

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

|                                                                                                                     |   |                                |
|---------------------------------------------------------------------------------------------------------------------|---|--------------------------------|
| VASU HOLDINGS, LLC, a Texas Corporation,                                                                            | ) |                                |
|                                                                                                                     | ) |                                |
| Plaintiff,                                                                                                          | ) | Case No. 2:24-cv-00034-JRG-RSP |
|                                                                                                                     | ) |                                |
| v.                                                                                                                  | ) |                                |
|                                                                                                                     | ) |                                |
| SAMSUNG ELECTRONICS CO., LTD., a Korean Corporation, and SAMSUNG ELECTRONICS AMERICA, INC., a New York Corporation, | ) |                                |
|                                                                                                                     | ) |                                |
|                                                                                                                     | ) |                                |
| Defendants.                                                                                                         | ) |                                |

---

**PLAINTIFF VASU HOLDINGS, LLC’S OBJECTIONS AND RESPONSES TO  
DEFENDANTS SAMSUNG ELECTRONICS CO., LTD. AND SAMSUNG  
ELECTRONICS AMERICA, INC.’S FIRST SET OF INTERROGATORIES (NOS. 1-25)**

Pursuant to Fed. R. Civ. P. Rules 26 and 33, Plaintiff Vasu Holdings, LLC (“Vasu”), responds to Defendant Samsung Electronics Co., Ltd. (“SEC”) and Samsung Electronics America, Inc. (“SEA”) (collectively with SEC, “Defendants” or “Samsung”) First Set of Interrogatories. Vasu makes these objections and responses herein (collectively “Responses”) based solely on its current knowledge, understanding, and belief as to the facts and information reasonably available to it as of the date of the Responses.

Additional discovery and investigation may lead to additions to, changes in, or modifications of these Responses. The Responses, therefore, are given without prejudice to Vasu’s right to supplement these Responses pursuant to Fed. R. Civ. P. 26(e), or to provide subsequent discovered information and to introduce such subsequently discovered information at the time of any trial or proceeding in this action.

## **GENERAL OBJECTIONS**

1. Vasu hereby incorporates by reference each and every general objection set forth below into each and every specific Response. From time to time, a specific Response may repeat a general objection for emphasis or for some other reason. The omission of a general objection in a specific Response shall not be interpreted as a waiver of that general objection to that Response.

2. Vasu objects to each and every Interrogatory, Definition, and Instruction to the extent that they are vague, ambiguous, unintelligible, or compound.

3. Vasu objects to each and every Interrogatory, Definition, and Instruction to the extent that they are overly broad, unduly burdensome, seek information not relevant to the claim or defense of any party, and are not proportional to the needs of this case.

4. Vasu objects to each and every Interrogatory, Definition, and Instruction to the extent that they are not reasonably calculated to lead to the discovery of admissible information.

5. Vasu objects to each and every Interrogatory, Definition and Instruction to the extent they are not reasonably calculated to lead to the discovery of admissible evidence because they are not properly limited in time.

6. Vasu objects to each and every Interrogatory, Definition, and Instruction to the extent that they are unduly burdensome and oppressive, to the extent they subject Vasu to unreasonable and undue effort or expense.

7. Vasu objects to each and every Interrogatory, Definition, and Instruction to the extent that they seek information beyond Vasu's actual knowledge, possession, custody, or control.

8. Vasu objects to each and every Interrogatory, Definition, and Instruction to the extent they are unreasonably cumulative or duplicative.

9. Vasu objects to each and every Interrogatory, Definition, and Instruction to the

extent they seek information that is obtainable from some other source that is more convenient, less burdensome, or less expensive.

10. Vasu objects to each and every Interrogatory, Definition, and Instruction to the extent that they seek information within Defendants' possession, custody or control.

11. Vasu objects to each and every Interrogatory, Definition, and Instruction to the extent they seek information in the public domain, information equally available to Defendant from another source and/or information that can be obtained more efficiently by Defendants through other means of discovery. Defendants can ascertain such information from its own records or from other sources at least as readily as Vasu.

12. Vasu objects to each and every Interrogatory, Definition, and Instruction to the extent that they seek confidential, business, financial, proprietary or sensitive information, or trade secrets of third parties, which may be subject to pre-existing protective order(s) and/or confidentiality agreements or in which any third party has an expectation of privacy. Such information shall not be provided absent an express order to the contrary from a court of competent jurisdiction, or an authorization from the third party having the interest in the information's confidentiality.

13. Vasu objects to each and every Interrogatory, Definition, and Instruction to the extent they seek information protected by the attorney-client privilege, the work product doctrine, common interest doctrine or any other applicable law, privilege, doctrine or immunity. Vasu will not disclose any information so protected, and the inadvertent disclosure or identification of any such information is not intended as, and will not constitute, a waiver of such privilege, doctrine, or immunity.

14. Vasu objects to each and every Interrogatory, Definition, and Instruction to the

extent they call for a legal conclusion. Vasu's responses shall not be construed as providing legal conclusions concerning the meaning or application of any terms used in Defendant's Interrogatories.

15. Vasu objects to each and every Interrogatory, Definition, and Instruction to the extent that they are premature, as they seek documents that are set to be disclosed on scheduled dates directed by the Court or the District of Texas Patent Local Rules.

16. Vasu objects to each and every Interrogatory, Definition, and Instruction to the extent that they are premature as the Court has not yet entered a claim construction order in this action.

17. Vasu objects to each and every Interrogatory, Definition, and Instruction as premature to the extent they seek information that will be the subject of expert testimony.

18. Vasu objects to each and every Interrogatory, Definition, and Instruction to the extent that they impose obligations inconsistent with the Scheduling Order, Protective Order, ESI Order to be entered in this case or any applicable standing orders.

19. Vasu objects to each and every Interrogatory, Definition, and Instruction to the extent they assume or mischaracterize any facts. Vasu's responses shall not be construed as agreeing to any facts or characterizations contained in Defendants' Interrogatories.

20. Vasu objects to each and every Interrogatory, Definition, and Instruction to the extent that they purport to impose any requirement or discovery obligation greater than or different from those imposed by the Federal Rules of Civil Procedure, the Local Rules of this Court, or orders of the Court governing these proceedings.

21. Vasu objects to each and every Interrogatory, Definition, and Instruction to the extent that they are unduly burdensome and oppressive on the grounds that they purport to require

Vasu to search its facilities and inquire of its employees other than those facilities and employees that would reasonably be expected to have responsive information. Vasu's Responses and productions are based upon: (1) a search of facilities and files that could reasonably be expected to contain responsive information and (2) inquiries of Vasu's employees and/or representatives who could reasonably be expected to possess responsive information.

22. Vasu objects to each and every Definition, Instruction, and Interrogatory to the extent it is compound and/or contains multiple subparts. Vasu will count each subpart as a separate interrogatory pursuant to Federal Rule of Civil Procedure 33(a). Vasu will not respond to interrogatories in excess of the allotted number of interrogatories established in the Court's scheduling order.

23. Vasu's written responses and production of documents are not intended to waive, and do not constitute waiver of, any objection that Vasu may have to the admissibility, authenticity, competency, relevance, or materiality of any documents produced or referred to in response to an Interrogatory. For any and all written responses and production of documents, Vasu reserves all objections or other questions regarding the admissibility, authenticity, competency, relevance, or materiality of any documents produced or referred to in response to an Interrogatory, as evidence in this Litigation or any other proceeding, action, or trial.

24. Vasu's written responses and production of documents are based upon information and writings available to and located by its attorneys as of service of these Responses. Vasu has not completed its investigation of the facts relating to this case, has not completed discovery in this action, and has not completed preparation for trial. All the information supplied and documents and things produced are based only on such information and documents that are reasonably available and specifically known to Vasu and its attorneys as of the date of service of

these Responses. Therefore, Vasu's written responses and production of documents are without prejudice to its right to supplement and/or amend its written responses and production of documents and to present at trial or other proceeding evidence discovered hereafter.

### **OBJECTIONS TO DEFINITIONS AND INSTRUCTIONS**

In addition to the objections set forth below, Vasu hereby specifically incorporates each and every general objection set forth above in its objections to Defendants' definitions and instructions.

1. Vasu objects to Defendants' Definitions of the terms "Plaintiff," "You," "Your," and "Vasu" and objects to each Interrogatory that incorporates any of these terms, to the extent they are overly broad and unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Vasu further objects to these definitions, and to each Interrogatory that incorporates any of these terms, to the extent that they call for a legal conclusion or seek documents or information protected from discovery by the attorney-client privilege, the work product doctrine, the common interest doctrine or any other applicable law, privilege, doctrine or immunity. Vasu further objects to these definitions, and to each Interrogatory that incorporates any of these terms, to the extent they include entities and persons over whom Vasu has no control.

2. Vasu objects to Defendants' Definition of the term "Defendants" and "Samsung" and to each Interrogatory that incorporates these terms, to the extent they are too narrow and fail to include each of Samsung's past and present officers, directors, employees, counsel, agents, consultants, representatives, and any other persons acting on behalf of any of the foregoing, and Defendants' affiliates, parents, divisions, joint ventures, licensees, franchisees, assigns, predecessors, and successors in interest, and any other legal entities, whether foreign or domestic,

that are owned or controlled by Samsung, and all predecessors and successors in interest to such entities.

3. Vasu objects to Defendants' Definition of the term "Asserted Patents" or "Patents-in-Suit" and to each Interrogatory that incorporates these terms, to the extent that they are vague, ambiguous, overbroad, unduly burdensome, and not reasonably calculated to lead to the discovery of admissible evidence, and to the extent they seek information not at issue in this case.

4. Vasu objects to Defendants' Definition of the term "Asserted Claim(s)" and to each Interrogatory that incorporates these terms, to the extent that they are vague, ambiguous, overbroad, unduly burdensome, and not reasonably calculated to lead to the discovery of admissible evidence, and to the extent they seek information not at issue in this case.

5. Vasu objects to Defendants' Definition of "Related Patents" and to each Interrogatory that incorporates these terms, to the extent that they are ambiguous, overbroad, unduly burdensome, not reasonably calculated to lead to the discovery of admissible evidence, and to the extent they seek information that is not relevant and/or not proportional to the needs of the case. Vasu objects to these Definitions to the extent they seek information that exceeds the scope of the relevance to the Asserted Patents. Vasu further objects to these Definitions to the extent they call for legal conclusions.

6. Vasu objects to Defendants' Definition of "Related Litigation" and to each Interrogatory that incorporates these terms, to the extent that they are ambiguous, overbroad, unduly burdensome, not reasonably calculated to lead to the discovery of admissible evidence, and to the extent they seek information that is not relevant and/or not proportional to the needs of the case. Vasu objects to these Definitions to the extent they seek information that exceeds the scope of the relevance to the Asserted Patents. Vasu further objects to these Definitions to the extent they

call for legal conclusions.

7. Vasu objects to Defendants' Definition of the term "Accused Product(s)" and to each Interrogatory that incorporates these terms, to the extent that they are vague, ambiguous, overbroad, unduly burdensome, and not reasonably calculated to lead to the discovery of admissible evidence, and to the extent they seek information not at issue in this case.

8. Vasu objects to Defendants' Definition of the terms "Infringe," and "Infringement" and to any Interrogatory that incorporates these terms, to the extent that they call for a legal conclusion.

9. Vasu objects to Defendants' Definition of the term "Person" and to each Interrogatory that incorporates this term as overbroad and seeking to impose obligations greater or different than those imposed by the Federal Rules of Civil Procedure, the Federal Rules of Evidence and/or protective order entered in or applicable to this action. Vasu further objects to this Definition, and to each Interrogatory that incorporates any of these terms, because it is not proportional to the needs of the case, such that the burden or expense of the proposed discovery outweighs its likely benefit. Vasu further objects to this Definition, and to each Request that incorporates this term, to the extent it is vague, overbroad, and unduly burdensome.

10. Vasu objects to Defendants' Definition of the term "Document" and "Thing" and to each Interrogatory that incorporates this term, to the extent they seek to impose obligations greater or different than those imposed by the Federal Rules of Civil Procedure, the Federal Rules of Evidence and/or ESI order or protective order entered in this action. Vasu further objects to this Definitions, and to each Interrogatory that incorporates this terms, to the extent that they call for the production of information that the parties have agreed not to preserve or produce. Vasu further objects to these definitions, and to each Interrogatory that incorporates this term, to the

extent they are vague, overbroad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence.

11. Vasu objects to Defendant's Definition of the term "Communication" and to each Interrogatory that incorporates this term, to the extent they seek to impose obligations greater or different than those imposed by the Federal Rules of Civil Procedure, the Federal Rules of Evidence and/or ESI order or protective order entered in this action. Vasu further objects to this Definition, and to each Interrogatory that incorporates this terms, to the extent that they call for the production of information that the parties have agreed not to preserve or produce. Vasu further objects to these definitions, and to each Interrogatory that incorporates this term, to the extent they are vague, overbroad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence.

12. Vasu objects to Defendants' Definitions of the terms "Concern," "Concerning," "Evidence," "Evidencing," "Reflect," "Reflecting," "Relating to," "Relates to," "Referring to," "Refer to," "Refers to," "Referred to," and "Regarding," "Refer or relate to," "Referring or relating to," and "Referred or related to" and to each Interrogatory that incorporates these terms, to the extent they are overbroad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence, and to the extent they call for legal conclusions. Vasu further objects to these definitions, and to each Interrogatory that incorporates them, to the extent that they are vague, ambiguous and/or unintelligible.

13. Vasu objects to Defendants' Definition of "Prior Art," and to each Interrogatory that incorporates this term, to the extent it is vague, ambiguous, unintelligible and/or calls for a legal conclusion, and to the extent that it is broader than the meaning of "prior art" pursuant to 35 U.S.C. §101 et seq. and related case law. Vasu further objects to the Definition of the term "Prior

Art,” and to each Interrogatory that incorporates this term, to the extent it seeks information about patents that are not at issue in this case.

14. Vasu objects to Defendants’ Definitions of the terms “any,” “all,” “every,” and “each” and variations thereof, to each Interrogatory that incorporates any of these terms, to the extent they are overbroad, unduly burdensome and is not proportional to the needs of the case, such that the burden or expense of the proposed discovery outweighs its likely benefit. Vasu further objects to these Definitions, and to each Interrogatory that incorporates them, to the extent that they are vague, ambiguous, and/or unintelligible.

### **RESPONSES TO INTERROGATORIES**

#### **INTERROGATORY NO. 1:**

Separately for each Asserted Claim of the Asserted Patents, identify the priority date (a date certain) to which Plaintiff contends the Asserted Claim is entitled and the basis therefor, including, without limitation, identification of all portions of the specification of any earlier Related Patents and/or applications leading to such Related Patents that support such priority date and description in detail on an element-by-element basis, all facts regarding the conception and reduction to practice, including but not limited to the date(s) and location(s) of conception and reduction to practice, all acts Plaintiff contends represent diligence occurring between the dates of conception and reduction to practice, each Person involved in such conception, diligence, and/or reduction to practice, the description of each Person’s role and participation in such conception and reduction to practice and the dates of their involvement, a description of all then-existing, commercially available devices using the claimed functionality, each Person involved in such conception and reduction to practice analyzed, reviewed, or was otherwise aware of, and all Documents (by Bates number) that Plaintiff contends support its response.

