

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner

v.

DH INTERNATIONAL LTD.,
Patent Owner

Inter Partes Review Case No. IPR2025-00172
U.S. Patent No. 9,022,294

PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE

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I. INTRODUCTION

At institution, the Board correctly rejected Patent Owner's ("PO") critiques of the Proposed Ground, finding that PO improperly sought to import limitations into the claims and mischaracterized the operation of the prior art, and observing that some of PO's Preliminary Response arguments were simply not understood. Rather than remedy these flaws, PO submitted a POR that is a near copy of the POPR, elaborating only minimally and failing to clarify the key points of confusion flagged by the Board at institution. Further, PO elected not to submit a new expert declaration, so any new elaboration in the POR is without expert support. As set forth below, PO's refusal to meaningfully engage the Board's analysis at institution provides the Board no basis on which to deviate from its preliminary findings.

II. PETITIONER'S CORRECTED TRANSLATION IS PROPER

Petitioner inadvertently submitted a Suga translation affidavit signed by a project manager, rather than the employee who performed the translation. Ex. 1005, 20. The Board acknowledged the error and ordered Petitioner to file a compliant affidavit. Paper 8, 18 n.6. Petitioner filed a corrected affidavit signed by the translator who performed the Suga translation. Ex. 1017, 20.

Citing no supporting legal authority, PO contends Ex. 1017 constitutes "new matter" because it is a "completely different attestation signed by a different person[.]" Paper 15, 2. This procedural objection lacks merit. A corrected affidavit

from the actual translator is fully consistent with PTAB practice. *See Hengdian Group DMEGC Magn. Co. v. Hitachi Metals, Ltd.*, IPR2017-01312, Paper 14 at 2 (PTAB Jan. 3, 2018). Nothing in 37 C.F.R. § 42.63(b) requires that a noncompliant affidavit be “corrected” by the same declarant.

Also, without legal support, PO asserts that Suga should be accorded a “priority date” of July 29, 2024—the date of Mr. Raia’s original affidavit. The prior-art date is its Japanese publication. PO provides no rationale for ignoring this publication date due to a now corrected procedural flaw with a translation affidavit.

III. PO REPEATS THE POPR’S CONFUSING ARGUMENTS

The POR continues to advance arguments that the Board expressly stated it did not understand. As reflected in the testimony of PO’s expert, Mr. Zaheer, PO’s arguments rest on a basic misunderstanding of the patent and its claimed subject matter.

A. PO Repeats Arguments the Board Already Found Confusing and Advances Minimal New Arguments Without Expert Support

The POR is largely a word-for-word reproduction of the POPR, and its arguments should be rejected for the same reasons identified in the Institution Decision. *See generally* Ex. 1018 (POPR and POR redline comparison); *see, e.g., Google LLC v. Uniloc 2017 LLC*, IPR2020-00756, Paper 30 at 51 (PTAB Oct. 12, 2021) (rejecting arguments made in POR that were rejected at institution); *Miami Int’l Holdings, Inc. v. Nasdaq, Inc.*, CBM2018-00030, Paper 65 at 16-17 (PTAB

Oct. 3, 2019) (“Patent Owner reasserts its [POPR’s] arguments, substantially word-for-word . . . Patent Owner does not apprise us of any reason to change our determination.”).

The POR even repeats verbatim the same arguments that the Board expressly stated it did not understand at institution. For example, the POR repeats without modification that Suga “teaches the selection of a communication path rather than switching based on a trigger, e.g., an invariable activation command, in response to an invariable activation cue.” Paper 6, 18-26; Paper 15, 16-24. At institution, the Board observed that “invariable activation cue” is not used in the patent and concluded that PO’s arguments were inconsistent with the claim language and therefore “not understood.” Paper 8, 16-24,n.7, 29.

Where PO does supplement the POPR, it does so without expert support, having elected not to submit a new expert declaration. With no clarifying expert testimony, the POR’s new arguments consist entirely of unsupported attorney argument. Ex. 1018 (redline compared document). For example, PO’s assertions that (1) no data is exchanged when an email is sent in the Suga–Gorsuch combination, and (2) Suga and Gorsuch do not disclose exchanging data with an access point, are purely attorney argument and provide no objective evidence rebutting Dr. Buehrer’s testimony. Paper 15, 33, 40. But it is well-settled that attorney argument cannot take the place of evidence missing from the record. *Estee Lauder Inc. v. L’Oreal, S.A.*,

129 F.3d 588, 595 (Fed. Cir. 1997); *see also* *RPX Corp. v. Link Engine Techs.*, IPR2017-00886, Paper 30 (P.T.A.B. August 23, 2018) (citing *Estee Lauder* in finding that attorney argument provides no objective evidence rebutting expert testimony); *see Elbit Sys. of Am., LLC v. Thales Visionix, Inc.*, 881 F.3d 1354, 1359 (Fed. Cir. 2018) (explaining that attorney argument is not evidence). Accordingly, the POR offers the Board no reason to deviate from its preliminary findings.

