

UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT TRIAL AND APPEAL BOARD

MOTOROLA SOLUTIONS, INC.

Petitioner

v.

STA GROUP LLC

Patent Owner

CASE: IPR2024-00511
U.S. PATENT NO. 9,319,852

PATENT OWNER'S PRELIMINARY RESPONSE

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I. INTRODUCTION

Patent Owner, STA Group LLC (“Patent Owner”), submits this Patent Owner Preliminary Response pursuant to 37 C.F.R. § 42.107(a) in response to the *Inter Partes* Review (“IPR”) petition (“Petition”) filed by Petitioner Motorola Solutions, Inc. (“Motorola” or “Petitioner”) for claims 1-5 and 7-16 (“Challenged Claims”) of U.S. Patent 9,319,852 (“’852 Patent”, Ex. 1001).

The Board should deny Petitioner’s institution request for several reasons.

First, Ground 1 is denoted as “Reserved” and “the subject of IPR2024-00479.” Petition, 1, 33. This incorporation of Ground 1 from another proceeding is an improper incorporation by reference and prohibits compliance with 35 U.S.C. § 318(a). Put simply, the Board cannot institute the present proceeding and comply with 35 U.S.C. § 318(a). For this reason alone, institution should be denied.

Second, the ’852 Patent properly claims priority to its parent application, which published as U.S. Patent Application Publication No. 2009/0298525 (“Shaffer”), the reference at the heart of the Petitioner’s Ground 2. Thus, the Shaffer reference does not qualify as prior art and, as a result, Ground 2 cannot be the basis on which to institute review.

Third, in Ground 3, Chowdhury describes a mechanism to arbitrate floor control, i.e., who is speaking. Arbitrating floor control is different than determining an endpoint is not in adherence with the *capabilities* of the predefined floor control

mechanism. Chowdhury is silent about receiving a determination about an endpoint's adherence with capabilities of a floor control mechanism. The Petition implicitly recognizes this, as it fails to cite any disclosure regarding the claimed capabilities.

In addition, Chowdhury's ISSI protocol module, which the Petition cites as the claimed dynamically inserted proxy, is a persistent part of a gateway device for setting up user equipment connections with P25 networks and manages all communications received from the network. Chowdhury does not contemplate any situation where the ISSI protocol module is dynamically inserted, as required by each independent claim.

Thus, Ground 3 fails to present a reasonable likelihood of invalidating any claim, and institution should be denied. Ground 4 is directed only to dependent claims and does not remedy the issues present for Ground 3.

In short, the Petition does not present "a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition." 35 U.S.C. § 314(a). Institution should be denied.

II. THE '852 PATENT

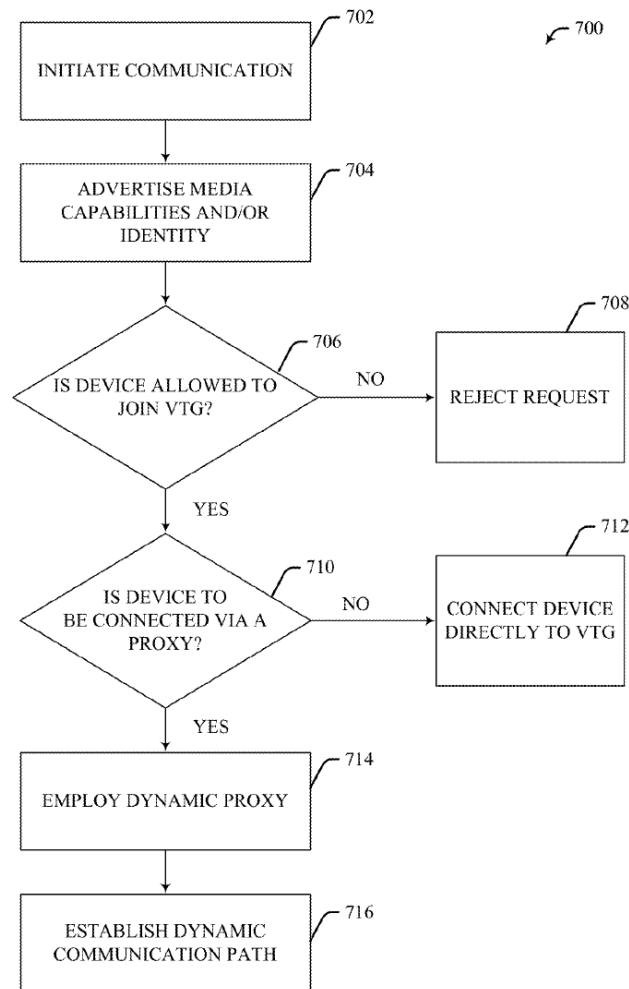
A. The Invention of the '852 Patent

The '852 Patent issued on October 24, 2014, as a divisional of an application filed May 27, 2008. Ex. 1001, Cover. The invention of the '852 Patent is directed

to a system and methodology to facilitate communication between non-compatible communication devices by using a dynamic media proxy. *Id.*, Abstract. Independent claims 1, 8, 12, and 17 recite identifying information related to an endpoint, negotiating a communication session with an interoperability server (IS), receiving a determination that the endpoint is not in adherence with the capabilities of a predefined floor control mechanism, and receiving a determination that a proxy is to be dynamically inserted to connect the endpoint to a virtual talk group. *Id.* cl. 1, 8, 12, 17.

