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BY E-MAIL

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Re: Vasu Holdings LLC v. Samsung Electronics Co., Ltd. et al (E.D. Tex. No. 2:24-cv-00034-JRG-RSP)

Dear Carlos:

I write on behalf of Defendant Samsung regarding Vasu's October 24, 2024 proposed Disclosure of Asserted Claims and Second Supplemental Preliminary Infringement Contentions ("Second Supplemental Infringement Contentions"). Not only do Vasu's proposed Second Supplemental Infringement Contentions improperly include newly asserted infringement theories, but they also fail to comply with the Discovery Order in this case and fail to address the majority of the deficiencies identified in Samsung's June 25, 2024 and September 18, 2024 letters. For at least the reasons discussed below, Vasu's Second Supplemental Infringement Contentions remain wholly deficient, and Samsung will not agree to Vasu's proposed supplementation. To be clear, Samsung is amenable to contentions that clarify what Vasu had included in its infringement contentions, but not to attempts by Vasu to pull in new theories of infringement untethered from its original contentions.

Because Vasu's contentions continue to be unclear, continue to rely on representative products without a basis for such representativeness, and continue to fail to provide the required specificity in its identification of source code, Samsung intends to move to strike Vasu's Supplemental Infringement Contentions, and to compel supplemental infringement contentions that comply with the rules. Please provide your availability for a meet and confer on November 20th or 21st.

Vasu's Second Supplemental Infringement Contentions Improperly Identify New Infringement Theories

Vasu's proposed Second Supplemental Infringement Contentions impermissibly identified a number of new infringement theories not previously disclosed, including those listed below. Not only are these new theories belated, but they also further confuse Vasu's contentions instead of provide the clarity needed for Samsung to understand what Vasu is accusing. Samsung will not agree to any supplementation that includes new theories.

- For all Asserted Patents, Vasu’s proposed Second Supplemental Infringement Contentions allege for the first time an “Intelligent Wi-Fi connection” module, including its “two sub-modules” (e.g., Appendices B-1¹ at 15-16; D-1 at 15; E-1 at 32; F-1 at 12), “Wi-Fi Connectivity Manager in Android Wi-Fi framework” (e.g., Appendices B-1 at 18; D-1 at 18; E-1 at 35; F-1 at 15), and “Connectivity Service” (e.g., Appendices B-1 at 18-19; D-1 at 18-19; E-1 at 35; F-1 at 15), each act as an interface server. Vasu did not identify the Intelligent Wi-Fi connection module, Wi-Fi Connectivity Manager, the Connectivity Service or any other component in the mobile device as the alleged “interface server” in its initial or first supplemental infringement contentions.
- For all Asserted Patents, Vasu alleges for the first time that a “signal strength” (e.g., claim 1 of the ’181 Patent) or “context” (e.g., the “first,” “second,” “third” and “fourth” contexts of claim 12 of the ’281 Patent); the “[first] context” and “second context” (e.g., claims 1 and 43 of the ’154 Patent); and a “context” (e.g., claims 1, 12, 23, 39 of the ’996 Patent) can be a “combination of information from the [] communication link,” including “Basic Service Set Identifier (‘BSSID’),” “service set identifier (‘SSID’),” “direction information (away from access point or towards access point),” “location information,” “location indicators,” “the number of bad packets,” “the number of beacon loss,” “the number of re-transmission,” “power requirements,” “Quality of Service,” “available speed/bandwidth,” “type of encryption,” “preferences” and “policies, known, or not known.” E.g., Appendices B-1 at 49; D-1 at 48; E-1 at 102, 143, 173, 177-78; F-1 at 42, 84, 106, 157-58, 168, 200. Vasu did not in its earlier contentions allege that any such information or combination thereof is the alleged “signal strength” or “context.”
- For at least the ’281 Patent and the ’996 Patent, Vasu expanded its theory for what triggers the automatic handoff (i.e., the second detected context that is the basis for the automatic switching to a Wi-Fi network) to include “delay in the network, packet loss, low throughput,” which is outside the scope of the “changes in signal strength or user preference” Vasu initially alleged as “the second detected context.” E.g., compare Appendix E-1 at 143 with old E-1² at 108; compare Appendix F-1 at 42 with old F-1 at 10-63. Vasu’s original contentions did not encompass this functionality.
- For at least the ’996 Patent, Vasu newly alleges that the “Smart Network Switch ... compares the received packets to determine the status of the network service” and that the “Accused Products track the packets from the transmitter and the receiver every second to track user status.” E.g., compare Appendix F-1 at 18 with old F-1 at 22-27. Vasu’s original contentions did not encompass this functionality.