B. PO's Expert Sowed Additional Confusion on Cross Examination

Attempting to understand the nature of PO's arguments, Petitioner asked PO's expert, Mr. Zaheer, to explain the alleged distinction between the proposed Suga–Gorsuch combination and the '294 Patent claims. He offered responsive testimony that is plainly inconsistent with both the specification and the claims, revealing that Mr. Zaheer fundamentally misunderstands the '294 Patent.

In the Proposed Combination, a user triggers a data conveyance email, which is conveyed either via W-LAN or cellular based on the state of a “data conveyance switching element.” *See* Petition at 22-23. Asked why sending an email in the Suga–Gorsuch combination is different from triggering a data communication in the '294 Patent, Mr. Zaheer testified that the '294 Patent requires a user-triggered action “that activates the invariable activation command, which switches the state between inactive and active.” Ex. 1019, 64:25–65:21 (cleaned up). This understanding of the '294 Patent was unequivocally wrong. As the Board recognized, an activation cue,

not a user's triggering action, dictates the state. Paper 8, 16 ("The '294 patent claims and specification make clear that *the switching element switches between a 'first state' and a 'second state' depending on whether or not an activation cue is received.*"¹). Petitioner's counsel gave Mr. Zaheer multiple opportunities to correct his testimony:

Q. Isn't the state [of the switching element] defined by the reception or non-reception of an activation [cue] in the '294 Patent?

A. No, it's the triggering.

Ex. 1019, 65:22-25.

Q. Does the switching between a first state and a second state depend on the user having triggered the device?

A. As I stated earlier, the switching element is not decoupled from the triggering action. The states in the switching element change based on the triggering.

...

Q. So the switching element changes from inactive to active based on the user's trigger; is that right? That's your understanding?

A. That is -- that is right, yes.

Ex. 1019, 67:11-70:24 (cleaned up).

Mr. Zaheer fundamentally misunderstands the patent and its claims. Accordingly, the Board should discount or disregard Mr. Zaheer's testimony regarding the alleged differences between the Suga-Gorsuch combination and the '294 Patent. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1318 (Fed. Cir. 2005) ("[A]

¹ All emphases added unless indicated otherwise.

court should discount any expert testimony that is clearly at odds with ... the written record of the patent.”) (quotations marks and citation omitted); *Homeland Housewares, LLC v. Whirlpool Corp.*, 865 F.3d 1372, 1378 (Fed. Cir. 2017) (“[W]e must disregard the testimony of an expert that is plainly inconsistent with the record or based on an incorrect understanding of the claim[s].”) (quotations marks and citations omitted).

IV. CLAIM CONSTRUCTION

A. The Board Should Maintain its Preliminary Claim Construction Findings

At institution, the Board concluded that only “*invariable activation command*,” “*activation cue*” and “*data conveyance switching element*” warranted construction. Paper 8, 10-16. The POR provides the Board no reason to deviate from its preliminary findings on these terms.

1. *Invariable activation command*

The Board preliminarily held that an “invariable activation command” is “a command issued to initiate a data conveyance operation, such that the command itself is the same regardless of which data conveyance operation is used.” Paper 8, 14. Consistent with Petitioner’s explanation of this phrase, this captures that the command is “invariable” in that “the decision of which link is used is independent of the command issued.” Petition, 32.

The POR does not engage the Board's finding and simply re-asserts the same arguments presented in the POPR. Ex. 1018, 31-35. The sole substantive addition is the following statement supported by a link to an online dictionary: "Invariable means not changing or not capable of change." Paper 15, 9. This does not appear inconsistent with the Board's preliminary construction, and the POR does not suggest otherwise.

2. *Activation cue*

The Board preliminarily held that "activation cue" is "a data communication of a specific type that will be recognized by the cellular phone as an activation cue received from a source external to the cellular phone." Paper 8, 15-16.