**RESPONSE TO INTERROGATORY NO. 1:**

Vasu incorporates its General Objections and Objections to Definitions and Instructions by reference. Vasu objects to this Interrogatory to the extent it is vague and ambiguous, particularly given the use of the phrase “for each Asserted Claim of the Asserted Patents,” “all acts Vasu contends represent diligence occurring between the dates of conception and reduction to practice.” Vasu objects to this Interrogatory as overbroad and unduly burdensome, not reasonably calculated to lead to the discovery of admissible evidence and neither relevant nor proportional to the needs of this case. Vasu objects to this Interrogatory to the extent it seeks information protected from disclosure by the attorney-client privilege, the work product doctrine, the common interest doctrine, or any other applicable law, privilege, doctrine, or immunity; Vasu will not disclose any privileged information. Vasu objects to this Interrogatory to the extent it calls for a legal conclusion. Vasu objects to this Interrogatory as premature to the extent it calls for subsequent discovery in this action and/or expert testimony that will be provided according to deadlines set forth by the Court. Vasu objects to this Interrogatory as being compound and having multiple subparts, which should count toward the limits on Interrogatories. Vasu objects to this interrogatory because it is not required to affirmatively prove entitlement to a priority date as this Interrogatory requests. *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1328-29 (Fed. Cir. 2008) (confirming that because defendant bears the burden to show invalidity, patentee need not prove entitlement to priority date except to the extent it rebuts evidence of anticipation or lack of section 112 support). Defendants have not asserted alleged prior art that falls in between the priority date of the Asserted Patents and the actual filing dates of the Asserted Patent applications. Defendants have offered no evidence that places the priority date of the Asserted Patents at issue.

Subject to and without waiving the foregoing General Objections and any specific objections contained herein, Vasu responds as follows:

Priority Dates

U.S. Patent Nos. 8,886,18; 10,206,154; 10,368,281; and 10,419,996 (the “Asserted NS Patents”) claim priority to Provisional Patent Application No. 60/534,466, filed January 6, 2004 (the “NS Provisional App.”). The NS Provisional App. includes support for all of the claims of the Asserted Patents. For example, it discloses a mobile device that switches between both cellular and Wi-Fi networks. *See, e.g.*, NS Provisional App. at Abstract, Fig. 1, 1-4, Claims 1-11. The NS Provisional App. includes descriptions of the monitoring of signal strengths of wireless connection for the determination of switching networks. NS Provisional App. at Abstract, Fig. 1, 1-4. For example, the NS Provisional App. discloses timers triggered by predefined signal strength thresholds to initial switching. NS Provisional App. at Abstract, Fig. 1, 1, 3-4.

U.S. Patent Nos. 8,520,605 and 8,958,434 (the “Asserted ST Patents”) claim priority to the Provisional Patent Application No. 60/352,258 filed February 11, 2005 (the “ST Provisional App.”). The ST Provisional App. includes support for all of the claims of the Asserted Patents. For example, it discloses a controller device that receives simultaneous or concurrent content streams associated with content originators or specific content. ST Provisional App. at 1-2, 5-6, Fig. 1. The ST Provisional App. includes descriptions of the use of quality of service transmission characteristics in a content parameter module. *Id.* at 5-6, Fig. 1. For example, the ST Provisional App. further includes descriptions of selective processing of content data stream based on content parameter values. *Id.* at 1-2, Fig. 1.

## Conception

Vasudevan Ganesan is the sole inventor of all but one of the Asserted Patents. Generally, his mission in developing the relevant technology in the Asserted Patents was to improve upon the operation of the nascent Wi-Fi technology. While mobile devices were originally not used for high-volume data, Mr. Ganesan foresaw that mobile consumers in the future would increasingly want to use Wi-Fi for high-volume content. Mr. Ganesan anticipated the rapid upward growth of Wi-Fi and said that Wi-Fi would ultimately replace cellular phones for connectivity and vehicles to transport content. In early 2003, Mr. Ganesan noticed some deficiencies in Wi-Fi. For example, the Wi-Fi signal profile was square, meaning the Wi-Fi signal strength increases and comes down at a 90-degree angle. This Wi-Fi strength profile means a user is inside or outside a Wi-Fi hotspot, and a Wi-Fi hotspot has a very short range. To address these, Mr. Ganesan started research and development on how to, without disruption, seamlessly hold in-progress content sessions when mobile consumers move between Wi-Fi and cellular networks. Mr. Ganesan conceived of the proactive predictive logic to predict the fall of the Wi-Fi signal before the 90-degree fall down of signal strength to hold an in-progress content session without disruption seamlessly and without breakdown. Mr. Ganesan understood technology was needed to hold the in-progress content session and then seamlessly transfer the in-progress content session to available cellular or another Wi-Fi hotspot. The intention was to keep communication sessions in progress with Wi-Fi as much as possible because Wi-Fi was much cheaper than cellular. Mr. Ganesan was unaware of any competition for this type of seamless session continuity.

Similarly, Mr. Ganesan began researching and developing how to control streams by content. Mr. Ganesan understood there was a need to provide coercive/disruptive control for broadband content. Mr. Ganesan worked on dynamically controlling the QOS parameters in the

router for any given content based on its origin. Mr. Ganesan was unaware of any competition for this type of coercive/disruptive control for broadband content.

To develop these ideas further, Mr. Ganesan started HAVA Corporation in October 2003 and soon after began working on the NS Provisional App. and ST Provisional App.

Vasu's investigation of this matter is ongoing, and its response to this Interrogatory will be supplemented as additional information becomes known to it. Discovery is ongoing. Vasu reserves the right to supplement its response pursuant to Fed. R. Civ. P. 26(e).

**INTERROGATORY NO. 2:**

For each Asserted Claim, state when, where, by whom, to whom, and under what terms the alleged invention, in whole or in part, was first publicly disclosed, demonstrated, used, sold, given away, or offered for sale by an inventor or any other Person. For clarity, this includes (on a claim-by-claim basis) an identification of all Documents and things evidencing and Persons knowledgeable about each such demonstration, use, disclosure, sale, gift, or offer for sale.

**RESPONSE TO INTERROGATORY NO. 2:**

Vasu incorporates its General Objections and Objections to Definitions and Instructions by reference. Vasu objects to this Interrogatory to the extent it seeks information protected from disclosure by the attorney-client privilege, the work product doctrine, the common interest doctrine, or any other applicable law, privilege, doctrine, or immunity; Vasu will not disclose any privileged information. Vasu objects to this Interrogatory to the extent it is vague and ambiguous, particularly given the use of the phrase "all Documents and things." Vasu objects to this Interrogatory as overbroad and unduly burdensome, not reasonably calculated to lead to the discovery of admissible evidence and neither relevant nor proportional to the needs of this case. Vasu objects to this Interrogatory to the extent it calls for a legal conclusion. Vasu objects to this

Interrogatory to the extent that it seeks information that is covered by confidential agreements with third-parties and/or protective orders of other litigations or any other proceedings.

Subject to and without waiving the foregoing General Objections and any specific objections contained herein, Vasu responds as follows:

Vasu is unaware of any public disclosure, demonstration, use, sale, giveaway, or offer for sale for any products that embody the claimed invention before the priority date of the Asserted Patents.

Vasu's investigation of this matter is ongoing, and its response to this Interrogatory will be supplemented as additional information becomes known to it. Discovery is ongoing. Vasu reserves the right to supplement its response pursuant to Fed. R. Civ. P. 26(e).

**INTERROGATORY NO. 3:**

For each Patent-in-Suit, identify any and all products, systems or software or systems manufactured, sold, or used by any Person that has embodied, practiced, fallen within the scope of, or used any Asserted Claim; state the period of time during which such products, systems or software were sold; identify and describe including by patent number each instance of patent marking compliant with 35 U.S.C. § 287, including any efforts by Plaintiff or previous assignees to compel all licensees of any of the Patents-in-Suit to mark products, systems or software covered by the Patents-in-Suit and all instances of which Plaintiff is aware in which any licensee marked or did not mark its products, systems or software with the number(s) of any of the Patents-in-Suit, and state the period of time during which such products, systems or software, if any, were marked and with which patents; and identify the persons most knowledgeable thereof and all documents and things relating thereto.

**RESPONSE TO INTERROGATORY NO. 3:**

Vasu incorporates its General Objections and Objections to Definitions and Instructions by reference. Vasu objects to this Interrogatory to the extent it seeks information protected from disclosure by the attorney-client privilege, the work product doctrine, the common interest doctrine, or any other applicable law, privilege, doctrine, or immunity; Vasu will not disclose any privileged information. Vasu objects to this Interrogatory to the extent it is vague and ambiguous, particularly given the use of the phrase “any and all products, systems, or software of systems manufactured, sold, or used by any Person that has embodied, practiced, fallen within the scope of, or used any Asserted Claim.” Vasu will address, to the extent any exist, products, systems, or software of systems manufactured, sold, or used by Vasu and Defendant. Vasu objects to this Interrogatory as overbroad and unduly burdensome, not reasonably calculated to lead to the discovery of admissible evidence and neither relevant nor proportional to the needs of this case. Vasu objects to this Interrogatory to the extent it calls for a legal conclusion. Vasu objects to this Interrogatory as being compound and having multiple subparts, which should count toward the limits on Interrogatories. Vasu objects to this Interrogatory to the extent it asks for information that is irrelevant, overbroad, and unreasonably burdensome, including information on whether any third-parties may infringe that Asserted Claims. Vasu limits its response to products, systems, or software that were developed by Vasu or Defendant.

Subject to and without waiving the foregoing General Objections and any specific objections contained herein, Vasu responds as follows:

Vasu has not disclosed, sold, or commercialized any product, system, software, or system that embodies all elements of any Asserted Claim. Accordingly, Vasu is not aware of any marking by Vasu. Additionally, Vasu did not commercialize any product that embodied the

asserted claims. Vasu did not license a product that embodies all of the limitations of any Asserted Claims. Regarding products embodying the asserted claims, Vasu identifies the products set forth in its infringement contentions and all supplements thereto and incorporates them by reference herein.

Vasu's investigation of this matter is ongoing, and its response to this Interrogatory will be supplemented as additional information becomes known to it. Discovery is ongoing. Vasu reserves the right to supplement its response pursuant to Fed. R. Civ. P. 26(e).

**INTERROGATORY NO. 4:**

Identify and describe each attempt to commercialize, market, license, assign, sell, and/or otherwise monetize the Patents-in-Suit or Related Patents including 1) identifying each actual settlement, license, sublicense, or sale (by Bates number); 2) the dates on which negotiations for such attempted monetization began and ended; 3) all Documents (by Bates number) exchanged during negotiations and otherwise relating to such agreements and negotiations; 4) all terms of the agreement or offer to enter into an Agreement, including but not limited to any consideration suggested, offered, or given; and 5) the Person(s) with knowledge of such factual bases and all documents (by Bates number) relating to any of the foregoing.

**RESPONSE TO INTERROGATORY NO. 4:**

Vasu incorporates its General Objections and Objections to Definitions and Instructions by reference. Vasu objects to this Interrogatory to the extent it seeks information protected from disclosure by the attorney-client privilege, the work product doctrine, the common interest doctrine, or any other applicable law, privilege, doctrine, or immunity; Vasu will not disclose any privileged information. Vasu objects to this Interrogatory to the extent it is vague and ambiguous, particularly given the use of the phrase "each attempt to commercialize, market,

license, assign, sell and/or otherwise monetize the Patents-in-Suit or Related Patents.” Vasu will address Vasu’s attempts to commercialize, market, license, assign, sell, and/or otherwise monetize the Patents-in-Suit or Related Patents with respect to companies offering infringing products or services. Vasu objects to this Interrogatory as overbroad and unduly burdensome, not reasonably calculated to lead to the discovery of admissible evidence and neither relevant nor proportional to the needs of this case. Vasu objects to this Interrogatory to the extent it calls for a legal conclusion. Vasu objects to this Interrogatory to the extent that it seeks information that is covered by confidential agreements with third-parties and/or protective orders of other litigations or any other proceedings.

Subject to and without waiving the foregoing General Objections and any specific objections contained herein, Vasu responds as follows:

Vasu has not licensed the Patents-in-Suit or Related Patents. Vasu has not approached any potentially infringing companies in an effort to commercialize, market, license, sell, or otherwise monetize the Asserted Patents. Vasu has not commercialized or marketed any products that embody the Patents-in-Suit.

In 2014, a law firm, representing an anonymous client, approached Hava Corporation to purchase the Asserted Patents. However, Hava Corporation responded that it was not interested in selling its intellectual property. The Asserted Patents have been assigned as summarized in the table below. All of the assignments have been between related entities.

| <u><b>Asserted Patent</b></u> | <u><b>Assignments</b></u>                                                                              |
|-------------------------------|--------------------------------------------------------------------------------------------------------|
| 8,520,605                     | <ul style="list-style-type: none"><li>10/27/2005: From Vasudevan Ganesan to Hava Corporation</li></ul> |

| <b><u>Asserted Patent</u></b> | <b><u>Assignments</u></b>                                                                                                                                                                                                                                      |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                               | <ul style="list-style-type: none"> <li>• 10/6/2010: From Hava Corporation to Vasu Networks Corporation</li> <li>• 7/11/2023: From Vasu Networks Corporation to Vasu Holdings, LLC</li> </ul>                                                                   |
| 8,958,434                     | <ul style="list-style-type: none"> <li>• 10/27/2005: From Vasudevan Ganesan to Hava Corporation</li> <li>• 10/6/2010: From Hava Corporation to Vasu Networks Corporation</li> <li>• 7/11/2023: From Vasu Networks Corporation to Vasu Holdings, LLC</li> </ul> |
| 8,886,181                     | <ul style="list-style-type: none"> <li>• 1/11/2006: From Vasudevan Ganesan to Hava Corporation</li> <li>• 10/6/2010: From Hava Corporation to Vasu Networks Corporation</li> <li>• 7/11/2023: From Vasu Networks Corporation to Vasu Holdings, LLC</li> </ul>  |
| 10,206,154                    | <ul style="list-style-type: none"> <li>• 1/11/2006: From Vasudevan Ganesan to Hava Corporation</li> <li>• 10/6/2010: From Hava Corporation to Vasu Networks Corporation</li> <li>• 7/11/2023: From Vasu Networks Corporation to Vasu Holdings, LLC</li> </ul>  |
| 10,368,281                    | <ul style="list-style-type: none"> <li>• 1/6/2005: From Vasudevan Ganesan to Hava Corporation</li> <li>• 10/6/2010: From Hava Corporation to Vasu Networks Corporation</li> </ul>                                                                              |

| <u>Asserted Patent</u> | <u>Assignments</u>                                                                                                                                                                                             |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        | <ul style="list-style-type: none"> <li>7/11/2023: From Vasu Networks Corporation to Vasu Holdings, LLC</li> </ul>                                                                                              |
| 10,419,996             | <ul style="list-style-type: none"> <li>3/13/2018: From Vasudevan Ganesan and Stephane H. Maes to Vasu Networks Corporation</li> <li>7/11/2023: From Vasu Networks Corporation to Vasu Holdings, LLC</li> </ul> |

Vasu's investigation of this matter is ongoing, and its response to this Interrogatory will be supplemented as additional information becomes known to it. Discovery is ongoing. Vasu reserves the right to supplement its response pursuant to Fed. R. Civ. P. 26(e).

**INTERROGATORY NO. 5:**

Identify every person or entity with a current or prior financial, ownership, or other interest in the Patents-in-Suit or Related Patents, this Action, Related Litigations, or Past Litigations, and for each such person or entity, describe the nature of the interest held by that person or entity, and the relationship between such person or entity and its affiliates, on the one hand, and Plaintiff, on the other hand.