¹ Unless otherwise specified, all citations to appendices throughout this letter refer to the appendices to Vasu’s Second Supplemental Infringement Contentions.

² All citations to “old [appendix number]” (e.g., “old E-1”) throughout this letter refer to appendices from Vasu’s Supplemental Infringement Contentions.

- For at least the '996 Patent, Vasu newly alleges that “when the Accused Products are in active mode, they monitor the quality of the last hop on WiFi using packet loss ratio as an indicator to decide if the link is good enough to switch to WiFi as the uplink” and pointed to “the WiFi watchdog.” *E.g., compare* Appendix F-1 at 72 *with* old F-1 at 10-63. Vasu’s original contentions did not encompass this functionality.
- For at least the '996 Patent, Vasu newly alleges that “[w]hen the screen of the Accused Products is on, and the Wi-Fi service in the Wi-Fi framework may poll RSSI and link-layer stats a first time window (e.g., 3 seconds) or by other configuration [REDACTED], which is the first time window.” And “[w]hen the screen is off, the candidate Wi-Fi network (SSID) and target RSSI (e.g., -63 dBm) is set for PNO scan, which is the first predefined threshold value running at a first time window (e.g., 5 minutes). If the PNO scan results with RSSI higher than the set value, a calculated score based on the connection will be compared with the current network’s score to decide if transition will occur.” *E.g., compare* Appendix F-1 at 72 *with* old F-1 at 10-63. Vasu’s original contentions did not encompass this functionality.

To reiterate, Samsung’s request for clarification was not an invitation for Vasu to identify wholly new infringement theories. Samsung opposes the addition of any of Vasu’s new infringement theories.

Vasu’s Second Supplemental Infringement Contentions Continue to Fail to Provide a Proper Basis for Representativeness

Vasu’s proposed Second Supplemental Infringement Contentions still do not provide a proper basis for representativeness in its infringement contentions, for at least the reasons previously identified in my September 18, 2024 letter. *See* Local Patent Rules 3-1(c).

Vasu improperly continues to provide only single charts for groups of products without sufficiently explaining why the particular products it charted are representative for each group. *See, e.g., Ultimate Pointer, LLC v. Nintendo Co.*, No. 6-11-cv-496, 2013 WL 12140173, at *3 (E.D. Tex. May 28, 2013). For example, in Appendix E-3, Vasu continues to use S22 as the representative Accused Product despite it being excluded from the list of the products defined as “Accused Products” for that appendix. *See* Appendix E-3 at 285.

Moreover, Vasu’s proposed Second Supplemental Infringement Contentions still rely on functionality that is not available in all of the accused products based on their supported Android versions. For example, and as noted in my September 18, 2024 letter, Vasu relies on the functionality from “Android Wi-Fi Network Selection,” for which Vasu cites to VASU 025102. *See, e.g.,* Appendix E-1 at 128. Even though Android Wi-Fi Network Selection first became available for Android 12 (VASU 025102), Vasu makes no attempt to limit the Accused Products for which it relies on this functionality to products that support Android 12, and instead accuses every Galaxy product based on this non-representative functionality. To the extent Vasu is alleging that different subsets of identified functionality are relevant to different accused products, and that Samsung can figure out

what functionality might be relevant to which products, Samsung does not accept this invitation. It is not Samsung's burden to guess at what products Vasu contends meet a certain limitation based on alleged support for certain functionalities, and for which products Vasu is in actuality relying on a different functionality.

And as previously noted in my September 18, 2024 letter, Vasu indiscriminately accuses all Galaxy Tab versions without regard for whether they support cellular functionality.

Moreover, as previously noted in my September 18, 2024 letter, including all examples previously identified, Vasu improperly relies on source code that is specific to certain versions of Android, and Vasu makes no attempt to show that such source code is applicable to all charted products. Thus, Vasu's claim charts still fail to meet the standard set by Local Patent Rule 3-1(c) and the Discovery Order. *See Michael S Sutton Limited v. Nokia Corp.*, No. 6:07-CV-203, Dkt. No. 59, at 4-5 (E.D. Tex. February 13, 2009). Vasu must limit each claim chart to those products for which the identified representative source code is applicable.

Vasu's Second Supplemental Infringement Contentions Continue to Improperly Add New Products

Vasu still has not withdrawn its belated identification of new products, as identified in my September 18, 2024 letter. Moreover, Vasu impermissibly added five new Accused Products again, including the Galaxy A23, S10 5G, Tab A9+, Tab A9+ 5G, and Tab S6 Lite. Samsung will oppose supplemental contentions that include new products.