The '852 Patent describes ISs and endpoints that include capability and information determination components that can “determine media capabilities of the endpoint and/or the identity of the endpoint.” *Id.*, 2:43-46, 2:52-57. A negotiation component is configured to advertise the determined capability and identity information “and negotiate a session with an interoperability server (IS) over a private channel.” *Id.*, 2:46-51. “[B]ased on the capability negotiation,” the IS “can dynamically insert a media proxy.” *Id.*, Abstract, 4:27-30, 6:27-32. In this way, the system “can dynamically facilitate communication between two or more non-compatible communication devices.” *Id.*, 2:33-42. The insertion of a proxy can be based, in part, on the system’s floor control policy. *Id.*, 6:27-32. The dynamic proxy also has the benefit of allowing for rogue endpoints to be screened from the virtual talk group. *Id.*, 3:10-20, 7:48-57.

Figure 7 shows an example procedure that dynamically facilitates communication between non-compatible communication devices. At Step 704, the IS determines media capabilities or an identity of an endpoint device to determine communication compatibility. *Id.*, 11:43-48. Step 710 specifies that the IS makes a determination as to whether an endpoint device is to be connected to a virtual talk group via a proxy based on communication compatibility. *Id.*, 11:48-52. When there is no communication compatibility between the endpoint device and the virtual talk group, as shown in Step 714, the IS dynamically inserts a proxy to allow the endpoint device to be connected to the virtual talk group. *Id.*, 11:63-12:3.



Id., Fig. 7, 2:1-4.

The '852 Patent issued with twenty claims, of which claims 1, 8, 12, and 17 are independent. The Petition challenges Claims 1-5 and 7-16—the Challenged Claims—under the grounds detailed below:

Ground	Basis for Challenge
1	Claims 1-5 and 8-11 are obvious over Choksi (IPR2024-00479)
2	Claims 1-5 and 7-16 are obvious over Shaffer and Keller

3	Claims 1-2 and 9-11 are obvious over Chowdhury, PoC Interworking Service, PoC System Description, TR23.979, and Jin
4	Claims 4, 5, 14, and 16 are obvious over Chowdhury, PoC Interworking Service, PoC System Description, PoC Architecture, TR23.979, Jin and TS23.060

B. Claim Construction

The Petition was filed after November 13, 2018, and, as such, the proper claim construction standard to be applied is articulated in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (*en banc*), in accordance with its regulation, 37 C.F.R. § 42.100(b). *Apple Inc. v. Firstface Co.*, No. 2021-1001, 2021 WL 4156323, at *1 (Fed. Cir. Sept. 13, 2021).

Therefore, these claims should be “given their ordinary and customary meaning [and] that the ordinary and customary meaning of a claim term is the meaning that the term would have to a [POSA] in question at the time of the invention, *i.e.*, as of the effective filing date of the patent application.” *Phillips*, 415 F.3d at 1312-13; *see also* Ex. 1032. These arguments for claim terms apply for the purposes of this IPR only and without conceding alternative arguments in the counterpart litigations. *See NEC Display Solutions of America, Inc. v. Ultravision Tech.*, IPR2019-01123, Paper 7 at 12-14 (P.T.A.B. Dec. 2, 2019).

Petitioner proposes a construction for limitation [1c] that, at this stage of the proceeding, need not be addressed. Petition, 16-18. The Petition fails to establish a likelihood of success in rendering any challenged claim unpatentable, and therefore institution should be denied under any construction.

C. Level of Ordinary Skill in the Art

At this stage of the proceeding, Patent Owner does not dispute the proposal provided by Petitioner as to who would qualify as a POSA: an individual “would have had at least a bachelor’s degree in electrical engineering, computer science, or a similar field, plus approximately three years of industry in networking or communication systems, in particular address interoperability between different types of networks and satellite communications.” Petition, 4-5.

III. THE PETITION FAILS TO ESTABLISH A REASONABLE LIKELIHOOD OF SUCCESS ON ANY CHALLENGED CLAIMS

A. Summary of the Alleged Prior Art

1. U.S. Pat. Pub. No. 2009/0298525 (“Shaffer”)

Shaffer is the publication of U.S. Patent Application No. 12/127,397 (the “’397 Application”). Ex. 1016, cover. The ’852 Patent is a divisional patent that claims priority to the ’397 Application. Ex, 1001, cover. As discussed in Section III.D.1, the priority claim is proper. Thus, Shaffer does not qualify as prior art pursuant to 35 U.S.C. § 121.

2. U.S. Patent No. 7,774,012 (“Chowdhury”)

Chowdhury was filed on January 30, 2007, and issued on August 10, 2010. Ex. 1035, cover. Chowdhury provides a “method and apparatus...for a gateway which interconnects public safety wireless networks and commercial wireless networks that support push-to-talk group calls.” *Id.*, Abstract.

Chowdhury’s gateway includes an Interoperability Module 240 and an ISSI Protocol Module 260. *Id.*, 5:41-44, Figs. 2, 3, 9. “ISSI Protocol Module 260 manages communications received from RFSSs, e.g., RFSS 50 and RFSS 60, of a public safety wireless network....” *Id.*, 6:40-42. In each of the “illustrative flow chart[s]” depicted in Figs. 4-8, ISSI Protocol Module 260 is utilized in the flow of communication described for that figure. *Id.*, 2:47-3:3, 9:26-29 (Fig. 4), 10:15-18 (Fig. 5), 11:4-12 (Fig. 6), 11:59-61, 12:1-3 (Fig. 7), 12:65-67 (Fig. 8).

3. PoC Documents

Poc Interworking Service (Ex. 1032), PoC System Description (Ex. 1031), and PoC Architecture (Ex. 1029) each lists October 2, 2007, on the face of the document. Ex. 1032, 1; Ex. 1031, 1; Ex. 1029, 1. Petitioner’s employee opines that these documents would have been published to the OMA website “within 3-4 days” of October 2, 2007. Ex. 1061, ¶ 9.

The PoC documents are each “Candidate Version 2.0” of different aspects of the Push to talk over Cellular standard published by the Open Mobile Alliance Ltd.