**RESPONSE TO INTERROGATORY NO. 5:**

Vasu incorporates its General Objections and Objections to Definitions and Instructions by reference. Vasu objects to this Interrogatory to the extent it seeks information protected by the attorney-client privilege, the work product doctrine, the common interest doctrine, or any other applicable law, privilege, doctrine, or immunity; Vasu will not disclose any privileged information. Vasu objects to this Interrogatory as overbroad and unduly burdensome, not reasonably calculated to lead to the discovery of admissible evidence and neither relevant nor

proportional to the needs of this case, including, for example, “Identify every person or entity with a current or prior financial, ownership, or other interest in the Patents-in-Suit or Related Patents, this Action, Related Litigation, or Past Litigation.” Vasu objects to this Interrogatory in its use of the phrase “Related Patents,” “Related Litigation,” and “Past Litigation” because it seeks information that exceeds the scope of the relevance to the Patents-in-Suit and is thus overbroad, unduly burdensome, and not proportional to the needs of this case. Vasu objects to the term “interest” as overbroad and will address who controls the Patents-in-Suit. Vasu objects to this Interrogatory as seeking information that is irrelevant, immaterial or not reasonably calculated to lead to the discovery of admissible evidence. Vasu objects to this Interrogatory to the extent that it seeks information that is covered by confidential agreements with third-parties and/or protective orders of other litigations or any other proceedings.

Subject to and without waiving the foregoing General Objections and any specific objections contained herein, Vasu responds as follows:

Vasu Holdings LLC (the successor entity to Vasu Networks Corporation) holds all ownership rights and interest in the Patents-in-Suit and has complete control over this Action.

Vasu’s investigation of this matter is ongoing, and its response to this Interrogatory will be supplemented as additional information becomes known to it. Discovery is ongoing. Vasu reserves the right to supplement its response pursuant to Fed. R. Civ. P. 26(e).

**INTERROGATORY NO. 6:**

For each Accused Product and for each of the Patents-in-Suit, describe with particularity all factual and legal bases for Plaintiff’s claim for damages in this Action, including without limitation: (a) whether Plaintiff’s damages claims are based on lost profits, a reasonable royalty, or other damages theory, including by identifying any royalty rate, royalty base, lost profits,

disgorgements, enhanced damages, attorney's fees, or costs that Plaintiff contends are appropriate, and the bases for such contentions including, if applicable, with reference to factors outlined in *Georgia-Pacific Corp. v. United States Plywood Corp.*, 318 F. Supp. 1116, 1119-20 (S.D.N.Y. 1970); (b) the date on which Plaintiff contends the hypothetical negotiation should have commenced with respect to each of the Patents-in-Suit; (c) the time period for which Plaintiff contends that it is entitled to collect damages from Defendants due to any alleged infringement of the Asserted Claims; and (d) whether the royalty base is based on the value of the entire product or a portion thereof (if so, identify the portion).

**RESPONSE TO INTERROGATORY NO. 6:**

Vasu incorporates its General Objections and Objections to Definitions and Instructions by reference. Vasu objects to this Interrogatory to the extent it seeks information protected from disclosure by the attorney-client privilege, the work product doctrine, the common interest doctrine, or any other applicable law, privilege, doctrine, or immunity; Vasu will not disclose any privileged information. Vasu objects to this Interrogatory to the extent it is vague and ambiguous, particularly given the use of the phrase "all factual and legal bases," and "including without limitation." Vasu objects to this Interrogatory as overbroad and unduly burdensome, not reasonably calculated to lead to the discovery of admissible evidence and neither relevant nor proportional to the needs of this case including, for example, in its use of the phrase "all factual and legal bases," and "including without limitation." Vasu objects to this Interrogatory to the extent it calls for information that is publicly available or equally available to Defendants, and therefore is of no greater burden for Defendants to obtain than for Vasu to obtain and produce. Vasu objects to this Interrogatory to the extent it seeks or requires information within Defendant's knowledge, possession, custody or control. Vasu objects to this Interrogatory as

being compound and having multiple subparts, which should count toward the limits on Interrogatories. Vasu objects to this Interrogatory as premature to the extent it calls for subsequent discovery in this action and/or expert testimony that will be provided according to deadlines set forth by the Court. Vasu objects to this Interrogatory to the extent it calls for a legal conclusion.

Subject to and without waiving the foregoing General Objections and any specific objections contained herein, Vasu responds as follows:

Vasu seeks damages in an amount adequate to compensate for Defendants' infringement, which is at least, but not limited to, a reasonable royalty for Defendants' infringement of the Patents-in-Suit, plus any costs, fees, interest, and/or enhancements as determined by the Court. *See* 35 U.S.C. §§ 283-285. Vasu additionally seeks an accounting of all infringing sales and revenues.

As discovery is at the early stages, Vasu has not yet completed its evaluation of the appropriate amount and structure of damages in this case. *See* Advisory Comm. Note to 1993 Amendment to Fed. R. Civ. P. 26(a)(1) (“[A] party would not be expected to provide a calculation of damages which, as in many patent infringement actions, depends on information in the possession of damages which, as in many patent infringement actions, depends on information in the possession of another party or person.”). Vasu reserves the right to disclose any additional information relating to damages that it discovers as it becomes known to Vasu during the course of discovery, consistent with the Federal Rules of Civil Procedure, the local rules of this Court, and any applicable Court order(s). Vasu further reserves the supplement, modify, and amend its damages calculations as appropriate in view of information disclosed in discovery and in view of anticipated expert opinions on the subject of damages.

Vasu may seek damages under at least the following theories: (1) a reasonable royalty based on Defendants' revenue from the Accused Products, (2) a reasonable royalty based on the number of units sold of the Accused Products, (3) a reasonable royalty based on the number of users for each of the Accused Products; (4) a reasonable royalty based on the number of sessions by Defendants' customers using the Accused Products; (5) a reasonable royalty based on foreign sales under 35 U.S.C. § 271(a) if a domestic act of infringement – at least one of “making, using, selling offering for sale, or importing” – was the proximate cause of those damages; *See Brumfield, Tr. For Ascent Tr. v. IBG LLC*, No. 2022-1630, 2024 WL 1292151 (Fed. Cir. Mar. 27, 2024), (6) the market approach using comparable licenses and (7) cost savings to Defendant from using the Asserted Patents. Vasu is actively seeking discovery into issues related to damages. Vasu will be evaluating each of these theories and conferring with its damages expert; afterwards, the damages expert will address the relevant theories, along with the factors set forth in *Georgia Pacific Corp. v. United States Plywood Corp.*, 318 F. Supp. 1116 (S.D.N.Y. 1970), in the damages expert report after the close of fact discovery.

Vasu's damages will be based on evidence developed during discovery and at trial. Such evidence will include Defendants' confidential information and documentation, testimony of fact witnesses and expert testimony, discovery responses, and other relevant information produced by the parties during discovery. For example, information regarding Defendants' infringement and damages will include, among other things, Defendants' financial information, including revenues and profits, cost of goods sold, quantity sold; number of users; extent of use; any efficiencies, avoided development costs, or cost savings that resulted from Defendants' infringement; Defendants' market share, competition, and the basis for market demand for Defendant's accused technologies, products, systems, and methods; Defendants' marketing materials and

surveys relating to the accused technologies, products, systems, and methods; the nature and extent of Defendants' infringement; the value of Defendants' infringement, including any costs saved or revenues or monetary value that Defendant derives from mobile carriers or customer data it can collect through its infringement and any qualitative impact of such on Defendants' business; whether the accused technology and Defendants' sales of the accused technologies, products, systems, and methods drive sales of Defendants' accused technologies, products, systems, and methods; any technically and economically comparable licenses or agreements; any benefits of the technology that Defendants realize; and any purported non-infringing alternatives. Additional information relevant to damages will include, among other things, market research, consumer survey data, industry reports, and Defendants' public Security & Exchange Commission filings.

Vasu may seek enhanced damages if discovery supports Defendants' infringement was egregious willful. *See* 35 U.S.C. § 284. To the extent allowable by law, Vasu seeks attorney's fees, costs, expenses, pre-judgment interest and post-judgment interest on its claims, and such other relief as the Court may deem appropriate. *See* 35 U.S.C. § 285. Such costs, fees, and expenses cannot be computed at the present time and depend on a variety of factors such as the length and intensity of the litigation and the positions that Defendants take.

Vasu contends that the hypothetical negotiation should have commenced when the first product was released with the infringing technology, which is believed based on publicly available information, to have been on, or around, 2015.

Vasu contends that it is entitled to collect damages from Defendants for the last six years for the following patents: U.S. Patent 8,886,181 (the '181 Patent), U.S. Patent 10,206,154 (the '154 Patent), U.S. 10,419,996 (the '996 Patent), and U.S. Patent 10,368,281 (the '281 Patent).

Vasu contends that it is entitled to collect damages as of January 12, 2024, the date in which Vasu sent notice to Defendants regarding Defendants' infringement of Vasu's patents and that included following asserted patents, U.S. Patent 8,520,605 (the '605 Patent) and U.S. Patent 8,958,434 (the '434 Patent). Dkt. 1-8, 1-9.

Vasu will determine whether the royalty base will be based on the value of the entire product or a portion thereof after conducting discovery of Defendants' confidential information and conferring with Vasu's damages expert.

Vasu's investigation of this matter is ongoing, and its response to this Interrogatory will be supplemented as additional information becomes known to it. Discovery is ongoing. Vasu reserves the right to supplement its response pursuant to Fed. R. Civ. P. 26(e).

**INTERROGATORY NO. 7:**

Identify any agreement that Plaintiff contends constitutes a comparable license for purposes of seeking a reasonable royalty from Defendants in this Action, and explain in detail the factual and legal bases for Plaintiff's contention that the agreement(s) constitutes a comparable license for purposes of seeking a reasonable royalty from Defendants.

**RESPONSE TO INTERROGATORY NO. 7:**

Vasu incorporates its General Objections and Objections to Definitions and Instructions by reference. Vasu objects to this Interrogatory to the extent it calls for a legal conclusion.

Subject to and without waiving the foregoing General Objections and any specific objections contained herein, Vasu responds as follows:

At this time, Vasu is unaware of any comparable license agreement for purposes of seeking a reasonable royalty from Defendants in this Action but will supplement its response, if applicable, as discovery continues in this Action.

Vasu's investigation of this matter is ongoing, and its response to this Interrogatory will be supplemented as additional information becomes known to it. Discovery is ongoing. Vasu reserves the right to supplement its response pursuant to Fed. R. Civ. P. 26(e).

**INTERROGATORY NO. 8:**

Explain in detail all facts and circumstances that support or otherwise relate to any secondary considerations of non-obviousness of any Asserted Claim, including identification of all Documents supporting Plaintiff's contention and including without limitation, Plaintiff's contention (if any) that the subject matter of any such claim: (a) satisfied a long-felt need, solved problems the industry failed to solve; (b) was the subject of skepticism expressed in the industry; (c) has been a commercial success; (d) has had its significance recognized by the industry; (e) has been copied by others; and/or (f) has achieved unexpected results; and further describe the alleged nexus between each such consideration and each Asserted Claim.

**RESPONSE TO INTERROGATORY NO. 8:**

Vasu incorporates its General Objections and Objections to Definitions and Instructions by reference. Vasu objects to this Interrogatory to the extent it calls for information that is publicly available or equally available to Defendants, and therefore is of no greater burden for Defendants to obtain than for Vasu to obtain and produce. Vasu objects to this Interrogatory to the extent it seeks or requires information within Defendant's knowledge, possession, custody or control. Vasu objects to this Interrogatory to the extent it is vague and ambiguous, particularly given the use of the phrase "all facts and circumstances," "identification of all Documents supporting Plaintiff's contention," and "including without limitation." Vasu objects to this Interrogatory as overbroad and unduly burdensome, not reasonably calculated to lead to the discovery of admissible evidence and neither relevant nor proportional to the needs of this case

including, for example, in its use of the phrase “all facts and circumstances,” “identification of all Documents supporting Plaintiff’s contention,” and “including without limitation.” Vasu objects to this Interrogatory as being compound and having multiple subparts, which should count toward the limits on Interrogatories. Vasu objects to this Interrogatory as premature to the extent it calls for subsequent discovery in this action and/or expert testimony that will be provided according to deadlines set forth by the Court. Vasu objects to this Interrogatory to the extent it calls for a legal conclusion.

Subject to and without waiving the foregoing General Objections and any specific objections contained herein, Vasu responds as follows:

This Interrogatory is premature in seeking validity contentions when Samsung has yet to provide invalidity contentions and in seeking early disclosure of expert analysis.

The Asserted Claims were duly issued by the USPTO and are presumed to be valid under 35 U.S.C. § 282. Defendant bears the burden of establishing invalidity with clear and convincing evidence. Thus, it is Defendant’s burden to come forward with a prima facie case of obviousness before secondary considerations become relevant. Vasu incorporates by reference its response to Interrogatory No. 14 regarding validity.

**Copying and Commercial Success:** Defendants Samsung copied the technology in the Asserted Patents and incorporated this technology into the Accused Products. Samsung achieved great commercial success based on the technology in the Asserted Patents (as will be shown in Samsung’s financial records, which have not yet been produced). Samsung is the second-largest mobile telecommunications company in the United States. For evidence of Samsung’s copying of Vasu’s patented technology, Vasu refers to its responses to Interrogatory Nos. 6, 9, 13 and 17. As evidence of Samsung’s use of Vasu’s patented technology, Vasu incorporates by reference its

infringement contentions and expert reports it will serve in accordance with the Docket Control Order.

Upon information and belief, other companies infringe Vasu's technologies. For example, Apple Inc.'s Wi-Fi Assist feature on their iPhone mobile devices appears to copy Vasu's technologies. Its Wi-Fi Assist feature allows users to stay connected to the Internet even if they have a poor Wi-Fi connection by automatically switching to cellular.

**Long-Felt Need:** The specification notes the long-felt need for Vasu's technology. As noted in the specification,

Current telephone communications occur over wireless cellular networks, such as GSM, CDMA, and CDMA2000, Voice Over Internet (VOIP), or circuit switched network, such as PSTN. Current state of the art of most telephones used with such networks is that each telephone is restricted for use with only one specific network. For example, a cellular phone works in a cellular network; a VOIP phone works in VOIP network, and a landline phone works in a circuit switched network. Such limitations imply that an in-progress telephone communication cannot be seamlessly switched among cellular, VOIP, and circuit switched networks without losing the connection.

Such wireless networks use regulated portions of the radio spectrum and are shared by many users. The infrastructure costs of wireless networks are relatively high due to the size and complexity of the network equipment. There is a wide variance in the performance of different wireless networks. For example, a conventional wireless cellular network covers a relatively large geographical area, but provides a relatively low bandwidth. Other wireless networks, such as CDMA2000-EV-DO/DV networks, offer higher bandwidth and enhanced data services, such as web browsing. However, these networks also pack many users into a relatively small portion of the regulated spectrum. Other types of wireless networks are adapted to improve spectral efficiency with increased speed and smaller coverage areas. For example, an IEEE 802.11x (or WiFi) network may transmit at speeds up to 11 Mbps using a Direct Sequence Spread Spectrum (DSSS) mode or at speeds up to 54 Mbps using an Orthogonal Frequency Division Multiplexing (OFDM) mode.