Vasu's Second Supplemental Infringement Contentions Continue to Fail to Identify Source Code

Vasu also has yet to address the deficiencies in its identification of source code that Samsung identified at issue in Vasu's proposed Supplemental Infringement Contentions, as required by the Discovery Order. Dkt. 29, ¶ 3(a)(i). In fact, it appears that Vasu has not meaningfully supplemented its identification of source code at all in its Second Supplemental Infringement Contentions. At best, it appears that Vasu inspected the source code computer for a few days in August to identify what source code generally relates to general functionalities, but has made no attempt to identify what source code actually implements the functionality Vasu believes infringes the asserted claims. Vasu does not appear to have identified any source code relevant enough to ask to be printed, and also has not followed up on its earlier review of source code to allow it to properly identify relevant source code.

Vasu's Second Supplemental Infringement Contentions Still Fail to Chart with the Required Specificity

Vasu's proposed Second Supplemental Infringement Contentions still do not sufficiently put Samsung on notice as to how the Accused Products infringe the Asserted Patents. This has left Samsung to guess at how Vasu might be alleging the accused products infringed. Vasu continues to fail to provide charts with required specificity for at least the reasons addressed below:

1. '181 Patent

- Claim 1 requires an “interface server.” Vasu’s Second Supplemental Infringement Contentions continue to assert that the interface server is the “AAA server” (Appendix B-1 at 25) and the “SCC AS” (Appendix B-1 at 15, 59, 67, 108, 129, 131). However, Vasu has not amended its contentions to show what functionality of the AAA server meets any of the claim limitations relating to the claimed “interface server.” At most, Vasu removed language describing the AAA server as an interface server in some instances, but has maintained the AAA server for this purpose in other instances. Vasu must amend its contentions to remove every reference indicating that the AAA server is the alleged “interface server.”
- Element 1[d] requires “notifying the mobile communication device to terminate transmission over the first communication link.” In Vasu’s Second Supplemental Infringement Contentions, Vasu contends that the “SCC AS,” not the Accused Products, “notifies the Accused Products” to “terminate transmitting over the first communication link.” Appendix B-1 at 96. Samsung therefore understands that Vasu is relying only on joint and/or indirect infringement for this claim limitation, and will proceed accordingly.
- Elements 1[c] and 43[c] require “a second context” and “[a / first / the] context [of the first communication link].” In Vasu’s Second Supplemental Infringement Contentions, Vasu identifies multiple contexts, but still does not specify which content is the claimed “second context” and which context is the “[a / first / the] context [of the first communication link].” *See, e.g.*, Appendix D-1 at 68, 133-34.
- In Vasu’s Second Supplemental Infringement Contentions, Vasu maintains that “the Wi-Fi service calculate[s] a ‘connected score’ based on the RSSI and . . . [can] pass the score to [a] connectivity service, which uses the score to determine whether to connect to a Wi-Fi network or to a mobile network.” Appendix B-1 at 67. As noted in my September 18, 2024 letter, we understand that the “notifying” is limited to the allegation that the Wi-Fi service passes a connected score based on the RSSI to a connectivity service. We take your reliance on the same theory without comment to confirm our understanding, and will proceed accordingly.

2. '154 Patent

- Claim 1 requires an “interface server.” Vasu’s Second Supplemental Infringement Contentions continue to assert that the interface server is the “AAA server” (Appendix D-1 at 24) and the “SCC AS” (Appendix D-1 at 15, 61, 107). However, Vasu has not amended its contentions to show what functionality of the AAA server meets any of the claim limitations relating to the claimed “interface server.” At most, Vasu removed language describing the AAA server as an interface server in some instances, but has maintained the AAA server for this purpose in other instances. Vasu must amend its contentions to remove every reference indicating that the AAA server is the alleged “interface server.”

- Elements 1[d] and 43[d] require “notifying the mobile communication device to terminate transmission over the first communication link.” In Vasu’s Second Supplemental Infringement Contentions, Vasu contends that the “SCC AS,” not the Accused Products, “notifies the Accused Products” to “terminate transmitting over the first communication link.” Appendix D-1 at 94. Samsung therefore understands that Vasu is relying only on joint and/or indirect infringement for this claim limitation, and will proceed accordingly.

3. '281 Patent

- Elements 1[a], 23[b], and 37[a] require a “first communication module” and “second communication module.” Vasu appears to have clarified that Wi-Fi chipsets are the first communication modules when switching to mobile network and are the second communication modules when switching to Wi-Fi network, but Vasu still confusingly alleges that “Wi-Fi network selection functions in the wi-Fi framework” can be the second communication module in some instances. *See, e.g.*, Appendix E-1 at 80, 128.