Ex. 1032, 1; Ex. 1031, 1; Ex. 1029, 1. The PoC Documents “define the system concepts and high level procedures for the PoC service enabler V2.0.” *See* Ex. 1031, 10; *see also* Ex. 1029, 5.

4. 3GPP Specifications (TR23.979, TR23.060)

TR23.979 (Ex. 1033) and TR23.060 (Ex. 1034) purport to list June, 2007 and March, 2008 on the face of the respective documents. Ex. 1033, 1; Ex. 1034; 1. Like the PoC Documents, Petitioner’s employee opines that these documents would have been published to the OMA website “within 3-4 days” of the respective release dates. Ex. 1061, ¶ 9. Neither of the 3GPP specifications list a release day, instead listing only the months in which the documents were allegedly released.

TR23.979 “studies the architectural requirements in order to enable services like PoC over 3GPP systems.” Ex. 1033, 6. TR23.060 “defines the stage-2 service description for the General Packet Radio Service (GPRS) which is a packet bearer service and a main part of the packet domain.” Ex. 1034, 11.

5. U.S. Pat. Pub. No. 2006/0003781 (“Jin”)

Jin was filed on June 30, 2004, and published on January 5, 2006. Ex. 1036, cover. Jin is titled “Methods and apparatus for the immediate acceptance and queuing of voice data for PTT communications.” *Id.*

Jin teaches a mobile station that works with a first-in-first-out (FIFO) buffer memory. *Id.*, Abstract. Once a user activates the PTT switch on the mobile station,

the processor “save[s] digital voice data corresponding to voice input signals in the FIFO buffer memory” and after confirming the floor has been granted, “cause[s] the digital voice data from the FIFO buffer to be retrieved and transmitted to the wireless network for the PTT voice communication.” *Id.*

B. The Legal Framework for Assessing Unpatentability

“In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity ... the evidence that supports the grounds for the challenge to each claim”)). The burden of persuasion in an IPR “never shifts to the patentee.” *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). Moreover, a petitioner should not “place the burden on [the Board] to sift through information presented by the Petitioners, determine where each element [of the challenged claims] is found in [the cited references], and identify any differences between the claimed subject matter and the teachings of [the cited references.]” *Google Inc. v. EveryMD.com LLC*, Case No. IPR2014-00347, Paper 9 at 25 (P.T.A.B. May 22, 2014).

A claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved based on underlying factual determinations, including (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) when in evidence, objective indicia of non-obviousness (i.e., secondary considerations). *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). “To satisfy its burden of proving obviousness, a petitioner cannot employ mere conclusory statements. The petitioner must instead articulate specific reasoning, based on evidence of record, to support the legal conclusion of obviousness.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016).

C. Ground 1: The Inclusion of Ground 1 is an Improper Incorporation Which Prohibits Compliance with 35 U.S.C. § 318(a)

In this Petition, Petitioner lists four total grounds under its statement of precise relief requested with its request for cancelation of claims in accordance with 35 U.S.C. § 311. Petition, 1. Petitioner identifies Ground 1 as “Reserved,” but later asserts that Ground 1 is “the subject of IPR2024-00479.” Petition, 1, 33. Petitioner’s treatment of Ground 1 is an improper incorporation by reference (see 37 C.F.R. § 42.6(a)(3)) and runs afoul of the Board’s framework following *SAS Institute, Inc. v. Iancu*, 138 S. Ct. 1348 (2018). See also 35 U.S.C. § 318(a). “If the Board institutes

an IPR, it must issue a final written decision addressing all claims challenged by the petitioner [and] must similarly address *all grounds of unpatentability raised by the petitioner.*”¹ *AC Techs. S.A. v. Amazon.com, Inc.*, 912 F.3d 1358, 1364 (Fed. Cir. 2019) (citing *SAS*, 138 S. Ct. at 1359-60). Notably, in an IPR, “it’s the petitioner, not the Director, who gets to define the contours of the proceeding.” *SAS*, 138 S. Ct. at 1355. Petitioner has defined the contours of this proceeding such that it includes four grounds, including this Ground 1, and as a result, has presented the Board with a situation where it is impossible to “address all grounds of unpatentability raised by the petitioner” unless the contents of IPR2024-00479 are fully incorporated into the instant Petition, which would be improper. *AC Techs.*, 912 F.3d at 1364; 37 C.F.R. § 42.6(a)(3).

In addition to specifically contouring its Petition to incorporate IPR2024-00479 into the present proceeding, Petitioner also submitted the identical expert declaration in both the present proceeding and IPR2024-00479. *Compare* Ex. 1002 with *Motorola Solutions, Inc. v. STA Group LLC*, IPR2024-00479, Ex. 1002 (P.T.A.B. May 13, 2024).² The expert declaration submitted in this proceeding and

¹ All emphasis added unless otherwise noted.

² To avoid having identical exhibits, Patent Owner has not re-submitted this declaration as a new exhibit in this proceeding.

in IPR2024-00479 analyzes each of the four grounds in detail. *See generally* Ex. 1002, ¶¶ 102-248. The declaration in this proceeding, Ex. 1002, includes a full-blown analysis of claims 1-5 and 8-11 in view of U.S. Patent Application Publication No. 2006/0058007 (“Choksi”), which *is* Petitioner’s Ground 1, that is allegedly “reserved,” yet expressly included in this proceeding. Ex. 1002, ¶¶ 102-153 (“GROUND 1: CHOKSI IN VIEW OF THE KNOWLEDGE OF A POSITA RENDERS OBVIOUS CLAIMS 1–5 AND 8–11”); *see also Motorola Solutions, Inc. v. STA Group LLC*, IPR2024-00479, Paper 2 at 1 (P.T.A.B. May 13, 2024). Choksi is also discussed in the Petition in the Overview of the Prior Art References section. Petition, 18-21. While the present Petition does not apply Choksi to any claim element or provide any additional analysis of Choksi, it is decidedly part of Petitioner’s expert declaration. However, because there is no analysis in the Petition, it is unclear why Petitioner refers to Choksi at all.