A network wireless access point conforming to a WiFi (e.g., IEEE 802.11b) network may cover an area of a few hundred feet in diameter. Each such network access point is connected to a larger network (e.g., Internet). One such example is WiFi VOIP (Wireless Fidelity Voice over Internet Protocol), through which a communication device user can place a wireless telephone call over the Internet, using the technology specified in IEEE 802.xx at the network access point. VOIP is a method for taking analog audio signals and converting them into digital data

that can be transmitted over the Internet. Conventional VOIP telephone communications are enabled by VOIP network carriers, which utilize VOIP networks (e.g. the Internet), to place VOIP based telephone calls. VOIP enabled and compatible networks include VOIP switching for proper routing and billing of VOIP based telephone calls.

In order to cover larger geographical areas, a relatively large number of IEEE 802.11x, for example, network access points and relatively large wire-line back haul networks are required. In part, due to the relatively small geographical coverage area of each network access point, the resulting IEEE 802.11x based network may thus be prohibitively expensive to set up. Further, the small coverage areas may lead to many “dead zones” in which mobile communication device users are unable to place telephone calls using the VOIP network.

Conventional VOIP phones, which function in a WiFi coverage area (hotspot) corresponding to a WiFi access point, offers relatively inexpensive telephone communications. However, the WiFi availability is limited due to the small geographical area supported by each WiFi access point.

Conventional cellular phones, which function in a cell coverage area within the cellular network, are relatively expensive for telephone communications and have limited multimedia capabilities. Cellular networks and availability to the network covers a much wider, extensive geographical area.

Conventional landline phones, which function in a circuit switched network such as most residences, do not offer extensive telephone communication features, for example video. Such landline phones also do not offer the mobility provided by mobile communications devices such as the VOIP phones or the cellular phones.

E.g., '181 Patent at 1:38-2:45.

**Industry Recognition:** Praise and recognition of the importance of Vasu's inventions as incorporated in the Accused Products. For example, in 2019, Samsung was awarded the “Best Wi-Fi Innovation Award” by the Wireless Broadband Alliance for its Intelligent Wi-Fi innovations, making it the first smartphone ever to receive the award. The award for this technology that embodies the Asserted Claims. In recognizing the award, Samsung noted:

The innovation enables the device to recognize when a user has entered a space where Wi-Fi connections are likely to be unstable, and automatically switch to LTE connectivity to avoid network interruption. What's more, Intelligent Wi-Fi allows the device to more quickly detect weaker Wi-Fi signals in places like elevators, allowing it to transition from Wi-Fi to LTE connectivity much more quickly.

The praise and recognition are further reflected in Samsung's decision to cite Vasu's patents in 12 of its prosecutions as summarized in the table below.

| <b>Samsung Patent or Application</b> | <b>Vasu Patent or Application Cited</b>              |
|--------------------------------------|------------------------------------------------------|
| US 11,432,214                        | US 2015-0092747 ( <b>US 10,206,154</b> )             |
| US 11,082,815                        | US 2012-0033658 ( <b>US 8,886,181</b> ) <sup>1</sup> |
| US 11,159,594                        | <b>US 8,886,181</b>                                  |
| US 9,319,943                         | US 2013-0250830                                      |
| US 11,006,476                        | US 2015-0092747 ( <b>US 10,206,154</b> )             |
| US 10,791,492                        | US 2005-0147049                                      |
| US 10,638,428                        | US 2015-0327147                                      |
| US 9,723,530                         | US 2006-0121894                                      |
| US 11,895,738                        | US 9,648,538<br>US 9,125,128<br>US 2011-0255416      |
| US 9,483,223                         | US 2005-0147049                                      |
| US 9,256,386                         | US 2005-0147049                                      |

---

<sup>1</sup> Bold text denotes an asserted patent.

|                 |                 |
|-----------------|-----------------|
| US 2014-0244839 | US 2005-0147049 |
|-----------------|-----------------|

The Vasu patent or applications cited by Samsung share specifications with the Asserted Patents or are of the Asserted Patents themselves. Beyond Samsung, other patent applicants and the United States Patent and Trademark Office examiners cited Vasu's Asserted Patents as prior art in at least 253 subsequent patent applications listed below, confirming the pioneering nature of the Asserted Claims:

**253 Subsequent Applications Citing to the Asserted Patents**

- |                 |                   |
|-----------------|-------------------|
| ▪ ATE 527835T1  | ▪ CN 105873146B   |
| ▪ CA 668025C    | ▪ CN 106229683A   |
| ▪ CA 681984C    | ▪ CN 106304117A   |
| ▪ CN 101247385B | ▪ CN 106792839A   |
| ▪ CN 101340722A | ▪ CN 107182093B   |
| ▪ CN 101584150A | ▪ CN 108417988B   |
| ▪ CN 102655669B | ▪ CN 108494444B   |
| ▪ CN 102984827A | ▪ CN 109273854B   |
| ▪ CN 102984827A | ▪ CN 110495218A   |
| ▪ CN 103796282A | ▪ CN 110831096B   |
| ▪ CN 103857068A | ▪ CN 110954159A   |
| ▪ CN 104284343B | ▪ CN 111050366A   |
| ▪ CN 105119937B | ▪ CN 111182652B   |
| ▪ CN 105187361B | ▪ CN 112042164A   |
| ▪ CN 105472744B | ▪ CN 114980236B   |
| ▪ CN 105519088A | ▪ DE 102015225388 |

- EP 1738538
- EP 1775891
- EP 1878440
- EP 1895383
- EP 2050286
- EP 2176997
- EP 2311292
- EP 2830366
- EP 3060026
- EP 3278598
- EP 3278599
- EP 3278627
- EP 3603209
- EP 3603211
- G538725A
- G560118A
- GB 495550A
- JP 2012090226A
- JP 4894532
- JP 5161400
- JP 5271999
- JP 5470590
- JP 6603402
- KR 100895688
- KR 101447920
- KR 101843052
- KR 102016644
- KR 102023402
- KR 102056408
- KR 102270034
- KR 102309839
- KR 102500347
- KR 102558475
- KR 2015/0114765A
- PL 2478678T3
- TWI 381754B
- US 7,099,309
- US 7,369,091
- US 7,392,050
- US 7,512,131
- US 7,660,565
- US 7,676,229
- US 7,688,754
- US 7,711,370
- US 7,729,489
- US 7,761,119
- US 7,830,844
- US 7,869,827
- US 7,873,384
- US 7,929,964

- |                |                |
|----------------|----------------|
| ▪ US 7,979,097 | ▪ US 8,630,644 |
| ▪ US 8,078,164 | ▪ US 8,676,926 |
| ▪ US 8,090,095 | ▪ US 8,706,863 |
| ▪ US 8,125,999 | ▪ US 8,744,523 |
| ▪ US 8,195,815 | ▪ US 8,805,352 |
| ▪ US 8,223,631 | ▪ US 8,825,108 |
| ▪ US 8,249,590 | ▪ US 8,825,108 |
| ▪ US 8,255,549 | ▪ US 8,838,152 |
| ▪ US 8,270,965 | ▪ US 8,867,490 |
| ▪ US 8,279,802 | ▪ US 8,892,104 |
| ▪ US 8,279,850 | ▪ US 8,913,604 |
| ▪ US 8,345,624 | ▪ US 8,913,604 |
| ▪ US 8,362,917 | ▪ US 8,948,746 |
| ▪ US 8,396,470 | ▪ US 8,958,784 |
| ▪ US 8,437,809 | ▪ US 8,989,813 |
| ▪ US 8,503,431 | ▪ US 8,995,254 |
| ▪ US 8,514,867 | ▪ US 8,995,412 |
| ▪ US 8,514,867 | ▪ US 9,009,343 |
| ▪ US 8,520,605 | ▪ US 9,031,540 |
| ▪ US 8,520,605 | ▪ US 9,042,266 |
| ▪ US 8,538,393 | ▪ US 9,071,959 |
| ▪ US 8,547,887 | ▪ US 9,100,790 |
| ▪ US 8,577,354 | ▪ US 9,161,209 |
| ▪ US 8,588,174 | ▪ US 9,161,312 |
| ▪ US 8,627,399 | ▪ US 9,184,978 |

- US 9,189,124
- US 9,191,448
- US 9,198,027
- US 9,204,327
- US 9,232,531
- US 9,241,292
- US 9,270,799
- US 9,288,606
- US 9,344,987
- US 9,357,378
- US 9,363,165
- US 9,363,622
- US 9,378,343
- US 9,391,749
- US 9,392,395
- US 9,398,462
- US 9,398,505
- US 9,420,496
- US 9,426,641
- US 9,448,815
- US 9,467,854
- US 9,491,678
- US 9,510,256
- US 9,532,211
- US 9,549,009
- US 9,553,953
- US 9,554,415
- US 9,565,231
- US 9,565,712
- US 9,578,113
- US 9,603,009
- US 9,661,495
- US 9,681,251
- US 9,730,133
- US 9,736,318
- US 9,740,875
- US 9,743,271
- US 9,774,728
- US 9,805,208
- US 9,813,891
- US 9,819,578
- US 9,826,439
- US 9,838,536
- US 9,877,185
- US 9,900,845
- US 9,913,132
- US 9,992,326
- US 9,992,817
- US 10,002,345
- US 10,021,240

- US 10,097,593
- US 10,178,525
- US 10,237,402
- US 10,243,691
- US 10,268,530
- US 10,271,265
- US 10,306,433
- US 10,320,989
- US 10,341,929
- US 10,419,996
- US 10,455,071
- US 10,477,454
- US 10,506,398
- US 10,594,596
- US 10,624,011
- US 10,645,562
- US 10,798,629
- US 10,805,861
- US 10,841,240
- US 10,999,705
- US 11,032,709
- US 11,082,109
- US 11,178,272
- US 11,197,204
- US 11,218,769
- US 11,228,957
- US 11,395,216
- US 11,405,225
- US 11,405,916
- US 11,419,054
- US 11,448,726
- US 11,503,526
- US 11,503,526
- US 11,523,253
- US 11,586,952
- US 11,593,837
- US 11,690,006
- US 11,751,123
- US 11,870,476
- US 11,913,970
- US 11,956,628
- US 11,962,585
- US 11,984,566
- US 2005/0185611
- US 2006/0245405
- US 2006/0248566
- US 2007/0002837
- US 2007/0071006
- US 2007/0124608
- US 2009/0141682

- US 2010/0272049
- US 2012/0120962
- US 2013/0121214
- US 2013/0343343
- US 2014/0267599
- US 2015/0093991
- US 2015/0094045
- US 2015/0163715
- US 2017/0264657
- US 2018/0359674
- WO 2009/107582
- WO 2010/063119
- WO 2011/075825
- WO 2012/063491
- WO 2015/010199
- WO 2019/146996
- WO 2019/172044
- WO 2019/185506
- WO 2020/170221
- WO 2021/084519

The above applications for which the Asserted Patents were found to be relevant prior art include multiple applications filed by mobile telecommunications equipment companies, such as Apple, Nokia, Motorola, and Research in Motion; telephone carriers, such as, AT&T, Sprint, Qwest, Mitel, Vonage, and leading technology companies, such as IBM, Google, Qualcomm, Microsoft, Intel, and Dell.

Vasu's investigation of this matter is ongoing, and its response to this Interrogatory will be supplemented as additional information becomes known to it. Discovery is ongoing. Vasu reserves the right to supplement its response pursuant to Fed. R. Civ. P. 26(e).

**INTERROGATORY NO. 9:**

Separately for each Accused Product, describe all facts and bases concerning Plaintiff's first formation of a belief that the Accused Product was infringing, including but not limited to an identification of the date(s) on which Plaintiff or any attorney or agent acting on Plaintiff's behalf first learned or became aware of each such Accused Product; the date(s) on which Plaintiff or any attorney or agent acting on Plaintiff's behalf first formed a belief that each such Accused Product allegedly infringed; investigations, reverse engineering, analyses, tests, or studies done on any of such Accused Products by or on the behalf of Plaintiff with respect to possible infringement of any claim of the Patents-in-Suit; each person with knowledge of the foregoing and an identification of all documents or privilege log entries relating to such awareness, testing, or belief; and the reasons why Plaintiff did not commence a suit alleging patent infringement between the date Plaintiff became so aware and the filing of the Complaint in this Action.

**RESPONSE TO INTERROGATORY NO. 9:**

Vasu incorporates its General Objections and Objections to Definitions and Instructions by reference. Vasu objects to this Interrogatory to the extent it seeks information protected from disclosure by the attorney-client privilege, the work product doctrine, the common interest doctrine, or any other applicable law, privilege, doctrine, or immunity; Vasu will not disclose any privileged information. Vasu objects to this Interrogatory to the extent it is vague and ambiguous, particularly given the use of the phrase “all facts and bases.” Vasu objects to this Interrogatory as overbroad and unduly burdensome, not reasonably calculated to lead to the discovery of admissible evidence and neither relevant nor proportional to the needs of this case including, for example, in its use of the phrase “all facts and bases,” and “identification of all documents or privilege log entries relating to such awareness, testing, or belief.” Vasu objects to this Interrogatory to the extent it calls for a legal conclusion.

Subject to and without waiving the foregoing General Objections and any specific objections contained herein, Vasu responds as follows:

Vasu determined that Defendants were practicing the asserted claims before filing this lawsuit. Vasu incorporates by references its Complaint and any documents cited therein, as well as its infringement contentions, as well as all subsequent amendments to the aforementioned documents.

Vasu’s investigation of this matter is ongoing, and its response to this Interrogatory will be supplemented as additional information becomes known to it. Discovery is ongoing. Vasu reserves the right to supplement its response pursuant to Fed. R. Civ. P. 26(e).

**INTERROGATORY NO. 10:**

For each Asserted Patent, state Plaintiff's contention as to what constituted the level of skill of a person of ordinary skill in the art of the subject matter of the Asserted Patent at the time of the invention.

**RESPONSE TO INTERROGATORY NO. 10:**

Vasu incorporates its General Objections and Objections to Definitions and Instructions by reference. Vasu objects to this Interrogatory to the extent it seeks information protected from disclosure by the attorney-client privilege, the work product doctrine, the common interest doctrine, or any other applicable law, privilege, doctrine, or immunity; Vasu will not disclose any privileged information. Vasu objects to this Interrogatory to the extent it calls for a legal conclusion. Vasu objects to this Interrogatory to the extent it seeks information within Defendant's possession, custody or control. Vasu objects to this Interrogatory to the extent it purports to impose any requirement or 13 discovery obligation greater than and/or different from those set forth by the Federal Rules of Civil Procedure, the Local Rules of this Court, the District of Delaware Patent Local Rules, or orders of the Court governing these proceedings. Vasu further objects to this Interrogatory to the extent it is overbroad, unduly burdensome, irrelevant to the claims and defenses, and not proportional to the needs of this case. Vasu objects to this Interrogatory to the extent that it seeks confidential business, financial, proprietary, or sensitive information or trade secrets of third parties, which is subject to pre-existing protective order(s) and/or confidentiality agreements; Vasu will not disclose any information subject to a confidentiality agreement without the express consent of the concerned third party.

Subject to and without waiving the foregoing General Objections and any specific objections contained herein, Vasu responds as follows:

Vasu contends that the level of a person having ordinary skill in the art of the subject matter (“PHOSITA”) of the Asserted Patents at the time of the invention is consistent across each patent. Vasu contends that the level of a PHOSITA of the Asserted Patents at the time of the invention is consistent across each patent. Specifically, Vasu asserts that a PHOSITA would be an individual who possesses (1) a bachelor’s degree in electrical engineering, computer science, or the like, and (2) has an advanced degree or at least two years of relevant work experience in the field. However, a lack of formal education may be substituted with additional work experience.