Vasu also no longer appears to allege that the first or second communication module may be the “VoIP user agent, VoWiFi call function, [and] mobile call function,” but Vasu still confusingly alleges that “mobile call functions” can be the second communication module in claim 37[c], which refers back to claim 1[c]. *See* Appendix E-1 at 354. Vasu must clarify its infringement theory on the “first communication module” and “second communication module” required under elements 1[a], 23[b], and 37[a].

- Elements 1[b], 23[d], 37[b], and 45[d] require “wherein upon activation of a timer, [the/a] switching system causes [the/a] second communication module to change state from a sleep mode to an active mode, wherein the timer is activated to establish a time window of a predefined size” Elements 12[b] and 31[b] similarly require “activating [] a timer to establish a first time window of a first predefined size” And element 31[f] requires, in part, “a timer is activated to establish a second time window of a second predefined size.” Vasu continues to allege that the “Android connectivity system issu[ing] scans,” “Doze” and “imminent AlarmClock alarm” features are the “timers” and appears to have addressed the three different scenarios for both time windows. Samsung’s understanding is that Vasu’s three different scenarios are as follows: (i) the example for Doze is the Accused Products periodically entering a maintenance window; (ii) the example for Wi-Fi framework is the use of exponential intervals, which also could be the same size for different time windows; and (iii) the example for the RSSI polling is a 3-second first time window and a 6-second second time window. Please notify us if Samsung’s understanding is incorrect.
- Despite Claim 12 requiring that the second network to which the connection is switched is a “Wi-Fi network,” Vasu continues to assert that the second wireless network is a “Wi-Fi or mobile network. *Compare* old E-1 at 108 *with* Appendix E-1 at 143. In fact, Vasu generally continues to merely identify a number of different types of contexts without specifying which

contexts map to the claim's "first," "second," "third," and "fourth" contexts. Vasu must clarify its infringement theories in this respect.

- Elements 1[b], 12[f], 23[d], 31[f], 37[b], and 45[d] require a "second predefined threshold value [V_{th2}]," and elements 1[b], 12[h], 23[d], 31[f], 37[b], and 45[d] require a "third predefined threshold value [V_{th3}]," wherein the third predefined threshold value (V_{th3}) is smaller than the second predefined threshold value (V_{th2}). Vasu does not dispute Samsung's understanding that Vasu's contention for the "second predefined threshold value [V_{th2}]" is limited to -68 dBm and the "third predefined threshold value [V_{th3}]" is limited to -73 dBm. *See, e.g.*, Appendix E-1 at 90, 349. We will proceed accordingly.
- Elements 23[d], 37[b], and 45[d] require "wherein upon activation of a timer, the switching system causes the second communication module to change state from a sleep mode to an active mode" For the "sleep mode" and "active mode," Vasu continues to fail to point to something specific and identify the relevant functionality, stating only that "[i]n sleep mode, the Accused Products are in a minimal power-consuming state and do not maintain active connections. In active mode, the Accused Products is 'awakened' to resume its full functions and conduct activities directed by the system or the users, which includes switching to a connection that has a higher level of signals for better quality of services or transmit data at its highest possible rate. In standby mode, the Accused Products are in an intermediate state that cuts battery power consumption." This does not specify the relevant functionality. For example, Samsung is unable to discern what Vasu is referring to as an "intermediate state that cuts battery power consumption," and while one could imagine a number of ways in which this could be done generally (e.g., by dimming a screen), Samsung cannot discern what functionality Vasu is pointing to. Similarly, the alleged "sleep mode" in which the device does "not maintain active connections," could correspond, e.g., to when the user has turned off the transceivers, or when the user is in a location where networks are detected, the but user does not allow the device to connect to any detected network. Vasu must clarify what the relevant functionality is.
- Element 23[d] requires "a second context" and "[the / a] context." Vasu identifies multiple contexts, but still does not specify which content is the claimed "a second context" and which context is the claimed "[the / a] context." *See, e.g.*, Appendix E-1 at 225-26. Vasu must identify which alleged context they allege meet each of these limitations.
- For element 31[b], Vasu continues to fail to show what functionality of the server Vasu is asserting activates a timer and the way in which the server determines a second signal level during the first time window as required by these claim elements. Vasu's added language regarding a server is non-specific, and generally mimics the claim language: "There are a number of ways that a timer is activated by the server (interface server or server for Wi-Fi framework) in the Accused Products to establish this first time window of a predefined size if the signal level is greater than the threshold value, which is configurable." The fact that Vasu alleges there are "a number of ways" this limitation is met in the accused products, yet fails

to identify a single one suggests that Vasu is actually unable to identify a plausible way in which this limitation is met in the accused products. If so, Vasu must withdraw its assertion of this claim. Otherwise, Vasu must clarify its theory.