The same issue bears out in a different way for IPR2024-00479 where the expert declaration features a lengthy discussion of prior art references like Chowdhury (Ex. 1035 in the present proceeding), that are not actually analyzed in

the Petition. *See Motorola*, IPR2024-00479, Ex. 1002, ¶¶ 99-100, 212-243. Notably, Chowdhury was not even submitted as an exhibit in IPR2024-00479.³

The inclusion of the expert’s analysis for all grounds in both proceedings, including a summary of all of the prior art relied upon in each of the four grounds and a fulsome analysis of each ground, will lead to a myriad of evidentiary issues if trial is instituted in either proceeding. This includes the expert’s reliance on evidence that should not be of record, as well as an impossibility regarding analyzing the patentability of claims in view of references not submitted with the Petition. *See, e.g.*, Ex. 1002, ¶ 251 (“I may utilize the documents cited and/or listed herein, or portions of those documents, as exhibits at any hearing or trial in this proceeding.”); *see also Motorola*, IPR2024-00479, Ex. 1002, ¶¶ 93-101, 212-248 (citing Exs. 1029-1036).

If the Board were to institute review of this Petition, it would present even more issues during the trial, final decision, and appellate record. For example, even if the Board instituted review and excluded and struck any references to Choksi, the

³ Exhibits 1028-1061 were submitted in the present proceeding, but not in IPR2024-00479. The declaration submitted in IPR2024-00479 affirmatively cites to Exs. 1029-1036, and references the remaining exhibits in the Index of Exhibits. *See Motorola*, IPR2024-00479, Ex. 1002, ¶¶ 93-101, pp. xii-xvi.

Petitioner could still arguably rely on Choksi later, including on appeal, as a reference referred to in the Petition. The Petition's treatment of exhibits and declarations render this proceeding a morass that the Board should not entertain. *Netflix, Inc. v. DivX, LLC*, 84 F.4th 1371, 1377 (Fed. Cir. 2023) (citing *Intelligent Bio-Systems, Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1367 (Fed. Cir. 2016) (“[T]he Board should [] not have to decode a petition to locate additional arguments beyond the ones clearly made,” yet this is precisely what will be required if IPR is instituted.)).

Petitioner may argue that it simply intended to alert the Board to the presence of a parallel proceeding, but that is contradicted by the fact that Petitioner did that elsewhere as required by 37 C.F.R. § 42.8(b)(2). Petition, 86 (“The ’852 patent is subject to [] IPR2024-00479, filed concurrently herewith by the same Petitioner.”). In fact, Petitioner's alleged “ranking” makes it clear that the Petitioner's intent is for both proceedings to be instituted, without a justification to warrant two petitions. Paper 2, 1-3. At the end of the day, the structure of the two petitions, the expert declaration, and the “ranking” paper make clear that Petitioner intended to file one IPR, ran out of words at the last minute, and filed “one IPR” spread over two petitions. *See* Paper 2, 1 (“Petitioner was unable to include all of these challenges in a single petition due to the limit on word count for a single petition.”). This is not

one of the proper parallel petition rationales envisioned by the Consolidated Trial Practice Guide.⁴ *See* Trial Practice Guide at 59.

Petitioner defined the contours of its proceeding and has made the conscious choice to make Ground 1 part of this proceeding; it must now live with the consequences. When it comes to deciding institution, the Board must institute all grounds, or none. *SAS*, 138 S. Ct. at 1359-60. And when the Board institutes, it must issue a final written decision addressing all claims challenged by the petitioner and all grounds of unpatentability raised by the petitioner. *AC Techs.*, 912 F.3d at 1364. Because Petitioner has failed to include the rationale for Ground 1 in this Petition (other than via improper incorporation of IPR2024-00479), the Board is unable to address the substance of this ground in a final written decision. Because the Board would be unable to address the substance of this ground in a final written decision, it would be unable to comply with 35 U.S.C. § 318(a). Therefore, the Board should deny institution of all grounds.

D. Ground 2: The Petition Does Not Establish That Claims 1-5 and 7-16 are Obvious Over Shaffer in view of Keller

The Petition fails to show that Shaffer in view of Keller discloses all the elements of independent claims 1, 8, and 12. As such, the Petition fails to

⁴ Available at <https://www.uspto.gov/TrialPracticeGuideConsolidated>.

demonstrate that the Challenged Claims are unpatentable based on obviousness and institution should be denied under 35 U.S.C. § 314(a).