PO primarily argues that a correct construction additionally requires that the "activation cue" is "*intended* as a predetermined indicator" by the transmitting device (i.e., the source external to the cellular phone). Paper 15, 9-10. PO largely repeats the arguments already rejected at institution, adding the following observation: "[T]he 'activation cue' must be predetermined to be an activation cue when sent to be received by the receiver, otherwise predetermined is being read out of the claims." Paper 15, 9, fn5. But the claims do not recite a "predetermined" activation cue. So, declining to adopt PO's additional language does not "read out" any claimed element. The specification likewise does not require that an activation cue be predetermined. It explains that the activation cue "is in the form of a data

communication of a specific type which will be recognized by electronic device 10 as an activation cue[.]” Ex. 1001, 9:24–27.

3. *Data conveyance switching element*

The POPR asserted that “‘data conveyance switching element’ should be given its plain meaning, which is the switching of the data.” Paper 6, 12. The Board preliminarily held that PO’s construction “conflicts with the express disclosure of the ’294 Patent” and rejected it. Paper 8, 16 (finding the “data conveyance switching element” is not a “data switch”). The POR argument is identical to the POPR argument, providing the Board no reason to reconsider its finding. Ex. 1018, 37.

B. Patent Owner’s Remaining Constructions

At institution, the Board concluded it was unnecessary to construe the claim terms “data exchange device,” “external data exchange device,” and “close proximity.” Paper 8, 16. Because PO advances arguments that depend on constructions of these terms, Petitioner addresses them below.

1. *Data Exchange Device/External Data Exchange Device*

The POR proposes that “[t]he data exchange device, by its plain meaning, is *a device or node on a network or a device that is directly linked without a network connection*[.]” Paper 15, 11. Although this proposal doesn’t account for the data exchange component of the claim language, Petitioner agrees that allowing for networked or non-networked devices that exchange data is consistent with the intrinsic record and with Petitioner’s Proposed Ground, which mapped Suga’s W-

LAN access point (e.g., WiFi router) and cellular base station as the claimed data exchange devices. *See* Paper 1, 39.

The POR also proposes that “[a]n external data exchange device is not a transceiver but *a device with a transceiver*.” Paper 15, 11. Whether a transceiver standing alone satisfies this claim language need not be resolved on this record. PO does not dispute that the proposed combination of Suga-Gorsuch relies on devices containing transceivers, rather than transceivers alone.

a) PO's Inconsistent Positions

Although PO's formal constructions are largely unobjectionable (albeit incomplete), the POR advances numerous arguments that depend on a much narrower construction of these terms. For example, the POR's discussion of limitation 1(c) argues that a “‘data exchange device’ is the device identified as the data's end destination, not a network access point or network infrastructure that passes the data.” Paper 15, 32. Discussing Claim 13, the POR similarly seeks to exclude “network infrastructure device[s] that simply route[] the data[.]” *Id.*, 55. In support, the POR notes that this narrower construction is consistent with specific examples in the specification, describing “data exchange device[s]” that are the endpoints in a network “where data originates or terminates[.]” *Id.*, 55. As the Board observed at institution, non-limiting examples from the specification must not be read into the claims. *See SuperGuide Corp. v. DirecTV Enterprises, Inc.*, 358 F.3d

870, 875 (Fed. Cir. 2004) (care should be taken “not to import into a claim limitations that are not part of the claim”); *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993); *IQRIS Techns. LLC v. Point Blank Enterprises, Inc.*, 2025 WL 727717, *4 (Fed. Cir. 2025); *see also* Paper 6, 30-31 (finding PO’s attempt to exclude Suga’s access points and base stations was improperly “reading preferred embodiment limitations into the broader language of the independent claims”).

In addition to the disconnect between PO’s formal proposed construction (Paper 15, 11) and its arguments that seek to exclude Suga’s access points and cellular base stations, PO (and its predecessor) have offered many different proposed constructions in other proceedings, none of which have excluded access points or base stations. For example, in a prior district court matter PO’s predecessor, G. Holdings, proposed alternatively that “[*n*]o construction [*was*] necessary[.]” or that “data exchange device” is a device for providing data upload or download. Ex. 1020 (Joint Claim Construction Chart, Dkt. 54-1, 5). In an unrelated and pending IPR proceeding, PO argued that “[t]he data exchange device, by its plain meaning, which is consistent with the specification, is *a device*[.]” and further argued that “[a]n external data exchange device is not a transceiver but *a device with a transceiver*.” *Google LLC v. DH International Ltd.*, IPR2024-01322, Paper 17, 7-8 (PTAB, June 09, 2025). None of these prior proposals suggests that the device is an endpoint where data originates or terminates.