Vasu’s investigation of this matter is ongoing, and its response to this Interrogatory will be supplemented as additional information becomes known to it. Discovery is ongoing. Vasu reserves the right to supplement its response pursuant to Fed. R. Civ. P. 26(e).

**INTERROGATORY NO. 11:**

Identify all Prior Art to any of the Patents-in-Suit or Related Patents known to Plaintiff or its attorneys, made known to Plaintiff or its attorneys, or ever brought to Plaintiff’s or Plaintiff’s attorney’s attention by any person—third party or otherwise—including, without limitation, all Documents and Things that any person or entity has asserted is Prior Art, is associated with Prior Art, or is potentially Prior Art.

**RESPONSE TO INTERROGATORY NO. 11:**

Vasu incorporates its General Objections and Objections to Definitions and Instructions by reference. Vasu objects to this Interrogatory to the extent it seeks information protected from disclosure by the attorney-client privilege, the work product doctrine, the common interest doctrine, or any other applicable law, privilege, doctrine, or immunity; Vasu will not disclose any privileged information. Vasu objects to this Interrogatory as seeking information that is

irrelevant, immaterial or not reasonably calculated to lead to the discovery of admissible evidence. Vasu objects to this Interrogatory to the extent it is vague and ambiguous, particularly given the use of the phrase “all Documents and Things.” Vasu objects to this Interrogatory as overbroad and unduly burdensome, not reasonably calculated to lead to the discovery of admissible evidence and neither relevant nor proportional to the needs of this case including, for example, in its use of the phrase “all Documents and Things.” Vasu objects to this Interrogatory to the extent it calls for a legal conclusion.

Vasu objects to this Interrogatory as compound and composed of multiple discrete subparts. Vasu objects to this Interrogatory as premature to the extent it seeks the disclosure of documents, information and/or expert opinion or testimony subject to the Scheduling Order in this action. Vasu objects to this Interrogatory to the extent it seeks information protected by the attorney-client privilege, common interest doctrine, work product doctrine, or seeks information protected by any other applicable law, privilege, doctrine, immunity or protection.

Subject to and without waiving the foregoing General Objections and any specific objections contained herein, Vasu responds as follows:

Without admitting that any of these references are “Prior Art,” Vasu is aware of the following references cited on the faces of the Asserted Patents.

| <b><u>Asserted Patent</u></b> | <b><u>Reference Cited</u></b>                                                                                                                    |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| 8,520,605                     | <u>US Patent Documents</u> <ul style="list-style-type: none"><li>▪ US 2001/0049790</li><li>▪ US 2002/0078174</li><li>▪ US 2002/0085516</li></ul> |

| <u>Asserted Patent</u> | <u>Reference Cited</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        | <ul style="list-style-type: none"> <li>▪ US 2002/0114305</li> <li>▪ US 2002/0147008</li> <li>▪ US 2002/0150228</li> <li>▪ US 2003/0012350</li> <li>▪ US 2003/0083079</li> <li>▪ US 2003/0086366</li> <li>▪ US 2003/0087629</li> <li>▪ US 2003/0112766</li> <li>▪ US 2003/0185172</li> <li>▪ US 2003/0217007</li> <li>▪ US 2003/0217091</li> <li>▪ US 2003/0224792</li> <li>▪ US 2004/0005878</li> <li>▪ US 2004/0085959</li> <li>▪ US 2004/0087307</li> <li>▪ US 2004/0105424</li> <li>▪ US 2004/0114559</li> <li>▪ US 2004/0127208</li> <li>▪ US 2004/0132427</li> <li>▪ US 2004/0137902</li> <li>▪ US 2004/0174880</li> <li>▪ US 2004/0203666</li> <li>▪ US 2004/0203788</li> </ul> |

| <u>Asserted Patent</u> | <u>Reference Cited</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        | <ul style="list-style-type: none"> <li>▪ US 2004/0203802</li> <li>▪ US 2004/0218575</li> <li>▪ US 2004/0229618</li> <li>▪ US 2005/0059400</li> <li>▪ US 2005/0147049</li> <li>▪ US 2005/0149740</li> <li>▪ US 2006/0040711</li> <li>▪ US 2006/0050687</li> <li>▪ US 2006/0050721</li> <li>▪ US 2006/0080423</li> <li>▪ US 2006/0121894</li> <li>▪ US 2006/0146767</li> <li>▪ US 2006/0291455</li> <li>▪ US 2007/0076665</li> <li>▪ US 2007/0112948</li> <li>▪ US 2007/0249390</li> <li>▪ US 2009/0070489</li> <li>▪ US 2010/0074228</li> <li>▪ US 6,175,737</li> <li>▪ US 6,473,413</li> <li>▪ US 6,515,983</li> <li>▪ US 6,553,022</li> <li>▪ US 6,584,087</li> </ul> |

| <u>Asserted Patent</u> | <u>Reference Cited</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        | <ul style="list-style-type: none"> <li>▪ US 6,754,833</li> <li>▪ US 6,862,444</li> <li>▪ US 6,996,107</li> <li>▪ US 7,127,232</li> <li>▪ US 7,254,119</li> <li>▪ US 7,382,763</li> <li>▪ US 7,398,088</li> <li>▪ US 7,512,796</li> </ul> <p><u>Foreign Patent Documents</u></p> <ul style="list-style-type: none"> <li>▪ EP 0936777</li> <li>▪ GB 287858</li> <li>▪ JP 2002/026994</li> <li>▪ JP 2004/320473</li> <li>▪ WO 2003/056719</li> <li>▪ WO 2004/013998</li> <li>▪ WO 2004/057903</li> </ul> |
| 8,958,434              | <p><u>US Patent Documents</u></p> <ul style="list-style-type: none"> <li>▪ US 2001/0049790</li> <li>▪ US 2002/0078174</li> <li>▪ US 2002/0085516</li> <li>▪ US 2002/0114305</li> <li>▪ US 2002/0147008</li> <li>▪ US 2002/0150228</li> </ul>                                                                                                                                                                                                                                                          |

| <u>Asserted Patent</u> | <u>Reference Cited</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        | <ul style="list-style-type: none"> <li>▪ US 2003/0012350</li> <li>▪ US 2003/0083079</li> <li>▪ US 2003/0086366</li> <li>▪ US 2003/0087629</li> <li>▪ US 2003/0112766</li> <li>▪ US 2003/0157899</li> <li>▪ US 2003/0177196</li> <li>▪ US 2003/0185172</li> <li>▪ US 2003/0217007</li> <li>▪ US 2003/0217091</li> <li>▪ US 2003/0224792</li> <li>▪ US 2003/0232615</li> <li>▪ US 2004/0005878</li> <li>▪ US 2004/0030791</li> <li>▪ US 2004/0085959</li> <li>▪ US 2004/0087307</li> <li>▪ US 2004/0105424</li> <li>▪ US 2004/0114559</li> <li>▪ US 2004/0127208</li> <li>▪ US 2004/0132427</li> <li>▪ US 2004/0137902</li> <li>▪ US 2004/0174880</li> <li>▪ US 2004/0203666</li> </ul> |

| <u>Asserted Patent</u> | <u>Reference Cited</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        | <ul style="list-style-type: none"> <li>▪ US 2004/0203788</li> <li>▪ US 2004/0203802</li> <li>▪ US 2004/0204097</li> <li>▪ US 2004/0218575</li> <li>▪ US 2004/0229618</li> <li>▪ US 2005/0044138</li> <li>▪ US 2005/0059400</li> <li>▪ US 2005/0147049</li> <li>▪ US 2005/0149740</li> <li>▪ US 2006/0040711</li> <li>▪ US 2006/0050663</li> <li>▪ US 2006/0050687</li> <li>▪ US 2006/0050721</li> <li>▪ US 2006/0080423</li> <li>▪ US 2006/0146767</li> <li>▪ US 2006/0291455</li> <li>▪ US 2007/0076665</li> <li>▪ US 2007/0112948</li> <li>▪ US 2007/0124490</li> <li>▪ US 2007/0249390</li> <li>▪ US 2009/0070489</li> <li>▪ US 2010/0074228</li> <li>▪ US 6,009,328</li> </ul> |

| <u>Asserted Patent</u> | <u>Reference Cited</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        | <ul style="list-style-type: none"> <li>▪ US 6,175,737</li> <li>▪ US 6,195,543</li> <li>▪ US 6,473,413</li> <li>▪ US 6,515,983</li> <li>▪ US 6,553,022</li> <li>▪ US 6,584,087</li> <li>▪ US 6,754,833</li> <li>▪ US 6,795,700</li> <li>▪ US 6,862,444</li> <li>▪ US 6,996,107</li> <li>▪ US 7,127,232</li> <li>▪ US 7,254,119</li> <li>▪ US 7,382,763</li> <li>▪ US 7,398,088</li> <li>▪ US 7,483,984</li> <li>▪ US 7,512,796</li> </ul> <p><u>Foreign Patent Documents</u></p> <ul style="list-style-type: none"> <li>▪ DE 20310113</li> <li>▪ EP 0936777</li> <li>▪ GB 2287858</li> <li>▪ JP 2002026994</li> <li>▪ JP 2004320473</li> <li>▪ WO 2003/056719</li> </ul> |

| <u>Asserted Patent</u> | <u>Reference Cited</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        | <ul style="list-style-type: none"> <li>▪ WO 2004/057903</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 8,886,181              | <u>US Patent Documents</u> <ul style="list-style-type: none"> <li>▪ US 2001/0049790</li> <li>▪ US 2002/0078174</li> <li>▪ US 2002/0085516</li> <li>▪ US 2002/0114305</li> <li>▪ US 2002/0147008</li> <li>▪ US 2002/0150228</li> <li>▪ US 2003/0012350</li> <li>▪ US 2003/0083079</li> <li>▪ US 2003/0086366</li> <li>▪ US 2003/0087629</li> <li>▪ US 2003/0112766</li> <li>▪ US 2003/0157899</li> <li>▪ US 2003/0177196</li> <li>▪ US 2003/0185172</li> <li>▪ US 2003/0217007</li> <li>▪ US 2003/0217091</li> <li>▪ US 2003/0224792</li> <li>▪ US 2003/0232615</li> <li>▪ US 2004/0005878</li> <li>▪ US 2004/0030791</li> <li>▪ US 2004/0085959</li> </ul> |

| <u>Asserted Patent</u> | <u>Reference Cited</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        | <ul style="list-style-type: none"> <li>▪ US 2004/0087307</li> <li>▪ US 2004/0105424</li> <li>▪ US 2004/0114559</li> <li>▪ US 2004/0127208</li> <li>▪ US 2004/0132427</li> <li>▪ US 2004/0137902</li> <li>▪ US 2004/0174880</li> <li>▪ US 2004/0203666</li> <li>▪ US 2004/0203788</li> <li>▪ US 2004/0203802</li> <li>▪ US 2004/0204097</li> <li>▪ US 2004/0218575</li> <li>▪ US 2004/0229618</li> <li>▪ US 2005/0044138</li> <li>▪ US 2005/0059400</li> <li>▪ US 2005/0147049</li> <li>▪ US 2005/0149740</li> <li>▪ US 2006/0040711</li> <li>▪ US 2006/0050663</li> <li>▪ US 2006/0050687</li> <li>▪ US 2006/0050721</li> <li>▪ US 2006/0080423</li> <li>▪ US 2006/0146767</li> </ul> |

| <b><u>Asserted Patent</u></b> | <b><u>Reference Cited</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                               | <ul style="list-style-type: none"> <li>▪ US 2006/0291455</li> <li>▪ US 2007/0076665</li> <li>▪ US 2007/0112948</li> <li>▪ US 2007/0124490</li> <li>▪ US 2007/0249390</li> <li>▪ US 2009/0070489</li> <li>▪ US 2010/0074228</li> <li>▪ US 6,009,328</li> <li>▪ US 6,175,737</li> <li>▪ US 6,195,543</li> <li>▪ US 6,473,413</li> <li>▪ US 6,515,983</li> <li>▪ US 6,553,022</li> <li>▪ US 6,584,087</li> <li>▪ US 6,754,833</li> <li>▪ US 6,795,700</li> <li>▪ US 6,862,444</li> <li>▪ US 6,996,107</li> <li>▪ US 7,127,232</li> <li>▪ US 7,254,119</li> <li>▪ US 7,382,763</li> <li>▪ US 7,398,088</li> <li>▪ US 7,483,984</li> </ul> |

| <u>Asserted Patent</u> | <u>Reference Cited</u>                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        | <ul style="list-style-type: none"> <li>▪ US 7,512,796</li> </ul> <p><u>Foreign Patent Documents</u></p> <ul style="list-style-type: none"> <li>▪ DE 20310113</li> <li>▪ EP 0936777</li> <li>▪ GB 2287858</li> <li>▪ JP 2002026994</li> <li>▪ JP 2004320473</li> <li>▪ WO 2003/056719</li> <li>▪ WO 2004/057903</li> </ul>                                                                                                                 |
| 10,206,154             | <p><u>US Patent Documents</u></p> <ul style="list-style-type: none"> <li>▪ US 2001/0049790</li> <li>▪ US 2002/0078174</li> <li>▪ US 2002/0085516</li> <li>▪ US 2002/0114305</li> <li>▪ US 2002/0147008</li> <li>▪ US 2002/0150228</li> <li>▪ US 2002/0152305</li> <li>▪ US 2002/0183038</li> <li>▪ US 2003/0009580</li> <li>▪ US 2003/0012350</li> <li>▪ US 2003/0053632</li> <li>▪ US 2003/0058876</li> <li>▪ US 2003/0083079</li> </ul> |

| <b><u>Asserted Patent</u></b> | <b><u>Reference Cited</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                               | <ul style="list-style-type: none"> <li>▪ US 2003/0086366</li> <li>▪ US 2003/0087629</li> <li>▪ US 2003/0112766</li> <li>▪ US 2003/0133421</li> <li>▪ US 2003/0157899</li> <li>▪ US 2003/0163697</li> <li>▪ US 2003/0177196</li> <li>▪ US 2003/0185172</li> <li>▪ US 2003/0217007</li> <li>▪ US 2003/0217091</li> <li>▪ US 2003/0224792</li> <li>▪ US 2003/0232615</li> <li>▪ US 2004/0005878</li> <li>▪ US 2004/0030791</li> <li>▪ US 2004/0052223</li> <li>▪ US 2004/0053599</li> <li>▪ US 2004/0076144</li> <li>▪ US 2004/0083360</li> <li>▪ US 2004/0085959</li> <li>▪ US 2004/0087307</li> <li>▪ US 2004/0095916</li> <li>▪ US 2004/0105424</li> <li>▪ US 2004/0114559</li> </ul> |

| <u>Asserted Patent</u> | <u>Reference Cited</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        | <ul style="list-style-type: none"> <li>▪ US 2004/0127208</li> <li>▪ US 2004/0132427</li> <li>▪ US 2004/0137902</li> <li>▪ US 2004/0141484</li> <li>▪ US 2004/0170173</li> <li>▪ US 2004/0174880</li> <li>▪ US 2004/0176128</li> <li>▪ US 2004/0181811</li> <li>▪ US 2004/0192294</li> <li>▪ US 2004/0203666</li> <li>▪ US 2004/0203788</li> <li>▪ US 2004/0203802</li> <li>▪ US 2004/0204097</li> <li>▪ US 2004/0205158</li> <li>▪ US 2004/0218575</li> <li>▪ US 2004/0229618</li> <li>▪ US 2004/0246990</li> <li>▪ US 2004/0267880</li> <li>▪ US 2005/0044138</li> <li>▪ US 2005/0059400</li> <li>▪ US 2005/0090259</li> <li>▪ US 2005/0135286</li> <li>▪ US 2005/0147049</li> </ul> |