1. The '852 Patent is Entitled to the May 2008 Priority Date

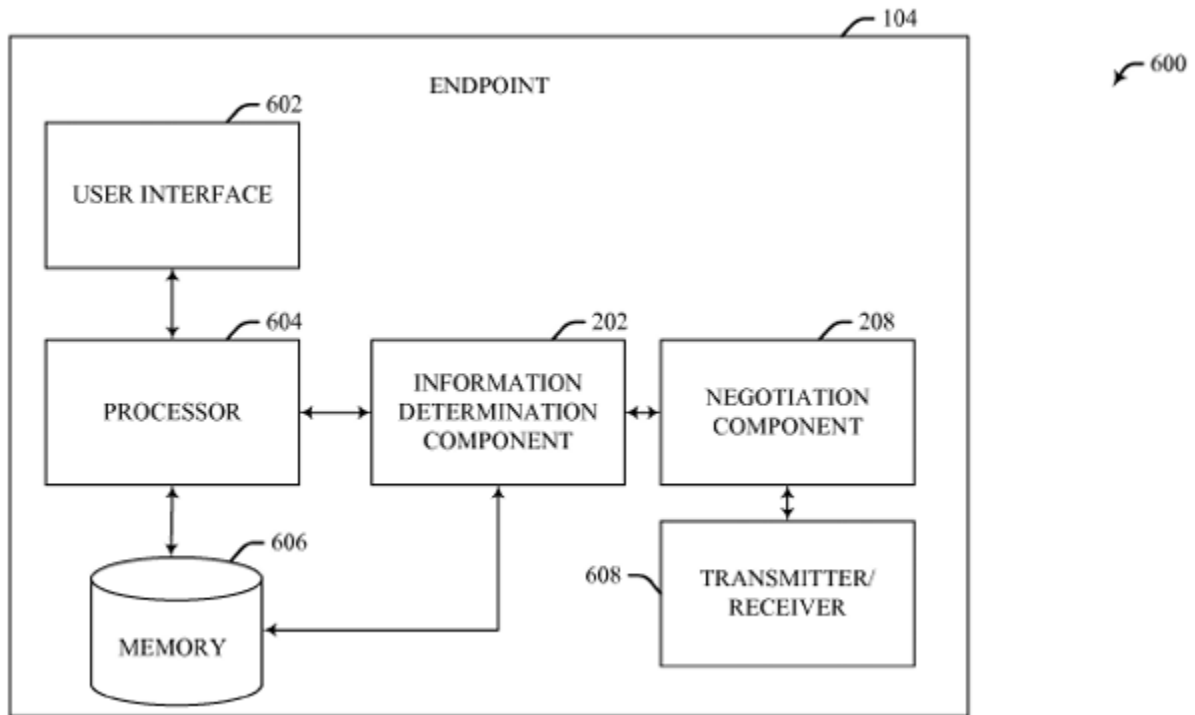
Petitioner's challenge to the '852 Patent's priority claim concerns whether the "receiving" limitation, [1c] is disclosed in Shaffer, which is the publication of the parent application. Petition, 5-14. Petitioner recognizes "Shaffer's specification is identical to the disclosure of the '852 patent." Petition, 33. For the reasons below, the claims and specification from Shaffer provide support for limitation, [1c].

First, claims 20 and 21 of Shaffer, as originally filed, are directed to an endpoint device. Ex. 1003, 96. Claim 20 recites an apparatus comprising "a negotiation component that negotiates a communication session with an interoperability server (IS) based in part on at least one of the identified information or a predefined floor control mechanism associated with the IS." *Id.* Claim 21 depends from Claim 20 and adds "a capability determination component that identifies media capabilities associated with the endpoint, the media capabilities employed by the IS to dynamically determine if the endpoint should be connected to a virtual talk group (VTG) via a proxy." *Id.*

Together, claims 20 and 21 recite how an endpoint and an IS negotiate a communication session by determining capabilities associated with the endpoint. *Id.* This includes the endpoint receiving a determination from the IS whether the

endpoint is in adherence with capabilities of a predefined floor control mechanism (or whether to connect via a proxy). *Id.* As such, the claims alone from the parent application provide support for independent claims 1, 8, 12, and 17 of the '852 Patent.

In addition to the claims, the specification from Shaffer provides additional support. For example, Fig. 6 from the parent application is reproduced below and shows an endpoint 104 with an information determination component (202) and a negotiation component (208). Ex. 1016, Fig. 6. The patent application discloses “the endpoint 104 can include an information determination component 202 that can be employed to identify information associated with the endpoint 104, such as capability information and/or identity information.” *Id.*, ¶ 53. The parent application also discloses the “negotiation component 208 can be employed to exchange capability information with an interoperability server (not shown) during communication.” *Id.*, ¶ 53. To enable the endpoint to receive a determination from the IS regarding an adherence with capabilities of a predefined floor control mechanism, Fig. 6 shows that the endpoint device also includes a transmitter/receiver 608. *Id.*, ¶ 54.



Id., Fig. 6.

The parent application describes a back-and-forth negotiation occurring between endpoints and interoperability servers. *See, e.g., id.*, ¶¶ 16 (“a negotiation component [of the endpoint] can advertise the determined information and negotiate a session with an interoperability server (IS) over a private channel. ***The endpoint can communicate with the IS through custom messaging.***”), 34, 35. This negotiation exchange includes communication related to the capabilities of the endpoint and IS. *See id.*, ¶¶ 25 (“The system disclosed herein, relates to interoperability systems that can dynamically insert a media proxy ***based on capability negotiation***, according to an embodiment of the invention.”), 26, 29.

The IS also determines resources allocation among the endpoints and works with endpoints to “optimize resource utilization, for example, by load sharing.” *Id.*, ¶ 38. The IS will also “validate the endpoint identity as secured and/or trusted and determine if the requesting endpoint is a trusted endpoint or potentially a rouge endpoint.” *Id.*, ¶ 40. The IS actively screens untrusted, rogue endpoints, whereas trusted endpoints will be permitted to join virtual talk groups (VTGs). *Id.*, ¶ 19.

As the specification of the parent application makes clear, the endpoints and IS are in extensive, detailed communication, including communication regarding the capabilities of the endpoint, the available resources of the endpoint, whether the endpoint will be permitted to join the VTG, and under which conditions the endpoint will be permitted to join. Thus, the limitation, “receiv[e/ing] a first determination from the [IS/interoperability server] that the [endpoint/initiating device] is not in adherence with capabilities of the predefined floor control mechanism and that a proxy is to be dynamically inserted to connect the [endpoint/initiating device] to a virtual talk group” is supported by the parent application. The ’852 Patent’s priority claim should be upheld.