PO does not acknowledge, let alone attempt to explain, the delta between its prior constructions and the meaning it ascribes this claim language in the instant proceeding. On this basis alone, the Board should reject PO's narrow proposals that seek to exclude the specific types of data exchange devices in Petitioner's Proposed Grounds. As the Director has emphasized, "[t]he Board's claim construction rules are designed to ensure that the Board correctly construes claim terms and to minimize inconsistency in claim construction between forums." *Revvo Technologies, Inc. v. Cerebrum Sensor Technologies, Inc.*, IPR2025-00632, Paper 20, 4 (Squires Nov. 3, 2025) (precedential); *see also Sun Pharm. Indus. Inc. v. Nivagen Pharm., Inc.*, IPR2025-00893, Paper 18 at 3 (Director Sept. 19, 2025) ("Although a party is not necessarily precluded from arguing different claim construction positions before a district court and the Board, a party should explain why different positions are warranted."); *Data Engine Techs. LLC v. Google LLC*, 10 F.4th 1375, 1381 (Fed. Cir. 2021) ("We have repeatedly rejected efforts to twist claims, 'like a nose of wax,' in 'one way to avoid [invalidity] and another to find infringement.'").

In sum, to the extent the Board expressly construes this language, data exchange devices are simply devices or nodes that send and/or receive data.

2. *Close Proximity*

As with “data exchange device,” PO has advanced numerous different and conflicting constructions of “close proximity.” In prior district court litigation, PO’s predecessor proposed that “[*n*]o construction [*was*] necessary” for the claim term “close proximity.” Ex. 1020 (Joint Claim Construction Chart, Dkt. 54-1, 41). In the unrelated and pending IPR proceeding with Google, PO advances alternative constructions arguing that “[c]lose proximity is *within a several meter range*” and that “a POSITA would consider close proximity to be *10 meters or less.*” IPR2024-01322, Paper 17, 8 (PTAB, June 09, 2025).

Here, PO begins by acknowledging the ’294 Patent teaches that “[c]lose proximity means within a several-meter range [or less].” Paper 15, 11 (citing Ex. 1001, 15:55–57). But PO then concludes that “a POSITA would consider close proximity to be *one meter or less.*” *Id.*

As with the prior terms, PO advancing alternative and inconsistent claim constructions should be rejected as procedurally improper. *Revvo Technologies*, IPR2025-00632, Paper 20 at 4. But PO’s construction advanced in *this* proceeding should also be rejected as finding no support in the intrinsic record. The plain claim language specifies that “close proximity” means “within a range to receive the activation cue to initiate the wireless data exchange.” Ex. 1001, Claims 8, 16. The specification passage PO cites states only that, “[i]n one embodiment, first data

transceiver 120 is a proximity transceiver that allows data transmission within a limited range, such as within several meters for example.” Ex. 1001, 15:55–57. Having proposed “10 meters or less” in the Google IPR proceeding, PO acknowledges that the specification’s “several meters” discussion is exemplary and does not impose a strict upper bound.

To limit “close proximity” to “one meter or less,” PO relies entirely on conclusory expert testimony. Mr. Zaheer argued that, in all examples of proximate devices in the specification (e.g., ATM, computer, or interface machine), “a person is physically close to the machines to view the interface and operate the machine.” Ex. 2001, ¶56. From this, he concludes close proximity is one meter or less. *Id.* On cross examination, Mr. Zaheer, admitted that the ’294 Patent does not discuss a user viewing or operating a data exchange device. Ex. 1019, 54:19-25, 55:16-56:13.

In sum, the Board should reject PO’s narrow construction that close proximity must be one meter or less, which conflicts with its own prior constructions and finds no support in the intrinsic record.

V. PO’S PROPOSED GROUND CRITIQUES ARE WITHOUT MERIT

A. PO’s Motivation to Combine Arguments Fail

The Petition identified several reasons why a POSITA would have been motivated to combine Suga and Gorsuch with a reasonable expectation of success. Paper 1, 23–26 (citing Ex. 1004 ¶¶74-76). The Board agreed. Paper 8, 22-24.

