numbers, and hardware build version numbers. Your response should also identify the persons most knowledgeable with respect to the subject matter of this Interrogatory.

**RESPONSE:**

**Interrogatory No. 5:** Identify, by product name, model number, and any other designation used by Samsung in marketing, sales, or technical documentation, each Hotspot Instrumentality identified in Interrogatory No. 3 and each RAN Instrumentality identified in Interrogatory No. 4 that is capable of transmitting or receiving wireless data:

- a. with a MIMO antenna;
- b. through a half-duplex communication mode;
- c. through a full-duplex communication mode;
- d. with antenna elements that perform beamforming; or
- e. encoded through OFDM modulation or the multi-user version of OFDM (OFDMA).

**RESPONSE:**

**Interrogatory No. 6:** Identify, by product name, model number, version, and any other designation used by Samsung in marketing, sales, or technical documentation, each Knox Instrumentality, and for each Knox Instrumentality identified, identify the one or more Samsung Knox services, individually and as a combination, that are capable of:

- a. identifying or storing wireless communication performance data for a plurality of managed devices by the one or more Samsung Knox services;
- b. transmitting or receiving wireless communication performance data for a managed device by the one or more Samsung Knox services; or
- c. configuring a plurality of managed devices, the one or more Samsung Knox services, based on wireless communication performance data.

**RESPONSE:**

**Interrogatory No. 7:** Identify, by product name, model number, and any other designation used by Samsung in marketing, sales, or technical documentation, each Multi-Band Antenna Instrumentality and, for each Multi-Band Antenna Instrumentality identified, (i) identify each antenna thereof that is tunable to operate, simultaneously or non-simultaneously, at two or more different frequency bands, (ii) describe in detail how each such antenna is tuned, (iii) identify the frequency bands at which each such antenna is tunable to operate (e.g., Wi-Fi 2.4 GHz, Wi-Fi 5 GHz, 3GPP Band 41, 3GPP Band n77, etc., as the case may be) in the Multi-Band Antenna Instrumentality, (iv) identify whether any such antenna is part of an antenna array, (v) identify the specific component(s) (e.g., software modules, firmware on chips, specific hardware chips, or modules) that tune each such antenna to operate a multiple frequency bands, including, to the extent appropriate, by manufacturer and product or model name or designation, the RF front-end chip or chip in each identified Multi-Band Antenna Instrumentality, (vi) describe how each such component contributes to the tuning of such antenna(s), and (vii) provide the pertinent technical identifiers for those implementing component(s), including, where applicable,

software version numbers, firmware version numbers, and hardware build version numbers. Your response should also Identify the Persons most knowledgeable with respect to the subject matter of this Interrogatory.

**RESPONSE:**

**Interrogatory No. 8:** Identify, by product name, model number, and any other designation used by Samsung in marketing, sales, or technical documentation, each Obstacle Avoiding Wireless Instrumentality and, for each Obstacle Avoiding Wireless Instrumentality identified, (i) identify the specific component(s) (e.g., software modules, firmware on chips, specific hardware chips, or modules) that implement(s) beam steering or beam forming functionality for wireless communication signals in a frequency range of 10 GHz to 500 GHz, including, but not limited to, one or more 5G cellular FR2 band(s), and explain in detail how each identified component contributes to that functionality, and (ii) provide the pertinent technical identifiers for the implementing component(s), including, where applicable, software version numbers, firmware version numbers, and hardware build version numbers. Your response should also Identify the Persons most knowledgeable with respect to the subject matter of this Interrogatory.

**RESPONSE:**

**Interrogatory No. 9:** For each product identified in response to Interrogatory Nos. 1-8, identify (i) when the product was first sold, (ii) when it was first sold in the U.S., (iii) the quantity sold worldwide, and (iv) the quantity sold in the U.S.

**RESPONSE:**

**Interrogatory No. 10:** Separately for each product identified in response to Interrogatory Nos. 1-8, Identify, on a quarter-by-quarter basis from January 2015 to the present, the following financial data: (i) the quantity of units sold, (ii) revenue, (iii) costs, (iv) gross profit, (v) net profit margins, (vi) the identity of documents sufficient to show financial data requested by (i) through (v), and Identify the Persons most knowledgeable with respect to the subject matter of this Interrogatory.

**RESPONSE:**

**Interrogatory No. 11:** If You contend that any product identified in response to Interrogatory Nos. 1-8 does not meet a limitation of any Asserted Claim, identify each such product and each such limitation, explain the basis for Your contention, and Identify any evidence that supports Your contention.

**RESPONSE:**

**Interrogatory No. 12:** Paragraph 250 of Samsung's Answer (Dkt. 16) "admits that Professor Rappaport has presented his work to certain employees of Samsung's affiliates."

For each such presentation, identify in detail:

- (a) the date(s) and location(s) of the presentation;
- (b) the identity of each employee of Samsung or a Samsung affiliate who attended the presentation, including the employee's title(s) and role(s) at the time;
- (c) the nature and subject matter of the work presented at that presentation by Professor Rappaport, including any technical topics, results, or publications discussed; and

(d) for each attending employee, the role(s) or responsibilities that employee performed for Samsung or any Samsung affiliate at the time of the presentation and thereafter during their tenure at Samsung or any Samsung affiliate.

**RESPONSE:**

**Interrogatory No. 13:** Describe in detail the circumstances, prior to June 6, 2025, (1) under which You learned of the Existence of each Asserted Patent, including the date on which such information was obtained, which individual(s) obtained such information, the source of such information and all Persons to whom such information was disclosed, and (2) of each of Your reviews of any of the Asserted Patents, including the date on which the review occurred, which individuals reviewed the Asserted Patent(s), the factual circumstances that led to the review of the Asserted Patent(s) and all actions undertaken by You as a result of that review.

**RESPONSE:**

**Interrogatory No. 14:** Identify all patent license agreements You contend are or may be comparable to the license that would result from a hypothetical negotiation over licensing any or all of the Asserted Patents, and for each such license agreement, identify all its material terms, explain why You contend the license agreement is comparable, and Identify the persons most knowledgeable with respect to the subject matter of this Interrogatory.

**RESPONSE:**

**Interrogatory No. 15:** Identify what You contend is the hypothetical negotiation date(s) in this Litigation (*i.e.*, date of first alleged infringement), and Identify all facts on which You relied to

determine the hypothetical negotiation date(s), all documents relating thereto, and the persons most knowledgeable of the facts underlying the determination of the hypothetical negotiation date and of Samsung's business, financial, competitive, and market circumstances at or around the time of that hypothetical negotiation date.

**RESPONSE:**

**Interrogatory No. 16:** To the extent that You contend that there are or may be commercially acceptable, available noninfringing alternatives to the infringement that is alleged in this Litigation, Identify the alleged alternatives, the dates on which the alternatives were available or would or could have been available, all costs associated with such alleged alternatives, what studies, tests, or analysis, if any, You performed concerning the alleged alternatives, and the Persons most knowledgeable with respect to such alleged alternatives.

**RESPONSE:**

**Interrogatory No. 17:** If You contend that any Asserted Claim is Essential to a Standard, Identify each such Asserted Claim, the Standard(s) to which You contend it is Essential, and why You contend such Asserted Claim is allegedly Essential to the Standard(s).

**RESPONSE:**

Dated: October 31, 2025

/s/ Patrick J. McElhinny

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**CERTIFICATE OF SERVICE**

The undersigned hereby certifies that the foregoing was served on October 31, 2025 by email on counsel of record for Defendants as follows:

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*/s/ Patrick J. McElhinny*  
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