| <b><u>Asserted Patent</u></b> | <b><u>Reference Cited</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                               | <ul style="list-style-type: none"> <li>▪ US 2005/0149740</li> <li>▪ US 2006/0003796</li> <li>▪ US 2006/0040711</li> <li>▪ US 2006/0050663</li> <li>▪ US 2006/0050687</li> <li>▪ US 2006/0050721</li> <li>▪ US 2006/0080423</li> <li>▪ US 2006/0092901</li> <li>▪ US 2006/0098643</li> <li>▪ US 2006/0141984</li> <li>▪ US 2006/0146767</li> <li>▪ US 2006/0291455</li> <li>▪ US 2007/0026862</li> <li>▪ US 2007/0076665</li> <li>▪ US 2007/0112948</li> <li>▪ US 2007/0124490</li> <li>▪ US 2007/0249390</li> <li>▪ US 2009/0070489</li> <li>▪ US 2009/0191864</li> <li>▪ US 6,009,328</li> <li>▪ US 6,175,737</li> <li>▪ US 6,195,543</li> <li>▪ US 6,473,413</li> </ul> |

| <u>Asserted Patent</u> | <u>Reference Cited</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        | <ul style="list-style-type: none"> <li>▪ US 6,515,983</li> <li>▪ US 6,553,022</li> <li>▪ US 6,584,087</li> <li>▪ US 6,754,833</li> <li>▪ US 6,996,107</li> <li>▪ US 7,127,232</li> <li>▪ US 7,254,119</li> <li>▪ US 7,382,763</li> <li>▪ US 7,398,088</li> <li>▪ US 7,483,984</li> <li>▪ US 7,512,796</li> </ul> <p><u>Foreign Patent Documents</u></p> <ul style="list-style-type: none"> <li>▪ DE 20310113</li> <li>▪ EP 0936777</li> <li>▪ GB 287858</li> <li>▪ JP 2002026994</li> <li>▪ JP 2004320473</li> <li>▪ WO 2003/056719</li> <li>▪ WO 2003/061177</li> <li>▪ WO 2004/057903</li> </ul> |
| 10,368,281             | <p><u>US Patent Documents</u></p> <ul style="list-style-type: none"> <li>▪ US 2001/0049790</li> <li>▪ US 2002/0073226</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

| <u>Asserted Patent</u> | <u>Reference Cited</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        | <ul style="list-style-type: none"> <li>▪ US 2002/0078174</li> <li>▪ US 2002/0085516</li> <li>▪ US 2002/0114305</li> <li>▪ US 2002/0147008</li> <li>▪ US 2002/0150228</li> <li>▪ US 2002/0152305</li> <li>▪ US 2002/0183038</li> <li>▪ US 2003/0009580</li> <li>▪ US 2003/0012350</li> <li>▪ US 2003/0053632</li> <li>▪ US 2003/0058876</li> <li>▪ US 2003/0061206</li> <li>▪ US 2003/0083079</li> <li>▪ US 2003/0086366</li> <li>▪ US 2003/0087629</li> <li>▪ US 2003/0112766</li> <li>▪ US 2003/0133421</li> <li>▪ US 2003/0157899</li> <li>▪ US 2003/0163697</li> <li>▪ US 2003/0177196</li> <li>▪ US 2003/0185172</li> <li>▪ US 2003/0217007</li> <li>▪ US 2003/0217091</li> </ul> |

| <b><u>Asserted Patent</u></b> | <b><u>Reference Cited</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                               | <ul style="list-style-type: none"> <li>▪ US 2003/0224792</li> <li>▪ US 2003/0232615</li> <li>▪ US 2004/0005878</li> <li>▪ US 2004/0052223</li> <li>▪ US 2004/0053599</li> <li>▪ US 2004/0076144</li> <li>▪ US 2004/0083360</li> <li>▪ US 2004/0085959</li> <li>▪ US 2004/0087307</li> <li>▪ US 2004/0095916</li> <li>▪ US 2004/0105424</li> <li>▪ US 2004/0114559</li> <li>▪ US 2004/0127208</li> <li>▪ US 2004/0132427</li> <li>▪ US 2004/0137902</li> <li>▪ US 2004/0141484</li> <li>▪ US 2004/0153676</li> <li>▪ US 2004/0170173</li> <li>▪ US 2004/0174880</li> <li>▪ US 2004/0176128</li> <li>▪ US 2004/0181811</li> <li>▪ US 2004/0192294</li> <li>▪ US 2004/0203666</li> </ul> |

| <b><u>Asserted Patent</u></b> | <b><u>Reference Cited</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                               | <ul style="list-style-type: none"> <li>▪ US 2004/0203788</li> <li>▪ US 2004/0203802</li> <li>▪ US 2004/0204097</li> <li>▪ US 2004/0205158</li> <li>▪ US 2004/0218575</li> <li>▪ US 2004/0229618</li> <li>▪ US 2004/0246990</li> <li>▪ US 2004/0267880</li> <li>▪ US 2005/0025164</li> <li>▪ US 2005/0044138</li> <li>▪ US 2005/0059400</li> <li>▪ US 2005/0090259</li> <li>▪ US 2005/0135286</li> <li>▪ US 2005/0147049</li> <li>▪ US 2005/0149740</li> <li>▪ US 2005/0239498</li> <li>▪ US 2005/0259958</li> <li>▪ US 2006/0003796</li> <li>▪ US 2006/0009219</li> <li>▪ US 2006/0010272</li> <li>▪ US 2006/0040711</li> <li>▪ US 2006/0050663</li> <li>▪ US 2006/0050687</li> </ul> |

| <u>Asserted Patent</u> | <u>Reference Cited</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        | <ul style="list-style-type: none"> <li>▪ US 2006/0050721</li> <li>▪ US 2006/0080423</li> <li>▪ US 2006/0092901</li> <li>▪ US 2006/0098643</li> <li>▪ US 2006/0105766</li> <li>▪ US 2006/0141984</li> <li>▪ US 2006/0146767</li> <li>▪ US 2006/0291455</li> <li>▪ US 2007/0026862</li> <li>▪ US 2007/0076665</li> <li>▪ US 2007/0112948</li> <li>▪ US 2007/0124490</li> <li>▪ US 2007/0249390</li> <li>▪ US 2009/0070489</li> <li>▪ US 2009/0191864</li> <li>▪ US 20140204902</li> <li>▪ US 6,009,328</li> <li>▪ US 6,175,737</li> <li>▪ US 6,195,543</li> <li>▪ US 6,473,413</li> <li>▪ US 6,515,983</li> <li>▪ US 6,553,022</li> <li>▪ US 6,584,087</li> </ul> |

| <u>Asserted Patent</u> | <u>Reference Cited</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        | <ul style="list-style-type: none"> <li>▪ US 6,754,833</li> <li>▪ US 6,996,107</li> <li>▪ US 7,127,232</li> <li>▪ US 7,254,119</li> <li>▪ US 7,382,763</li> <li>▪ US 7,398,088</li> <li>▪ US 7,483,984</li> <li>▪ US 7,512,796</li> </ul> <p><u>Foreign Patent Documents</u></p> <ul style="list-style-type: none"> <li>▪ DE 20310113</li> <li>▪ EP 0936777</li> <li>▪ GB 287858</li> <li>▪ JP 2002026994</li> <li>▪ JP 2004320473</li> <li>▪ WO 2003/056719</li> <li>▪ WO 2003/061177</li> <li>▪ WO 2004/013998</li> <li>▪ WO 2004/057903</li> </ul> |
| 10,419,996             | <p><u>US Patent Documents</u></p> <ul style="list-style-type: none"> <li>▪ US 2001/0049790</li> <li>▪ US 2002/0073226</li> <li>▪ US 2002/0078174</li> <li>▪ US 2002/0085516</li> </ul>                                                                                                                                                                                                                                                                                                                                                               |

| <b><u>Asserted Patent</u></b> | <b><u>Reference Cited</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                               | <ul style="list-style-type: none"> <li>▪ US 2002/0114305</li> <li>▪ US 2002/0147008</li> <li>▪ US 2002/0150228</li> <li>▪ US 2002/0152305</li> <li>▪ US 2002/0183038</li> <li>▪ US 2003/0009580</li> <li>▪ US 2003/0012350</li> <li>▪ US 2003/0053632</li> <li>▪ US 2003/0058876</li> <li>▪ US 2003/0061206</li> <li>▪ US 2003/0083079</li> <li>▪ US 2003/0086366</li> <li>▪ US 2003/0087629</li> <li>▪ US 2003/0112766</li> <li>▪ US 2003/0133421</li> <li>▪ US 2003/0157899</li> <li>▪ US 2003/0163697</li> <li>▪ US 2003/0177196</li> <li>▪ US 2003/0185172</li> <li>▪ US 2003/0217007</li> <li>▪ US 2003/0217091</li> <li>▪ US 2003/0224792</li> <li>▪ US 2003/0232615</li> </ul> |

| <b><u>Asserted Patent</u></b> | <b><u>Reference Cited</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                               | <ul style="list-style-type: none"> <li>▪ US 2004/0005878</li> <li>▪ US 2004/0052223</li> <li>▪ US 2004/0053599</li> <li>▪ US 2004/0076144</li> <li>▪ US 2004/0083360</li> <li>▪ US 2004/0085959</li> <li>▪ US 2004/0087307</li> <li>▪ US 2004/0095916</li> <li>▪ US 2004/0105424</li> <li>▪ US 2004/0114559</li> <li>▪ US 2004/0127208</li> <li>▪ US 2004/0132427</li> <li>▪ US 2004/0137902</li> <li>▪ US 2004/0141484</li> <li>▪ US 2004/0153676</li> <li>▪ US 2004/0170173</li> <li>▪ US 2004/0174880</li> <li>▪ US 2004/0176128</li> <li>▪ US 2004/0181811</li> <li>▪ US 2004/0192294</li> <li>▪ US 2004/0203666</li> <li>▪ US 2004/0203788</li> <li>▪ US 2004/0203802</li> </ul> |

| <b><u>Asserted Patent</u></b> | <b><u>Reference Cited</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                               | <ul style="list-style-type: none"> <li>▪ US 2004/0204097</li> <li>▪ US 2004/0205158</li> <li>▪ US 2004/0218575</li> <li>▪ US 2004/0229618</li> <li>▪ US 2004/0246990</li> <li>▪ US 2004/0267880</li> <li>▪ US 2005/0025164</li> <li>▪ US 2005/0044138</li> <li>▪ US 2005/0059400</li> <li>▪ US 2005/0090259</li> <li>▪ US 2005/0135286</li> <li>▪ US 2005/0147049</li> <li>▪ US 2005/0149740</li> <li>▪ US 2005/0239498</li> <li>▪ US 2005/0259958</li> <li>▪ US 2006/0003796</li> <li>▪ US 2006/0009219</li> <li>▪ US 2006/0010272</li> <li>▪ US 2006/0040711</li> <li>▪ US 2006/0050663</li> <li>▪ US 2006/0050687</li> <li>▪ US 2006/0050721</li> <li>▪ US 2006/0080423</li> </ul> |

| <b><u>Asserted Patent</u></b> | <b><u>Reference Cited</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                               | <ul style="list-style-type: none"> <li>▪ US 2006/0092901</li> <li>▪ US 2006/0098643</li> <li>▪ US 2006/0105766</li> <li>▪ US 2006/0141984</li> <li>▪ US 2006/0146767</li> <li>▪ US 2006/0291455</li> <li>▪ US 2007/0026862</li> <li>▪ US 2007/0076665</li> <li>▪ US 2007/0112948</li> <li>▪ US 2007/0124490</li> <li>▪ US 2007/0249390</li> <li>▪ US 2009/0070489</li> <li>▪ US 2009/0191864</li> <li>▪ US 20140204902</li> <li>▪ US 6,009,328</li> <li>▪ US 6,175,737</li> <li>▪ US 6,195,543</li> <li>▪ US 6,473,413</li> <li>▪ US 6,515,983</li> <li>▪ US 6,553,022</li> <li>▪ US 6,584,087</li> <li>▪ US 6,754,833</li> <li>▪ US 6,996,107</li> </ul> |

| <u>Asserted Patent</u> | <u>Reference Cited</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        | <ul style="list-style-type: none"> <li>▪ US 7,127,232</li> <li>▪ US 7,254,119</li> <li>▪ US 7,382,763</li> <li>▪ US 7,398,088</li> <li>▪ US 7,483,984</li> <li>▪ US 7,512,796</li> </ul> <p><u>Foreign Patent Documents</u></p> <ul style="list-style-type: none"> <li>▪ DE 20310113</li> <li>▪ EP 0936777</li> <li>▪ GB 287858</li> <li>▪ JP 2002026994</li> <li>▪ JP 2004320473</li> <li>▪ WO 2003/056719</li> <li>▪ WO 2003/061177</li> <li>▪ WO 2004/013998</li> <li>▪ WO 2004/057903</li> </ul> |

Vasu's investigation of this matter is ongoing, and its response to this Interrogatory will be supplemented as additional information becomes known to it. Discovery is ongoing. Vasu reserves the right to supplement its response pursuant to Fed. R. Civ. P. 26(e).

**INTERROGATORY NO. 12:**

For each Patent-in-Suit, identify any validity or invalidity analysis(-es), any enforceability or unenforceability analysis(-es), any infringement or non-infringement analysis(-es), any essentiality or non-essentiality analysis(-es), and any analysis(-es) or statement(s) related

to patent value (or lack thereof) that You are aware of. For clarity, this includes any such analysis(-es), Document(s), or statement(s) brought to Your attention by a third party, and a description of the circumstances under which You acquired this knowledge.

**RESPONSE TO INTERROGATORY NO. 12:**

Vasu incorporates its General Objections and Objections to Definitions and Instructions by reference. Vasu objects to this Interrogatory to the extent it seeks information protected from disclosure by the attorney-client privilege, the work product doctrine, the common interest doctrine, or any other applicable law, privilege, doctrine, or immunity; Vasu will not disclose any privileged information. Vasu objects to this Interrogatory as overbroad and unduly burdensome, including, for example, in its use of the phrase “any validity or invalidity analysis(-es),” “any enforceability or unenforceability analysis(-es),” “any infringement or non-infringement analysis(-es),” “any essentiality or non-essentiality analysis(-es),” and “any analysis(-es) or statement(s) related to patent value (or lack thereof).” Vasu objects to this Interrogatory as being compound and having multiple subparts, which should count toward the limits on Interrogatories. Vasu objects to this Interrogatory to the extent it calls for a legal conclusion.

Vasu objects to this Interrogatory to the extent that it is compound and/or contains multiple subparts. Vasu objects to this Interrogatory to the extent that it seeks information within Defendants’ possession, custody or control. Vasu objects to this Interrogatory to the extent it purposes to impose any requirement or discovery obligation greater than and/or different from those set forth by the Federal Rules of Civil Procedure, the Local Rules of this Court, the Eastern District of Texas Patent Local Rules or orders of this Court governing these proceedings.

Subject to and without waiving the foregoing General Objections and any specific objections contained herein, Vasu responds as follows:

Vasu is not aware of any non-privileged validity or invalidity analyses, any enforceability or unenforceability analyses, any infringement or non-infringement analyses, any essentiality or non-essentiality analyses based on all elements of the Asserted Claims, and any analyses or statements related to the value of the Asserted Patents.