The POR adds nothing that undermines the Board's preliminary findings. Instead, PO repeats the same arguments previously raised in the POPR, which the Board already found were unpersuasive or not understood. Paper 6, 18–26; Paper 15, 16-24; Paper 8, 22-25. Namely, the POR re-asserts that a POSITA would have not been motivated to combine Suga and Gorsuch because they are from a different field of endeavor than the '294 Patent. Paper 15, 16-24. PO insists that the '294 Patent is directed to a device to “data transfer security,” whereas Suga and Gorsuch are “directed towards selecting data paths between a cellular network and LAN to reduce the expense of data transmission.” Paper 15, 22-23 (citing Ex. 2001 ¶¶67-68). PO's argument is meritless. It rests almost entirely on Mr. Zaheer, who does not clearly define the field of endeavor, provides no analysis of the intrinsic record that might support a specific definition, and even admitted under cross examination that he is unfamiliar with the legal standard for defining a field of endeavor. Ex. 1019, 20:10-23:13. At most, Mr. Zaheer testified that the '294 Patent “it's about security.” *Id.*, 23:4-13.

Even setting aside that its expert failed to understand, let alone perform, the requisite inquiry, PO is wrong that the '294 Patent “is directed to data transfer security[.]” Paper 15, 22. The patent's sole reference to “security” suggests the mobile device may be equipped with “security software, as known in the art.” Ex. 1001, 16:52-57. Mr. Zaheer pointed only to the PIN and biometric triggering options

as the patent's security concepts. Ex. 1019, 23:14-25. But those are *optional* means of triggering. The patent also teaches that triggering may be accomplished by means of a simple "button." Ex. 1001, 7:4-8, 10:52-56 ("triggering of control device 12 may comprise a single step, such as pressing a single button, or more than one step, such as pressing a button and concurrently applying one's fingerprint on a fingerprint scanner"). A POSITA would understand that triggering via a button press is unrelated to security. Ex. 1021, ¶¶4-5. It is improper to limit the field of endeavor to security based on an optional feature in only certain embodiments. Instead, as the Board correctly observed, "Suga and Gorsuch are in the same field of endeavor as the '294 patent because they are directed to mobile electronic devices that switch between data communication paths or networks." Paper 8, 24.

B. The Claims Do Not Require Secure or Financial Transactions

Separate from the motivation to combine critique, PO repeatedly asserts that the '294 Patent is limited to devices or methods that facilitate secure or financial transactions. *See e.g.*, Paper 15, 25-27 (arguing that Suga does not teach a "control device" as recited in limitation [1(b)] because Suga's keyboard does not activate a security feature, such as a PIN); *id.*, 55-58 (arguing that Suga does not teach an "authorization command" because Suga does not include a "security authorization," such as a PIN, in its email application).

The Board already declined to limit the claims to the preferred embodiment of a control device for activating a security feature, such as a PIN. Paper 8, 28-29. The Board should likewise reject PO's arguments that seek to limit the claims to a device or method for secure or financial transactions. Secure financial transactions are merely exemplary; the '294 Patent more broadly applies to exchanging any data using different communication paths. *See* Ex. 1001, 16:7-8 ("***One way to carry out*** the present invention is within a financial transaction."), 1:16-18 ("This invention relates to a portable electronic device capable of alternate data conveyance operations responsive to an invariable activation command."), 11:64-65 ("Portable electronic device 10 could also have a ***plethora of other alternate purposes.***"). Notably, none of "data security," "secure transactions," "financial transaction," or any similar term appears in the Claims, Title, Abstract, or Field of the Invention of the '294 Patent.

1. The claimed "control device" is security agnostic

Turning to the limitation-specific security arguments, PO insists Suga does not teach limitation [1(b)'s] "control device" because Suga's keyboard 39 does not mandate a PIN. Paper 15, 25-27. The Board rejected this argument at institution (Paper 8, 28-29), and the developed record further favors rejecting PO's attempt to limit the claims to security-related embodiments. Namely, Mr. Zaheer expressly acknowledged that the recited "control device" in Claim 1 is ***not limited*** to a device

for activating a security feature such as a PIN, but could instead be a generic button without security measures. Ex. 1019, 29:7-33:10.