Finally, the Federal Circuit has “held that the exact terms appearing in the claim [i.e., “receiv[e/ing] a first determination”] ‘need not be used in *haec verba*’” to satisfy the written description requirement. *Blue Calypso, LLC v. Groupon, Inc.*, 815 F.3d 1331, 1345 (Fed. Cir. 2016) (quoting *Lockwood v. Am. Airlines, Inc.*, 107

F.3d 1565, 1572 (Fed. Cir. 1997)). Indeed, the case cited in the Petition confirms “the level of detail required to satisfy the written description requirement varies depending on the nature and scope of the claims and on the complexity and predictability of the relevant technology.” *Ariad Pharmaceuticals, Inc. v. Eli Lilly and Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010). Here, where the endpoints and IS are engaged in detailed communication regarding endpoint capabilities and access to VTGs, it would have been predictable for those communications to include information from the IS, including any determinations made by the IS. *Id.* (confirming disclosure can be adequate when “the existing knowledge in the particular field” and “the predictability of the aspect at issue” support such a finding). The receiving (and First Determination Limitation, to the extent they are different) are supported by the patent application, and properly claim priority.

Because the '852 Patent's priority claim is correct, the parent application (Shaffer) cannot be used to invalidate the '852 Patent. 35 U.S.C. § 121 (“A patent issuing on an application with respect to which a requirement for restriction under this section has been made, or on an application filed as a result of such a requirement, shall not be used as a reference either in the Patent and Trademark Office or in the courts against a divisional application”). Therefore, institution should be denied.

E. Ground 3: The Petition Does Not Establish That Claims 1-2 and 9-13 are Obvious Over Chowdhury, OMA-PoC Documents, TR23.979, and Jin

The Petition fails to show that the combination of Chowdhury, OMA-PoC Documents, TR23.979, and Jin discloses all the elements of independent claims 1, 8, or 12.⁵ As such, the Petition fails to demonstrate that the Challenged Claims are unpatentable based on obviousness and institution should be denied under 35 U.S.C. § 314(a).

- 1. Chowdhury fails to disclose a processor configured to “receive a first determination from the IS that the endpoint is not in adherence with capabilities of the predefined floor control mechanism...wherein the capabilities comprise quality of service, rules of transmission and trusted endpoint identity”**

Claims 1, 8, and 12 recite receiving a first determination that an endpoint is not in adherence with capabilities of a predefined floor control mechanism. Claims 1, 8, and 12 recite what is meant by capabilities of the predefined floor control

⁵ In its “Statement of Precise Requested Relief,” and again in the heading to ground 3, Petitioner does not contend Claim 8 is unpatentable over this combination of references. Petition, 1, 58. However, Challenged Claims 9-11 depend from Claim 8.

mechanism. Specifically, the capabilities include quality of service, rules of transmission, and a trusted endpoint identity.

Chowdhury is silent about making a determination about the three claimed capabilities of a predefined floor control mechanism, let alone receiving a determination in the user equipment regarding adherence with the claimed capabilities. The dearth of disclosure in Chowdhury is abundantly clear from the Petition’s analysis of this limitation, which includes one conclusory statement regarding “rules of transmission of the P2T network” yet fails to address the other capabilities: quality of service and trusted endpoint identity.⁶ Petition, 73. “[T]he Petition does not address or explain how or why [the prior art] teaches [‘wherein the capabilities comprise *quality of service*, rules of transmission and *trusted endpoint identity*’] as recited in limitation 1[e],” and, therefore, cannot support institution. *Delta Electronics, Inc. v. Vicor Corp.*, IPR2024-00187, Paper 10 at 31-32 (P.T.A.B. May 17, 2024); *see also Hyundai Motor Co. v. Mel NavIP LLC*, IPR2024-00173, Paper 7 at 14-15 (P.T.A.B., May 16, 2024)_(denying institution because “Petitioner

⁶ For the other grounds, Petitioner addresses each capability individually. *See Motorola*, IPR2024-00479, Paper 2 at 26-31 (Ground 1); *see also* Petition, 42-43 (Ground 2). No comparable headings or analysis exists for Ground 3. Petition, 73.

fails to point to any disclosure in [the prior art] that makes this determination and outputs a message when it occurs.”). Therefore, institution should be denied.

2. Chowdhury fails to disclose a processor configured to “receive a first determination from the IS that the endpoint is not in adherence with capabilities of the predefined floor control mechanism and that a proxy is to be dynamically inserted to connect the endpoint to a virtual talk group”

The specification of the ’852 Patent discloses the relationship between the capabilities of the floor control mechanism and the dynamically inserted proxy, stating when “an active VTG [] already has multiple talkers streaming media into it,” the endpoint “can be dynamically connected to the VTG via a proxy to prevent transmitting media into [the] active VTG.” Ex. 1001, 6:34-45. Put differently, when an endpoint is “non-conforming with the floor control policy of the system, the IS 102 (FIG. 1) can dynamically insert a proxy between the endpoint 104 and the VTG” to prevent “rendering the VTG useless.” *Id.*

In contrast, Chowdhury’s ISSI protocol module is not “dynamically inserted to connect the endpoint to a virtual talk group.” As shown in Fig. 3 below, the ISSI protocol module is *always* used to connect a gateway to an RFSS server. The ISSI protocol module “manages communications received from the P25 network.” Ex. 1035, 6:40-42. Chowdhury discloses that upon receipt of a PoC-group-register message, the Call Control Interop Module 242 sends an ISSI-setup-request to ISSI

Protocol Module 260 to set up an RTP connection with a home radio frequency sub-system (RFSS). *Id.*, 11:4-7.