- Similarly for elements 31[d], 31[e], and 31[f], Vasu continues to fail to identify any server functionality. Vasu merely adds a reference to a “server” doing something, but fails to identify what the “server” is doing, as noted in the below examples. For the various limitations for claim 31, Vasu continues to refer to a “server for Wi-Fi framework/Wi-Fi firmware,” but does not identify what this “server” actually is, or how it relates in any way to the remaining claim language. As such, Vasu must clarify what “server” it is referring to.
 - 31[d]: “As described in Element 31[c], if the second detected signal level falls below the first predefined threshold value, which means the current network’s connectivity is deteriorating, the Accused Products start to search for an alternative Wi-Fi network signals to have the signal level above the current network, above the first pre-defined threshold value, by the server (server for the Wi-Fi framework or interface server).”
 - 31[e]: “As described in Element 31[f], with a Wi-Fi framework server or interface server, if the alternative signal level according to the context of the network is above the first predefined threshold value, which indicates that the Wi-Fi network has a better connectivity than the current network.”
 - 31[f]: “Through ‘Switch to mobile data’ product feature in the Accused Products, the Accused Products automatically switch a Wi-Fi communication (first communication link) in progress to the mobile network (second communication link) if no alternative signal level according to the context of the network is above the first predefined threshold value, with the server (interface server for Wi-Fi network).”

4. '996 Patent

- Elements 12[d] and 23[d] require “wherein upon activation of a timer, the server causes a communication module to change state from a sleep mode to a stand-by mode, and the server causes the [second] communication module to change state from the stand-by mode to an active mode before a[/the] communication is switched to the communication module.” Samsung previously identified that Vasu did not explain how a second communication module changes states upon activation of a timer. Vasu’s amendments fail to address this deficiency.

Vasu contends that four scenarios/functionalities satisfy these elements. *See, e.g.*, Appendix F-1 at 149-153. However, these four scenarios/functionalities still fail to show a second communication module changing state from sleep to stand-by upon activation of a timer. Vasu’s only statement on this point is that “[i]n stand-by mode, the Accused Products are in an intermediate state that cuts battery power consumption.” *See* Appendix F-6 at 63. As with the related limitations for the '281 patent, Vasu, leaves open a plethora of possibilities, and

does not provide an explanation as to what that stand-by mode is. Vasu must provide this clarity.

Samsung also previously identified that Vasu did not sufficiently show how a server causes the second communication module to change state. Vasu has not addressed this deficiency in its Second Supplemental Infringement Contentions. Vasu must also provide this information.

- Elements 1[b], 12[d], 23[d], 25[d], 34[b], 35[b], 39[f], and 41[d] require a “communication module [that] changes state from a sleep mode to a stand-by mode” and “from the stand-by mode to an active mode.” Samsung previously noted that it understands Vasu’s contentions for the “sleep mode” is “the Doze stationary state,” the “stand-by mode” is “the Doze lightweight,” and the “active mode” is “the exit of Doze by a triggering event (e.g., user interaction, device movement, turning on the screen, or imminent AlarmClock alarm),” 7/11/24 Letter at 6; *see also* Appendix F-1 at 35, but Vasu still has not amended its Second Supplemental Infringement Contentions to include this additional explanation. Vasu must specify these contentions.
- Relatedly, for elements 1[a], 12[d], 23[d], 25[d], 34[b], 35[b], 39[f], and 41[d], Vasu’s Second Supplemental Infringement Contentions show what it alleges to be a transition from a sleep mode to an active mode, but still do not identify the functionality Vasu alleges is the transition from a sleep mode to a stand-by mode or what functionality Vasu alleges is the transition from the stand-by mode to an active mode. Vasu still has not addressed this deficiency.
- Claim 25 identifies a first device and a second device. For element 25[d], Vasu now points to a “communication module of the second network,” but this is inconsistent with Vasu’s contention in element 25[c], where Vasu states that the second device is the communication module of the phone. Samsung is unable to discern the accused functionality. Vasu must provide clarity on what “communication module of the second network” means.
- Claim 39 discloses “another communication device.” Vasu has not identified how the Accused Products meet this claim limitation. Vasu must therefore address this deficiency.

As requested above, please provide your availability for a meet and confer on November 20th or 21st to address a motion to strike Vasu’s Supplemental Infringement Contentions, and to compel supplemental infringement contentions that comply with the rules.

Sincerely,



Alexander Middleton