2. *Claim 14's "authorization command" is security agnostic*

PO's Claim 14 critique similarly turns on importing a security requirement. Claim 12 recites a user selectively triggering the control device to issue an invariable activation command that initiates the first data conveyance operation. Dependent Claim 13 further requires the cellular phone displays data representative of the first data, and Dependent Claim 14 additionally requires the phone await an "authorization command" input before forwarding the first data to the first external data exchange device. Ex. 1001, Claim 14.

PO does not dispute Petitioner's theory that a POSITA would have understood the Proposed Combination teaches or suggests these steps, including that an email is displayed on the LCD screen and that the user is presented a confirmation message requiring further user input before sending the email, as was well-established in the art. Paper 1, 72-73 (citing Ex. 1004 ¶¶145–146); Ex. 1019, 57:15-59:25 (Mr. Zaheer confirming that he does not dispute Petitioner's expert's opinion that the prior art teaches or suggests a confirmation step). Instead, PO's critique is that the Proposed Combination's confirmation requirement is not an "authorization command" because it fails to impose security measures. Paper 15, 56-57; Ex. 1019, 57:15-59:25.

PO's argument improperly reads a "security" limitation into Claim 14. Claim 14 simply requires the device to "await[] an authorization command" before transmitting data. It does not also require the authorization to involve a PIN, password, or any particular security credential. Indeed, the '294 Patent expressly distinguishes the concept of authorization from security measures such as entering a PIN, treating security as *optional*. See, e.g., Ex. 1001, 15:15-18 (triggering "may be accomplished by entering a PIN code, pressing an authorization button, entering a PIN code AND pressing on an authorization button, or the like"), 16:26-28 ("The user must *authorize the transaction* by using control device 114, which *may include entering a PIN code*."). Further, consistent with the Petition's reliance on a user confirmation, the '294 Patent expressly teaches that "an authorization command is inputted through a *user confirmation input device*." *Id.*, 15:50-54.

C. PO Mischaracterizes Suga's User-Configured Priority Settings

PO's arguments regarding limitations [1(b), (e)-(f)] rest on mischaracterizations of Suga's user-configured priority settings. Responsive to the Board preliminarily finding that transmitting an email in the Proposed Combination satisfies the claimed "invariable activation command," PO argues that Suga's process falls outside the claims because a user can change the operation of Suga's device through settings. Paper 15, 30-31. PO similarly contends that Suga-Gorsuch does not teach a "cue receiver" because Suga merely performs rule-based selecting

of data path according to user-defined settings. Paper 15, 35-36. Finally, PO argues that Suga does not teach a “data conveyance switching element” because Suga relies on user configured priority settings rather than on the state of the switching element to convey data. Paper 15, 38-39.

Each of these settings-focused arguments turns critically on the temporal relationship between (1) choosing the settings and (2) applying the settings incident to sending an email. That is, PO suggests that after a user triggers the device to send an email, the user might be able to control or adjust how that email is conveyed via the settings, failing to capture the claimed invariability. PO is wrong. The settings are first “set” then they are subsequently applied when the user sends an email. The user has no ability to control or adjust the data conveyance via the settings *after* triggering the device to send the email.

As the Petition explains, a user may configure Suga's device settings such as “Prioritize use of wireless LAN” and “Automatically switch to phone line if wireless LAN line cannot be used[.]” Paper 1, 38 (citing Suga, [0043], [0047]-[0052], Fig. 5). Once these settings are set, subsequent requests to send an email causes the device to transmit the email pursuant to those settings. *Id.* (citing Suga, [0047], [0050]-[0051], Fig. 6.). PO's own expert confirmed this description of Suga. *See* Ex. 1019, 48:6-18 (agreeing the device applies a user's previously chosen settings when sending an email).

Put simply, there is no ability for the user to vary the network selection for an individual transmission—the choice is dictated based on the availability of W-LAN. Paper 1, 35-38. Thus, as the Board correctly held, Suga's command to transmit an email is "invariable." The same activation command is issued whenever the user triggers transmission, and the network path is determined by the state of the MPU (i.e., the switching element)—first state when W-LAN is available and second state when it is not. Paper 1, 35-38, 46-51.

The Board likewise recognized at institution that in Suga "the choice between wireless networks is based on the availability of W-LAN and cannot be influenced by the user (at the time of transmission)." Paper 8, 28 (citing the Petition 35, 37-39). Mr. Zaheer similarly admitted that Suga provides no indication that a user could change the priority settings shown in Fig. 5 once the user triggers transmission of email data. Ex. 1019, 48:19-49:13.