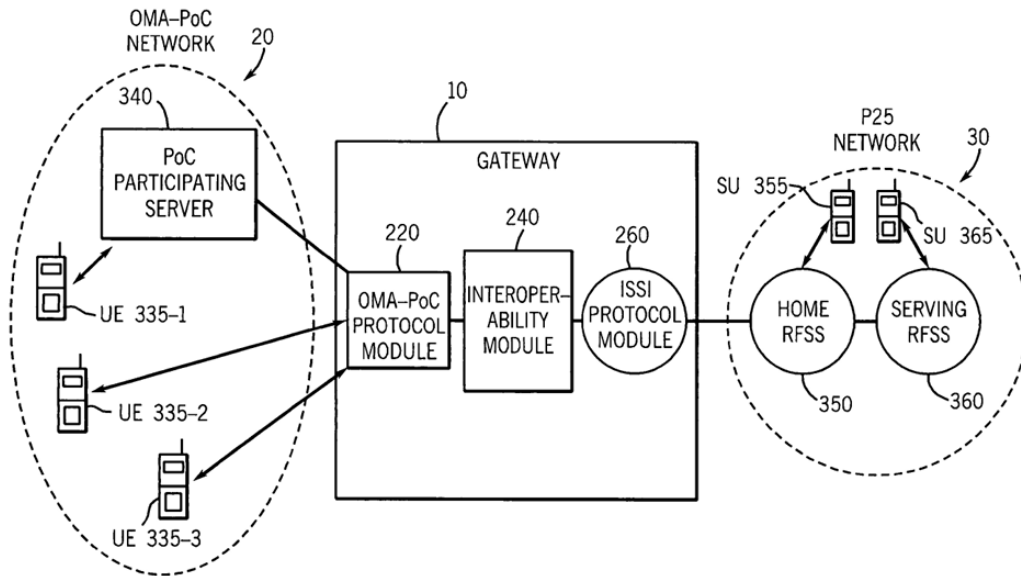


FIG. 3

Id., Fig. 3.

Contrary to the assertion at page 74 of the Petition, Chowdhury's ISSI protocol module is not dynamically inserted. Chowdhury instead discloses that the ISSI protocol module is a persistent part of a gateway device for setting up user equipment connections with P25 networks. *Id.*, 6:40-48. Chowdhury indicates that the ISSI protocol module includes separate interfaces for receiving SIP and RTP messages from a P25 network. *Id.* Chowdhury discloses that the ISSI protocol module is *always present* since its interfaces are needed for receiving the SIP and RTP messages, as shown in Fig. 3 above. *See id.*, 7:11-16; *see also id.* 9:26-34, 9:52-55 (use of ISSI Protocol Module 260 to control RTP connection in Fig. 4),

10:15-18, 10:28-31 (same in Fig. 5), 11:4-7 (same in Fig. 6), 11:59-61, 12:1-3, 12:29-32, 12:50-55 (same in Fig. 7), 12:65-67 (same in Fig. 8). Because the ISSI protocol module is a persistent, and required, part of the Chowdhury system, there would never be any reason to make a determination to dynamically insert the ISSI protocol module much less to send or receive such a determination. Indeed, Chowdhury is silent about conditions that would trigger the dynamic insertion of the ISSI protocol module because there is never a situation where this module would need to be dynamically inserted, it is already permanently a part of Chowdhury's system.

Therefore, Chowdhury fails to disclose a processor configured to receive a first determination from the IS that the endpoint is not in adherence with capabilities of the predefined floor control mechanism and that a proxy is to be dynamically inserted to connect the endpoint to a virtual talk group, as recited in claims 1, 8, and 12. For this reason, institution should accordingly be denied.

3. Chowdhury fails to disclose a processor configured to “receive a first determination from the IS that the endpoint is not in adherence with capabilities of the predefined floor control mechanism”

Chowdhury discloses a gateway device for interconnecting commercial wireless networks and public safety wireless networks that support push-to-talk (PTT) talk group calls. Ex. 1035, 3:11-13. Chowdhury's gateway device includes

a PTT Interop Module 244 to manage communication operations, such as floor control arbitration. *Id.*, 6:17-20. In addition, Chowdhury's gateway device includes a Call Control Interop Module 242 that manages connectivity, "i.e., set up and tear down of connections, between talk group components, e.g., handsets, push-to-talk servers, and provides interworking for SIP messages." *Id.*, 6:14-17. Chowdhury indicates that a Transmission InterOp Module 246 of the gateway device manages the transfer of media packets between networks and provides interworking for Real Time Protocol (RTP) messages. *Id.*, 6:32-36. This includes performing audio codec translation if different codecs are used in different networks. *Id.*, 6:36-37.

Chowdhury fails to disclose receiving a determination that an endpoint is not in adherence with capabilities of a predefined floor control mechanism. Chowdhury instead discloses the PTT Interop Module 244 for providing or arbitrating floor control. *Id.*, 6:18-20. Arbitrating floor control among user equipment using Talk Burst Control Protocol, as disclosed by Chowdhury, is not the same as determining adherence with floor control capabilities of the floor control mechanism. *Id.*, 3:50-54. According to Chowdhury, arbitrating floor control relates to determining who can speak in a virtual talk group. *Id.*, 1:35-40. In contrast, determining adherence with floor control capabilities, as recited in each independent claim of the '852 Patent, relates to determining whether user equipment or an endpoint is even capable

of complying with quality of service, rules of transmission, and trusted endpoint identity capabilities. Ex. 1001, 7:35-51, 2:59-67, 6:27-34.

Further, Chowdhury contemplates the user equipment as having floor control capabilities such that a determination of the adherence of their capabilities is not needed or need to be received by the user equipment. Ex. 1035, 8:24-40. At most, Chowdhury discloses adding a non-persistent tributary RTP segment between a gateway and the requesting user equipment when a request to access a floor is received. *Id.* Because the user equipment has floor control capabilities and the RTP segment does not make a determination regarding the capabilities of the floor control mechanism, there would be no need to ever “receive a first determination from the IS that the endpoint is not in adherence with capabilities of the predefined floor control mechanism,” as recited in each independent claim. For this additional reason, institution should be denied.