Vasu's investigation of this matter is ongoing, and its response to this Interrogatory will be supplemented as additional information becomes known to it. Discovery is ongoing. Vasu reserves the right to supplement its response pursuant to Fed. R. Civ. P. 26(e).

**INTERROGATORY NO. 13:**

For each Asserted Claim and each Accused Product, state the complete factual and legal basis for any contention that Defendants indirectly infringe under 35 U.S.C. §§ 271(b)-(c) by knowingly and intentionally inducing or contributing to direct infringement. For clarity, this includes an identification of each activity You contend supports indirect infringement and the identity of the Person performing each such activity; an identification of all Persons with knowledge of and Documents relating to such activity; and an identification and detailed description of all Documents and things evidencing and Persons knowledgeable about why the Accused Product is not a staple article or commodity of commerce suitable for substantial noninfringing use.

**RESPONSE TO INTERROGATORY NO. 13:**

Vasu incorporates its General Objections and Objections to Definitions and Instructions by reference. Vasu objects to this Interrogatory to the extent it seeks information protected from disclosure by the attorney-client privilege, the work product doctrine, the common interest

doctrine, or any other applicable law, privilege, doctrine, or immunity; Vasu will not disclose any privileged information. Vasu objects to this Interrogatory to the extent it is vague and ambiguous, particularly given the use of the phrase “all Documents and things.” Vasu objects to this Interrogatory as being compound and having multiple subparts, which should count toward the limits on Interrogatories. Vasu objects to this Interrogatory to the extent it calls for a legal conclusion.

Vasu objects to this Interrogatory to the extent that it is compound and/or contains multiple subparts. Vasu objects to this Interrogatory to the extent that it seeks information within Defendants’ possession, custody or control. Vasu objects to this Interrogatory to the extent it purposes to impose any requirement or discovery obligation greater than and/or different from those set forth by the Federal Rules of Civil Procedure, the Local Rules of this Court, the Eastern District of Texas Patent Local Rules or orders of this Court governing these proceedings.

Vasu further objects to this Interrogatory as premature insomuch as it calls for information that is the subject of expert testimony or opinion. Vasu will provide expert reports in accordance with the Docket Control Order.

Subject to and without waiving the foregoing General Objections and any specific objections contained herein, Vasu responds as follows:

Defendants have induced infringement through activities demonstrating knowledge and intent to infringe. For example, Defendants' marketing materials and user manuals explicitly instruct users on how to use the feature for automatic switching from Wi-Fi to cellular switching based on signal strength thresholds and between Wi-Fi networks based on user preference settings, which infringes the Asserted Patent. Similarly, Defendants' marketing materials and user manuals explicitly instruct users on how to use the feature for selectively process content

streams based on content parameters, which also infringe the Asserted Patents. Samsung's marketing team and technical writers created and distributed these materials. Relevant documents can include user manuals of the Accused Products, online help guides, and marketing materials. Similarly, Defendants' customer support representatives provide instructions and training to users on setting up and using the accused functionalities in a manner that infringes the patent. For example, customers can get assistance with using the accused functionalities by calling customer support at +1 (800) SAMSUNG (726-7864). Relevant documents can include customer support logs and customer service training materials. Further, internal communications among Samsung's employees discuss the patented technology and ways to implement it in the Accused Products. These communications involve the development teams of the Accused Functionalities. Relevant documents can include internal emails and meeting notes. Additionally, Defendants received a letter from Vasu on January 15, 2024, but continued to provide the accused functionalities without modification. This lack of modification demonstrates knowledge and intent, evidenced by this letter and continuing to release new products with infringing features.

Regarding contributory infringement, the one of the accused functionalities is specifically designed to perform automatic Wi-Fi and cellular network switching based on signal strength and user preferences, which directly aligns with the patented technology. Similarly, another accused functionality is selectively process broadband content transmitted to end user devices based on content parameters. These specialized functionalities are implemented by product development teams and are documented in product specifications and design documents. The primary purpose of these functionalities is based on the processes described in the Asserted Patents. These functionalities have no substantial non-infringing applications. Product

specifications, design documents, source code, and system architecture documents demonstrate this process. The accused functionalities are deeply integrated into the device's operating system or firmware and cannot be easily separated or used independently of the patented method. Finally, the functionality of the accused feature relies on methods or processes explicitly covered by the patent, making it inseparable from the patented technology. This dependency is documented, for example, by the software development team in the source code, product specifications, and design documents.

Defendants have knowingly and intentionally induced infringement and contributed to direct infringement of the Asserted Claims through their activities, instructions, and integration of the Accused Functionalities. These activities and the accompanying exhibits demonstrate that the accused feature is not a staple article or commodity of commerce suitable for substantial non-infringing use.

Vasu's investigation of this matter is ongoing, and its response to this Interrogatory will be supplemented as additional information becomes known to it. Discovery is ongoing. Vasu reserves the right to supplement its response pursuant to Fed. R. Civ. P. 26(e).

**INTERROGATORY NO. 14:**

Describe in detail any disclosure or commercial exploitation of the subject matter disclosed or claimed in any Asserted Patent prior to or after the claimed priority date of that Asserted Patent (whether or not secret or confidential), including each use for a commercial purpose, each disclosure to someone other than Plaintiff, and each sale or offer for sale.

**RESPONSE TO INTERROGATORY NO. 14:**

Vasu incorporates its General Objections and Objections to Definitions and Instructions by reference. Vasu objects to this Interrogatory to the extent it seeks information protected from

disclosure by the attorney-client privilege, the work product doctrine, the common interest doctrine, or any other applicable law, privilege, doctrine, or immunity; Vasu will not disclose any privileged information. Vasu objects to this Interrogatory as seeking information that is irrelevant, immaterial or not reasonably calculated to lead to the discovery of admissible evidence. Vasu objects to this Interrogatory to the extent it calls for a legal conclusion.

Subject to and without waiving the foregoing General Objections and any specific objections contained herein, Vasu responds as follows:

Vasu objects to this Interrogatory to the extent that it is compound and/or contains multiple subparts. Vasu objects to this Interrogatory to the extent that it seeks information within Defendants' possession, custody or control. Vasu objects to this Interrogatory to the extent it purposes to impose any requirement or discovery obligation greater than and/or different from those set forth by the Federal Rules of Civil Procedure, the Local Rules of this Court, the Eastern District of Texas Patent Local Rules or orders of this Court governing these proceedings.

Vasu further objects to this Interrogatory as premature insomuch as it calls for information that is the subject of expert testimony or opinion. Vasu will provide expert reports in accordance with the Docket Control Order.

Vasu has not made any disclosure or commercial exploitation of the subject matter disclosed or claimed in any Asserted Patents with respect to any alleged infringer beyond Defendants.

Vasu's investigation of this matter is ongoing, and its response to this Interrogatory will be supplemented as additional information becomes known to it. Discovery is ongoing. Vasu reserves the right to supplement its response pursuant to Fed. R. Civ. P. 26(e).

**INTERROGATORY NO. 15:**

Describe in complete detail each instance in which Plaintiff or any other person or entity has identified or given notice of the Asserted Patents to any Person or Entity, asserted that any Person or Entity, other than Defendants, practices any claim element of any Asserted or Related Patent and such Person's or Entity's response(s) thereto, and Plaintiff's response(s) to such response(s), including a description of all allegations by any Person or Entity that any claim of any Asserted or Related Patent is invalid or unenforceable and Plaintiff or its predecessors-in-interest's response thereto.

**RESPONSE TO INTERROGATORY NO. 15:**

Vasu incorporates its General Objections and Objections to Definitions and Instructions by reference. Vasu objects to this Interrogatory to the extent it seeks information protected from disclosure by the attorney-client privilege, the work product doctrine, the common interest doctrine, or any other applicable law, privilege, doctrine, or immunity; Vasu will not disclose any privileged information. Vasu objects to this Interrogatory to the extent it calls for a legal conclusion.

Subject to and without waiving the foregoing General Objections and any specific objections contained herein, Vasu responds as follows:

On January 15, 2024, Samsung received notice of its infringement of the Asserted Patents. The attorney-client privilege and work product doctrine prevents Vasu from identifying other instances in which Vasu has identified or given notice of the Asserted Patents to any other Person or Entity in which it asserts that such Person or Entity has practiced any claim element of any Asserted or Related Patent. Accordingly, Vasu cannot provide such Person's or Entity's response(s) thereto, nor Vasu's response(s) to such response(s) because they do not exist.

Vasu's investigation of this matter is ongoing, and its response to this Interrogatory will be supplemented as additional information becomes known to it. Discovery is ongoing. Vasu reserves the right to supplement its response pursuant to Fed. R. Civ. P. 26(e).

**INTERROGATORY NO. 16:**

Describe in complete detail, on a limitation-by-limitation basis and in chart form, the factual and legal bases and supporting evidence for any contention Plaintiff has that any Asserted Claim is infringed under the Doctrine of Equivalents, specifying in each instance how any Accused Product performs substantially the same function of the alleged invention in substantially the same way to achieve substantially the same result and/or why the differences between the Accused Product and the Asserted Claims are insubstantial.

**RESPONSE TO INTERROGATORY NO. 16:**

Vasu incorporates its General Objections and Objections to Definitions and Instructions by reference. Vasu objects to this Interrogatory to the extent it seeks information protected from disclosure by the attorney-client privilege, the work product doctrine, the common interest doctrine, or any other applicable law, privilege, doctrine, or immunity; Vasu will not disclose any privileged information. Vasu objects to this Interrogatory as premature to the extent it calls for subsequent discovery in this action and/or expert testimony that will be provided according to deadlines set forth by the Court. Vasu objects to this Interrogatory to the extent it calls for a legal conclusion.

Vasu objects to this Interrogatory to the extent that it is compound and/or contains multiple subparts. Vasu objects to this Interrogatory to the extent that it seeks information within Defendants' possession, custody or control. Vasu objects to this Interrogatory to the extent it purposes to impose any requirement or discovery obligation greater than and/or different from

those set forth by the Federal Rules of Civil Procedure, the Local Rules of this Court, the Eastern District of Texas Patent Local Rules or orders of this Court governing these proceedings.

Vasu further objects to this Interrogatory as premature inasmuch as it calls for information that is the subject of expert testimony or opinion. Vasu will provide expert reports in accordance with the Docket Control Order.

Subject to and without waiving the foregoing General Objections and any specific objections contained herein, Vasu responds as follows:

Vasu incorporates by reference Vasu's Preliminary Infringement Contentions served on May 15, 2024 ("Preliminary ICs"), setting forth Defendants' infringement of the Asserted Claims of the Asserted Patents under the doctrine of equivalents (DOEs). Specifically, for example, Vasu's Preliminary Infringement Contentions describes how the identified the Accused Products perform substantially the same function as the element 1[c] requirement of the '181 Patent because they monitor the signal strength of Wi-Fi network and mobile networks through "Intelligent Wi-Fi" product feature and switch on-going call or data stream sessions with the end user device to a second mobile or Wi-Fi network through "Switch to Mobile Data" product functions without interrupting the call or data streaming sessions. Preliminary ICs, Appx. B-1 at 38-39. Vasu also incorporates by reference its response to Interrogatory No. 13.

This response is based on the information currently known to Vasu. Vasu reserves the right to supplement its response upon additional discovery, including depositions and reviewing the Defendants' production of documents, discovery responses, and non-infringement positions.

Vasu's investigation of this matter is ongoing, and its response to this Interrogatory will be supplemented as additional information becomes known to it. Discovery is ongoing. Vasu reserves the right to supplement its response pursuant to Fed. R. Civ. P. 26(e).

**INTERROGATORY NO. 17:**

Separately for each Accused Product and each limitation of each Asserted Claim, Identify all Documents and other evidence that You contend support Your contention that each Accused Product infringes or has infringed any claim of the Patents-in-Suit, including pinpoint citations to all computer code (including source code), by file, page, and line number, that allegedly support your contentions.

**RESPONSE TO INTERROGATORY NO. 17:**

Vasu incorporates its General Objections and Objections to Definitions and Instructions by reference. Vasu objects to this Interrogatory to the extent it seeks information protected from disclosure by the attorney-client privilege, the work product doctrine, the common interest doctrine, or any other applicable law, privilege, doctrine, or immunity; Vasu will not disclose any privileged information. Vasu objects to this Interrogatory to the extent it is vague and ambiguous, particularly given the use of the phrase “all Documents and other evidence.” Vasu objects to this Interrogatory as overbroad and unduly burdensome, for example, in its use of the phrase “all Documents and other evidence.” Vasu objects to this Interrogatory to the extent it calls for a legal conclusion.

Vasu objects to this Interrogatory to the extent that it is compound and/or contains multiple subparts. Vasu objects to this Interrogatory to the extent that it seeks information within Defendants’ possession, custody or control. Vasu objects to this Interrogatory to the extent it purposes to impose any requirement or discovery obligation greater than and/or different from those set forth by the Federal Rules of Civil Procedure, the Local Rules of this Court, the Eastern District of Texas Patent Local Rules or orders of this Court governing these proceedings.

Vasu further objects to this Interrogatory as premature insomuch as it calls for information that is the subject of expert testimony or opinion. Vasu will provide expert reports in accordance with the Docket Control Order.

Subject to and without waiving the foregoing General Objections and any specific objections contained herein, Vasu responds as follows:

Vasu will provide citations to the source code according to the Discovery Order entered into in this case. This Interrogatory is premature in seeking source code citations when Samsung has yet to provide any source code and seeking early disclosure of expert analysis.

Vasu incorporates by references its Complaint and any documents cited therein, as well as its infringement contentions, as well as all subsequent amendments to the aforementioned documents.

Vasu's investigation of this matter is ongoing, and its response to this Interrogatory will be supplemented as additional information becomes known to it. Discovery is ongoing. Vasu reserves the right to supplement its response pursuant to Fed. R. Civ. P. 26(e).

**INTERROGATORY NO. 18:**

For each Asserted Patent, describe in detail any valuations (including, but not limited to, technical importance or monetary valuations) of the patent performed for any purpose, including the identity of the Person or Entity performing the valuation; The identity of the Person or Entity requesting or requiring performance of the valuation; the date or dates on which the valuation was performed; the date as of which the valuation was performed; the purpose for which the valuation was performed; the methodology used to perform the valuation, and the results, conclusions, findings, or other information produced by the valuation exercise, including identification of relevant documents by Bates number.

**RESPONSE TO INTERROGATORY NO. 18:**

Vasu incorporates its General Objections and Objections to Definitions and Instructions by reference. Vasu objects to this Interrogatory to the extent it seeks information protected from disclosure by the attorney-client privilege, the work product doctrine, the common interest doctrine, or any other applicable law, privilege, doctrine, or immunity; Vasu will not disclose any privileged information. Vasu objects to this Interrogatory to extent it is vague and ambiguous, particularly as to what is meant by “any valuations.” Vasu objects to this Interrogatory to the extent it calls for a legal conclusion. Vasus objects to this Interrogatory as vague and ambiguous, particularly with respect to the meaning of the term “valuation.”

Subject to and without waiving the foregoing General Objections and any specific objections contained herein, Vasu responds as follows:

Vasu is not aware of any analysis where each Asserted Patent was valued or a valuation of each Asserted Patent in the marketplace.