D. "Data Exchange Devices" Need Not Originate or Terminate Data

As explained above in Section IV.B.1, the POR argues (1) that the data exchange device is "a device or node on a network or a device that is directly linked without a network connection" and (2) that an external data exchange device is "a device with a transceiver." Paper 15, 11. In other proceedings, PO (or its predecessor) proposed constructions that generally require devices with a transceiver

capable of exchanging data. As discussed in Section IV.B.1, none of these proposed constructions limit the claimed devices to endpoints.

Despite this history of proffering broad constructions of the claim language, PO's limitation-specific arguments turn on a much narrower view of the claim language. Namely, the POR insists that a "data exchange device" must be the "data's end destination" and excludes "[n]etworking devices, such as access points or cellular base stations[.]" Paper 15, 32, 40, 47. As set forth in Section IV.B.1, to the extent the Board expressly construes this language, data exchange devices are simply devices or nodes that exchange data. Suga's W-LAN access point and cellular base stations are unequivocally devices that exchange data. Paper 1, 39-44, 52-56. Indeed, a POSITA would have understood Suga's access point and base station provide bidirectional data communications on their respective networks. Ex. 1021, ¶¶6-10.

Even if the Board were to accept PO's construction of these terms set forth in the POR at p. 11, Suga's access point and cellular base station satisfy this proposal. Namely, both devices in Suga are "device[s] [and] node[s] on a network" and both include a transceiver. PO does not elaborate on the meaning it ascribes to "node" in this proposal, and the patent does not use the term "node." But it was well understood in the art that network access devices such as those in Suga are network nodes. Ex. 1021, ¶¶6-10 (citing to a 2000 Telecom Dictionary, which defines "node" broadly to capture access devices and other network infrastructure used to "route traffic

through the network,” which cleanly captures both Suga’s W-LAN access point and cellular base station).

1. Suga’s device and W-LAN access point exchange data

PO argues that Suga does not teach limitations [1(c), (d) or (f)] because the mapped email transmission does not involve “data exchange.” Paper 15, 32-33, 37, 40. As Petitioner understands this argument, PO is suggesting that the claims require a “data exchange device” to not only receive data from the mobile device, but also to process that data as an endpoint.² *Id.*, 40 (arguing the “access point is . . . not an end device” because “payloads are not examined” and therefore “[n]o data is exchanged with the access point”). This is simply another way of arguing that the claimed data exchange device must be an endpoint, rather than a network node. As set forth in Section IV.B.1, limiting this element to endpoints is not supported by the intrinsic record and conflict with PO’s constructions of the term in this and other proceedings. Further, although PO’s argument purports to be based on a POSITA’s understanding, PO cites no evidence in support.

² To the extent PO is separately arguing there must be bidirectional communications, this directly conflicts with the meaning ascribed to “data exchange.” Ex. 1001, 10:20-25.

E. Suga Device Exchanges Data with the W-LAN Access Point Via a “Direct Link” Within a “Close Proximity”

Claims 8, 11 and 16 recite exchanging data through a “direct link” and Claims 8 and 16 further require the cellular phone is within “close proximity” of the first external data exchange device. Ex. 1001, Claims 8, 11, 16.³

PO argues that a “direct link” refers to a node-to-node connection without involving any network infrastructure and insists that Suga’s WiFi access point communications are network-based and therefore not direct. Paper 15, 45-46. In support, PO points to Fig. 4 of the ’294 Patent and argues that “there is a difference between direct linked devices and a connection to a network[.]” Paper 15, 46-47. PO also repeats that “close proximity” means “a limited range, such as within several meters” and simultaneously asserts that it means “one meter or less.” Paper 15, 48.

Starting with “direct link,” PO improperly imports preferred-embodiment limitations into the broader claim language. A “direct link” must connect the mobile device to a proximate data exchange device without intervening devices. But nothing in the intrinsic record mandates that the data exchange device in this arrangement be

³ For Claim 16, PO notes that the Petition provided a cross reference to Claim 5, which is a claim not coextensive with Claim 16. This was a typographical error. The Claim 16 analysis is coextensive with Claim 8, so the Petition’s cross reference for Claim 16 should point to the Claim 8 mapping. Similarly, the Petition’s cross reference for Claim 17 should be Claim 9, rather than Claim 6.