F. Dependent Claims 2-5, 7, 9-11, and 13-16

Because the Petition fails to show a reasonable likelihood of invalidating independent Claims 1, 8, or 12, the grounds challenging the dependent claims, including Ground 4, also fail to show a reasonable likelihood of success. *See, e.g., Hartness Int’l Inc. v. Simplimatic Eng’g Co.*, 819 F.2d 1100, 1108 (Fed. Cir. 1987) (“[T]he district court was correct in holding that independent claim 1 was

nonobvious. A fortiori, dependent claim 3 was nonobvious (and novel) because it contained all the limitations of claim 1 plus a further limitation.”).

IV. CONCLUSION

Petitioner has failed to demonstrate that there is a reasonable likelihood that it would prevail with respect to at least one of the claims challenged in the Petition, and the Board should deny institution.

Respectfully submitted by

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CLAIM APPENDIX OF THE CHALLENGED CLAIMS

- [1pre] An apparatus comprising a processor, wherein the processor is configured to:
 - [1a] identify information related to an endpoint to obtain identified information; and
 - [1b] negotiate a communication session with an interoperability server (IS) based in part on at least one of the identified information or a predefined floor control mechanism associated with the IS; and
 - [1c] receive a first determination from the IS that the endpoint is not in adherence with capabilities of the predefined floor control mechanism and that a proxy is to be dynamically inserted to connect the endpoint to a virtual talk group, wherein the capabilities comprise quality of service, rules of transmission and trusted endpoint identity.
- [2] The apparatus of claim 1, wherein the processor is further configured to identify media capabilities associated with the endpoint, the media capabilities employed by the IS to dynamically determine if the endpoint should be connected to the virtual talk group via the proxy.
- [3] The apparatus of claim 2, further comprising a transmitter, wherein the transmitter transmits data to the virtual talk group if it is determined that the proxy is not employed to connect the endpoint to the virtual talk group.

- [4] The apparatus of claim 2, further comprising a transmitter, wherein the transmitter transmits data to the proxy over a private channel if it is determined that the proxy is employed to connect the endpoint to the virtual talk group.
- [5] The apparatus of claim 1, wherein the processor is further configured to determine an identity associated with the endpoint, the identity employed by the IS to dynamically determine if the endpoint should be connected to the virtual talk group via the proxy.
- [7] The apparatus of claim 1, wherein the processor is further configured to monitor endpoints directly connected to the virtual talk group and determines that a directly connected endpoint is not conforming with a floor control policy of the virtual talk group.
- [8pre] A method comprising:
 - [8a] initiating communication with a non-compatible communication device;
 - [8b] identifying information associated with an initiating device; and
 - [8c] negotiating a communication session with an interoperability server (IS) based in part on at least one of the identified information or a predefined floor control mechanism associated with the IS; and

- [8d] receiving a first determination from the IS that the initiating device is not in adherence with capabilities of the predefined floor control mechanism and that a proxy is to be dynamically inserted to connect the initiating device to a virtual talk group, wherein the capabilities comprise quality of service, rules of transmission and trusted endpoint identity.
- [9] The method of claim 8, wherein the information associated with the initiating device includes at least one of media capability information associated with the initiating device or an identity of the initiating device.
- [10] The method of claim 8, further comprising transmitting media to the proxy over a private network through custom messages if it is evaluated that the proxy is employed.
- [11] The method of claim 8, further comprising, attaching the initiating device directly to the virtual talk group and transmitting media directly to the virtual talk group if the proxy is not employed to attach the initiating device to the virtual talk group.
- [12pre] An endpoint comprising:
 - [12a] a transmitter and a receiver;
 - [12b] a user interface;
 - [12c] a processor coupled to the user interface, wherein the processor:

- [12d] identifies information related to the endpoint; and
 - [12e] negotiates a communication session with an interoperability server based in part on at least one of the identified information or a predefined floor control mechanism associated with the interoperability server; and
 - [12f] receive a first determination from the interoperability server that the endpoint is not in adherence with capabilities of the predefined floor control mechanism and that a proxy is to be dynamically inserted to connect the endpoint to a virtual talk group, wherein the capabilities comprise quality of service, rules of transmission and trusted endpoint identity.
- [13] The endpoint of claim 12, wherein the processor identifies media capabilities associated with the endpoint, the media capabilities employed by the interoperability server to dynamically determine if the endpoint should be connected to the virtual talk group via the proxy.
- [14] The endpoint of claim 12, wherein the processor determines an identity associated with the endpoint, the identity employed by the interoperability server to dynamically determine if the endpoint should be connected to a virtual talk group via the proxy.
- [15] The endpoint of claim 12, wherein the processor causes the transmitter to transmit data to the virtual talk group if it is determined that the proxy is not employed to connect the endpoint to the virtual talk group.

- [16] The endpoint of claim 12, wherein the processor causes the transmitter to transmit data to the proxy over a private channel if it is determined that the proxy is employed to connect the endpoint to the virtual talk group.

Certification of Service Under 37 C.F.R. §42.6(e)(4)

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Certification of Word Count Under 37 C.F.R. §42.24(d)

The undersigned hereby certifies that the foregoing Patent Owner's Preliminary Response contains **5,833** words, not including a table of contents, table of authorities, mandatory notices under §42.8, certificate of service, certificate of word count, appendix of exhibits or appendix of claim listing as specified by 37 C.F.R. §42.24, according to the word count feature of the word-processing software used to prepare the Patent Owner's Preliminary Response.

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