Vasu’s investigation of this matter is ongoing, and its response to this Interrogatory will be supplemented as additional information becomes known to it. Discovery is ongoing. Vasu reserves the right to supplement its response pursuant to Fed. R. Civ. P. 26(e).

**INTERROGATORY NO. 19:**

For any patent that claims priority to an earlier application, identify for each element of each Asserted Claim, by column, line, and/or figure number of each earlier application, all disclosure You contend provides written description and enablement support required by 35 U.S.C. § 112.

**RESPONSE TO INTERROGATORY NO. 19:**

Vasu incorporates its General Objections and Objections to Definitions and Instructions by reference. Vasu objects to this Interrogatory to the extent it seeks information protected from disclosure by the attorney-client privilege, the work product doctrine, the common interest doctrine, or any other applicable law, privilege, doctrine, or immunity; Vasu will not disclose any privileged information. Vasu objects to this Interrogatory to the extent it calls for information that is publicly available or equally available to Defendants, and therefore is of no greater burden for Defendants to obtain than for Vasu to obtain and produce. Vasu objects to this Interrogatory to the extent it calls for a legal conclusion. Vasu objects to this interrogatory to the extent it is overly broad, unduly burdensome, seek information not relevant to the claim or defense of any party, and are not proportional to the needs of this case. Vasu objects to this Interrogatory to the extent it seeks information protected by the attorney-client privilege, the work product doctrine, the common interest doctrine, or any other applicable law, privilege, doctrine, or immunity. Vasu objects to the Interrogatory as calling for claim charts identifying “for each element of each Asserted Claim, by column, line, and/or figure number of each earlier application, all disclosure [Vasu] contend[s] provides written description and enablement support” within at least fourteen different patents, which is compound, unduly burdensome, and disproportionate to the needs of the case.

Vasu objects to this Interrogatory to the extent that it is compound and/or contains multiple subparts. Vasu objects to this Interrogatory to the extent that it seeks information within Defendants’ possession, custody or control. Vasu objects to this Request to the extent it requires an application of claim terms whose scope is disputed and have yet to be construed by the Court.

Vasu reserves the right to supplement this Response, if appropriate, after receiving the Court's claim construction order.

Subject to and without waiving the foregoing General Objections and any specific objections contained herein, Vasu responds as follows:

Vasu incorporates by reference its response to Interrogatory No. 1. Furthermore, the Asserted Claims were duly issued by the USPTO and are presumed to be valid under 35 U.S.C. § 282. Defendants bears the burden of establishing invalidity with clear and convincing evidence. Vasu is not required to affirmatively prove enablement and written description as this Interrogatory suggests. *Ormco Corp. v. Align Tech., Inc.*, 498 F.3d 1307, 1318 (Fed. Cir. 2007) (“The party alleging invalidity for lack of enablement bears the burden of proving by clear and convincing evidence that the specification of a challenged patent fails to teach one of ordinary skill in the art how to make the invention.”); *Hynix Semiconductor Inc. v. Rambus Inc.*, 645 F.3d 1336, 1351 (Fed. Cir. 2011) (“To overcome the presumption of validity of patents, the accused must show that the claims lack a written description by clear and convincing evidence.”). Samsung has yet to provide invalidity contentions. Accordingly, Defendants have not discharged their burden of demonstrating by clear and convincing evidence that the Asserted Claims are unsupported by their specifications. Thus, Defendants have not presented evidence that calls into question whether the Asserted Patents are valid for lack of § 112 support.

Vasu's investigation of this matter is ongoing, and its response to this Interrogatory will be supplemented as additional information becomes known to it. Discovery is ongoing. Vasu reserves the right to supplement its response pursuant to Fed. R. Civ. P. 26(e).

**INTERROGATORY NO. 20:**

Identify and describe in detail any discussions Vasu has had with any party regarding acquiring Vasu, including but not limited to, when the discussions took place, what offers were made, any statements by either party related to the value of Vasu, and any statements made by either party related to the value of the Patents-in-Suit.

**RESPONSE TO INTERROGATORY NO. 20:**

Vasu incorporates its General Objections and Objections to Definitions and Instructions by reference. Vasu objects to this Interrogatory to the extent it seeks information protected from disclosure by the attorney-client privilege, the work product doctrine, the common interest doctrine, or any other applicable law, privilege, doctrine, or immunity; Vasu will not disclose any privileged information. Vasu objects to this Interrogatory to the extent it calls for a legal conclusion.

Subject to and without waiving the foregoing General Objections and any specific objections contained herein, Vasu responds as follows:

Vasu is not aware of any discussions of Vasu approaching any party regarding interest in acquiring Vasu. Accordingly, no details exist regarding when the discussions took place, what offers were made, any statement by either party related to the value of Vasu, or any statement made by either party related to the value of the Patents-in-Suit.

Vasu's investigation of this matter is ongoing, and its response to this Interrogatory will be supplemented as additional information becomes known to it. Discovery is ongoing. Vasu reserves the right to supplement its response pursuant to Fed. R. Civ. P. 26(e).

**INTERROGATORY NO. 21:**

Identify and describe in detail all attempts by Vasu to develop technology for any Third Party.

**RESPONSE TO INTERROGATORY NO. 21:**

Vasu incorporates its General Objections and Objections to Definitions and Instructions by reference. Vasu objects to this Interrogatory to the extent it seeks information protected from disclosure by the attorney-client privilege, the work product doctrine, the common interest doctrine, or any other applicable law, privilege, doctrine, or immunity; Vasu will not disclose any privileged information. Vasu objects to this Interrogatory as seeking information that is irrelevant, immaterial or not reasonably calculated to lead to the discovery of admissible evidence. Vasu objects to this Interrogatory to the extent it is vague and ambiguous, particularly given the use of the phrase “all attempts.” Vasu objects to this Interrogatory to the extent it calls for a legal conclusion.

Subject to and without waiving the foregoing General Objections and any specific objections contained herein, Vasu responds as follows:

Vasu has not developed or attempted to develop technology for any Third Party that did or would have embodied the Asserted Claims.

Vasu’s investigation of this matter is ongoing, and its response to this Interrogatory will be supplemented as additional information becomes known to it. Discovery is ongoing. Vasu reserves the right to supplement its response pursuant to Fed. R. Civ. P. 26(e).

**INTERROGATORY NO. 22:**

Identify all investors in Vasu, the amount of their investment, and what they received in exchange for their investment.

**RESPONSE TO INTERROGATORY NO. 22:**

Vasu incorporates its General Objections and Objections to Definitions and Instructions by reference. Vasu objects to this Interrogatory to the extent it seeks information protected from disclosure by the attorney-client privilege, the work product doctrine, the common interest doctrine, or any other applicable law, privilege, doctrine, or immunity; Vasu will not disclose any privileged information. Vasu objects to this Interrogatory to the extent it is vague and ambiguous, particularly given the use of the phrases “investors” and “investment.” Vasu objects to this Interrogatory as seeking information that is irrelevant, immaterial or not reasonably calculated to lead to the discovery of admissible evidence. Vasu objects to this Interrogatory to the extent it calls for a legal conclusion.

Subject to and without waiving the foregoing General Objections and any specific objections contained herein, Vasu responds as follows:

Vasu is wholly owned by Vasudevan Ganesan.

Vasu’s investigation of this matter is ongoing, and its response to this Interrogatory will be supplemented as additional information becomes known to it. Discovery is ongoing. Vasu reserves the right to supplement its response pursuant to Fed. R. Civ. P. 26(e).

**INTERROGATORY NO. 23:**

Identify any debts currently owed by Vasu, when they were incurred, for what they were incurred, and to whom they are owed.

**RESPONSE TO INTERROGATORY NO. 23:**

Vasu incorporates its General Objections and Objections to Definitions and Instructions by reference. Vasu objects to this Interrogatory to the extent it seeks information protected from disclosure by the attorney-client privilege, the work product doctrine, the common interest

doctrine, or any other applicable law, privilege, doctrine, or immunity; Vasu will not disclose any privileged information. Vasu objects to this Interrogatory as seeking information that is irrelevant, immaterial or not reasonably calculated to lead to the discovery of admissible evidence. Vasu objects to this Interrogatory to the extent it calls for a legal conclusion.

Subject to and without waiving the foregoing General Objections and any specific objections contained herein, Vasu responds as follows:

Currently, Vasu does not hold any debts relevant to the Asserted Patents or this litigation. Accordingly, there are no further details to disclose, such as when they were incurred, for what reasons, and to whom they are owed.

Vasu's investigation of this matter is ongoing, and its response to this Interrogatory will be supplemented as additional information becomes known to it. Discovery is ongoing. Vasu reserves the right to supplement its response pursuant to Fed. R. Civ. P. 26(e).

**INTERROGATORY NO. 24:**

Identify each product or service You contend is a collateral or convoyed product or service for the Accused Products, and describe with particularity all factual and legal bases for Your claim for damages based on such collateral or convoyed sales, including the effect of selling the Accused Products in promoting the allegedly convoyed sales and whether and how You contend the collateral or convoyed product or service (a) affects the royalty rate or royalty base under a reasonable royalty damages theory, (b) resulted in reasonably foreseeable losses under a lost profits damages theory, and (c) is functionally related to an Accused Product (e.g., whether the Accused Product and collateral or convoyed product or service are part of a single assembly, parts of a complete machine, or constitute a functional unit).

**RESPONSE TO INTERROGATORY NO. 24:**

Vasu incorporates its General Objections and Objections to Definitions and Instructions by reference. Vasu objects to this Interrogatory to the extent it seeks information protected from disclosure by the attorney-client privilege, the work product doctrine, the common interest doctrine, or any other applicable law, privilege, doctrine, or immunity; Vasu will not disclose any privileged information. Vasu objects to this Interrogatory to the extent it seeks or requires information within Defendant's knowledge, possession, custody or control. Vasu objects to this Interrogatory as overbroad and unduly burdensome, for example, in its use of the phrase "all factual and legal bases for Your claim for damages based on such collateral or convoyed sales." Vasu objects to this Interrogatory to the extent it calls for a legal conclusion. Vasu objects to this interrogatory to the extent that it is premature and calls for information that that will be provided during expert discovery.

Subject to and without waiving the foregoing General Objections and any specific objections contained herein, Vasu responds as follows:

Vasu cannot answer this Interrogatory until the discovery of this Action progresses. Once the Defendants produce relevant discovery, then Vasu can appropriately identify each product or service that Vasu contends is a collateral or convoyed product or service for the Accused Products.

Vasu's investigation of this matter is ongoing, and its response to this Interrogatory will be supplemented as additional information becomes known to it. Discovery is ongoing. Vasu reserves the right to supplement its response pursuant to Fed. R. Civ. P. 26(e).

**INTERROGATORY NO. 25:**

Separately for each Asserted Claim, state whether you contend the Asserted Claim or any portion of the Asserted Claim is essential to any standard, including without limitation 802.11, and identify the specific portions of the respective standard to which the Asserted Claim is alleged to be essential.

**RESPONSE TO INTERROGATORY NO. 25:**

Vasu incorporates its General Objections and Objections to Definitions and Instructions by reference. Vasu objects to this Interrogatory to the extent it seeks information protected from disclosure by the attorney-client privilege, the work product doctrine, the common interest doctrine, or any other applicable law, privilege, doctrine, or immunity; Vasu will not disclose any privileged information. Vasu objects to this Interrogatory to the extent it calls for information that is publicly available or equally available to Defendants, and therefore is of no greater burden for Defendants to obtain than for Vasu to obtain and produce. Vasu objects to this Interrogatory to the extent it calls for a legal conclusion. Vasu objects to this Interrogatory to the extent it is vague and ambiguous, particular with respect to “essential to any standard.”

Vasu further objects to this Interrogatory as premature insomuch as it calls for information that is the subject of expert testimony or opinion. Vasu will provide expert reports in accordance with the Docket Control Order.

Subject to and without waiving the foregoing General Objections and any specific objections contained herein, Vasu responds as follows:

Vasu has not performed any element-by-element analysis regarding whether any of the Asserted Patents are essential to any standard, and, as such, is unaware of whether any Asserted

Claims are essential to any standard. Vasu incorporates by reference its Infringement Contentions with respect to any standards that may be relevant to Defendant's infringement.

Vasu's investigation of this matter is ongoing, and its response to this Interrogatory will be supplemented as additional information becomes known to it. Discovery is ongoing. Vasu reserves the right to supplement its response pursuant to Fed. R. Civ. P. 26(e).

Dated: July 29, 2024

By: /s/ Kristopher Kastens  
Paul J. Andre (*pro hac vice*)  
Lisa Kobialka (*pro hac vice*)  
James Hannah (*pro hac vice*)  
Kristopher Kastens (*pro hac vice*)  
KRAMER LEVIN NAFTALIS  
& FRANKEL LLP  
333 Twin Dolphin Drive, Suite 700  
Redwood Shores, CA 94065  
Telephone: (650) 752-1700  
pandre@kramerlevin.com  
lkobialka@kramerlevin.com  
jhannah@kramerlevin.com  
kkastens@kramerlevin.com

S. Calvin Capshaw (Bar No. 03783900)  
Elizabeth L. DeRieux (Bar No. 05770585)  
Capshaw DeRieux LLP  
114 E. Commerce St.,  
Gladewater, Texas 75647  
Telephone: 903-845-5770  
ccapshaw@capshawlaw.com  
ederieux@capshawlaw.com

*Attorneys for Plaintiff*  
Vasu Holdings, LLC

**CERTIFICATE OF SERVICE**

I hereby certify that on July 29, 2024, a complete copy of the foregoing **PLAINTIFF VASU HOLDINGS, LLC'S OBJECTIONS AND RESPONSES TO DEFENDANTS SAMSUNG ELECTRONICS CO., LTD. AND SAMSUNG ELECTRONICS AMERICA, INC.'S FIRST SET OF INTERROGATORIES (NOS. 1-25)** was served via electronic mail upon the following counsel of record for Defendant Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc.:

Melissa R. Smith  
State Bar No. 24001351  
GILLAM & SMITH, LLP  
303 South Washington Avenue  
Marshall, Texas 75670  
Telephone: (903) 934-8450  
Facsimile: (903) 934-9257  
melissa@gillamsmithlaw.com

Steven Pepe  
(NY Bar No. 2810430)  
Alexander E. Middleton  
(NY Bar No. 4797114)  
Jolene L. Wang  
(NY Bar No. 5462619)  
ROPES & GRAY LLP  
1211 Avenue of the Americas  
New York, NY 10036-8704  
Telephone: (212) 596-9000  
Facsimile: (212) 596-9090  
Steven.Pepe@ropesgray.com  
Alexander.Middleton@ropesgray.com  
Jolene.Wang@ropesgray.com

*Attorneys for Defendants*  
Samsung Electronics Co., Ltd. and Samsung  
Electronics America, Inc.

David S. Chun  
(CA Bar No. 315958)  
Christopher M. Bonny  
(CA Bar No. 280554)  
ROPES & GRAY LLP  
1900 University Avenue 6th Floor  
East Palo Alto, CA 94303-2284  
Telephone: (650) 617-4000  
Facsimile: (650) 617-4090  
David.Chun@ropesgray.com  
Christopher.Bonny@ropesgray.com

Fan (Frances) Zhang  
(DC Bar No. 1721165)  
ROPES & GRAY LLP  
2099 Pennsylvania Avenue, N.W.  
Washington, D.C. 20006  
Telephone: (202) 508-4600  
Facsimile: (202) 508-4650  
Frances.Zhang@ropesgray.com

By: /s/ Kristopher Kastens  
Kristopher Kastens