a non-networked device connected **only** to the cellular phone, as PO insists. The '294 Patent distinguishes short-range, single-hop “direct links” from communication with “remote” devices via a network. It does not prohibit the directly linked device from being part of a broader network. *See* Ex. 1001, 13:12-24 (explaining that data may be conveyed “through a direct link” to an external data exchange device, contrasted with conveying data to a “remote” second external device). A POSITA would have understood “direct link” in this context to refer to a proximate, point-to-point wireless association, e.g., the type of short-range link formed between a handset and a WLAN access point during IEEE 802.11 association—regardless of whether the access point is itself connected to a wider network. Ex. 1021, ¶¶11-14. Accordingly, the proposed Suga–Gorsuch combination satisfies the “direct link” limitation. Suga’s cellular phone connects to a W-LAN access point via a short-range, node-to-node link over which data is exchanged without intermediary routing hardware. Paper 1, 39 (citing Ex. 1004, ¶86); Ex. 1021, ¶¶11-14.

Turning to “close proximity,” as set forth in Section IV.B.2, PO’s narrow construction conflicts with its own prior constructions, finds no support in the intrinsic record, and should be rejected.

VI. CONCLUSION

Petitioner respectfully requests the Board find all Challenged Claims unpatentable.

Respectfully submitted,

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COUNSEL FOR PETITIONER

APPENDIX OF EXHIBITS

Exhibit 1001	U.S. Patent No. 9,022,294 (“the ’294 Patent”)
Exhibit 1002	U.S. App. No. 10/552,912
Exhibit 1003	File History for U.S. Patent No. 9,022,294
Exhibit 1004	Declaration of Dr. Michael Buehrer (“ <i>Dec.</i> ”)
Exhibit 1005	Japanese Patent No. 2003110751 to Suga (“ <i>Suga</i> ”)
Exhibit 1006	International Patent Application Publication No. WO 2001/22662 to Gorsuch (“ <i>Gorsuch</i> ”)
Exhibit 1007	U.S. Patent No. 8,792,454 to Taniuchi et al. (“Taniuchi”)
Exhibit 1008	U.S. Patent No. 8,165,559 to Klesper et al. (“ <i>Klesper</i> ”)
Exhibit 1009	Nokia Corporation, Nokia 6136 User Guide, 9252766 Issue 2, copyright 2007
Exhibit 1010	U.S. Patent Publication No. 2007/0277120 to Wilson et al.
Exhibit 1011	Feng Zhang, <i>Vertical Handoff Between 3G Networks and WLANS</i> , copyright 2005
Exhibit 1012	Al Sacco, The Eight Hottest Smartphones of 2008, computerworld.com, https://www.computerworld.com/article/1367892/the-eight-hottest-smartphones-of-2008.html
Exhibit 1013	U.S. Patent No. 7,660,854 to Sorotzkin (“ <i>Sorotzkin</i> ”)
Exhibit 1014	U.S. Patent No. 6,671,718 to Meister et al. (“ <i>Meister</i> ”)
Exhibit 1015	<i>DH International Ltd. v. Apple Inc.</i> , 3:24-cv-06185 (N.D. Cal.), Dkt. 83, Joint Initial Case Management Statement
Exhibit 1016	Nokia N93 User Guide
Exhibit 1017	Japanese Patent No. 2003110751 to Suga with English Translation and Updated Translator’s Affidavit
Exhibit 1018	Redline Comparison of Patent Owner’s Preliminary Response and Patent Owner Response filed in IPR2025-00172
Exhibit 1019	Deposition Transcript of Safwan Zaheer of November 21, 2025
Exhibit 1020	Joint Claim Construction Case 2:20-cv-00342
Exhibit 1021	Supplemental Declaration of Dr. R. Michael Buehrer
Exhibit 1022	Excerpt McGraw-Hill Illustrated Telecom Dictionary (2000)

CERTIFICATION OF COMPLIANCE WITH 37 C.F.R. 42.24

Pursuant to 37 C.F.R. § 42.24(c)(1), the undersigned certifies that the foregoing *Petitioner's Reply to Patent Owner's Response* contains 5,548 words, exclusive of the table of contents, certificate of service, certificate of word count, and appendix of exhibits.

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CERTIFICATE OF SERVICE ON PATENT OWNER
UNDER 37 C.F.R. § 42.6

Pursuant to 37 C.F.R. § 42.6(e), the undersigned certifies that on December 10, 2025, the foregoing *Petitioner's Reply to Patent Owner's Response* was served via electronic filing with the Board and via Electronic Mail on Patent Owner:

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