UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC
Petitioner

v.

FLYPSI, INC.
Patent Owner

IPR2023-00358
Patent No. 10,334,094

PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE

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I. INTRODUCTION

Petitioner Google LLC ("Google") replies to Patent Owner's Response (Paper No. 21, "POR") filed by Flypsi, Inc ("Flyp"). As discussed below, Flyp's response advances arguments that are inconsistent with the record evidence. All of the challenged claims should be found unpatentable and canceled.

II. CLAIM CONSTRUCTION

A. "Channel"

Flyp asserts that the term "channel" should be construed not for what it is, but for what it is not: "[a] channel does not have to be fully connected on both ends or actually transmitting a particular type of information to qualify as a channel." (POR, 6.) Flyp does not ever clarify what it means for something to be "fully connected on both ends or actually transmitting a particular type of information to qualify as a channel." (POR, 6.) However, what *is* clear is that the '094 patent explicitly states that communication channels, when carrying voice information, are referred to as voice channels, and when carrying data, are referred to as data channels. (Pet., 40-41 (discussing limitation [1.e]); Ex. 1001, 4:44-49 (describing a data channel), 4:49-55 (describing a voice channel); *see also* Ex. 2009, 52:18-53:13, 55:4-12.) Dr. Lin's testimony identified by Flyp—that "a channel, when carrying voice, is a voice channel" and "when…carrying non-voice data, it would be a data channel," (POR, 8 (quoting Ex. 2009 at 75:10-18))—is consistent with these statements in the patent.

Therefore, to the extent Flyp's construction requires otherwise, the construction is wrong.

Consistent with the above, when Flyp's expert, Dr. Akl, was asked whether, "[w]hen any of the [cellular] protocols…are used to transport data, are those protocols qualified as data channel," he did not deny that they qualify as data channels (Ex. 1102, 35:1-5), and agreed that the cellular protocol "does qualify as a voice channel when you're sending voice traffic" (*id.*, 41:23-42:4). And Dr. Akl otherwise refused to answer questions throughout his deposition on this issue, even questions about the patent itself. For example, when asked about a passage directly quoted from the challenged patent and reproduced in his declaration that reads "[a] preferred data channel may be an [IP] channel," he said he did not "have opinions on that." (Ex. 1102, 30:2-31:4; *see also id.*, 34:4-8 (when asked "is PSTN a voice channel," Dr. Akl responded "I don't have opinions on that"), 34:14-35:5 (stating that he does not have opinions on whether a certain protocol, *e.g.*, CDMA, GSM, or LTE, qualifies as a data channel when used to transport data), 42:5-43:4, 49:3-8, 50:9-18.)

Flyp's proposed construction is also problematic because it appears to be based on a mischaracterization of the Petition, and more particularly the Petition's "first way" of addressing limitation [1.c]. (POR, 7-13; Pet., 23-26.) For example, Flyp asserts the "[t]he Petition is based on the false dichotomy that a channel must

actively be carrying voice data to qualify as a voice channel, or else it is a data channel." (POR, 7.) This is incorrect. Rather, the Petition explained that, where there is no voice path connected yet, and only non-voice data is being transmitted (i.e., a combination of the relationship number and the third party number), a data channel such as an IP channel would be used to transmit the non-voice data. (Pet., 25-26.)

In addition, Flyp does not even allege that its construction is relevant to the "second way" the Petition addresses limitation [1.c]. Yet the "second way" was the focus of the Board's institution decision. (*See* Institution Decision (Paper 9) (Inst. Dec.), 17.) As such, the Board need not even reach Flyp's proposed construction.

III. ALL OF THE CHALLENGED CLAIMS ARE UNPATENTABLE

A. Ground 1: Backhaus Discloses Limitation [1.c]

Similar to its claim construction argument, Flyp begins by focusing its attention on the "first way" that the Petition mapped Backhaus to limitation [1.c], ignoring that the Board indicated that it instituted review primarily based on the Petition's "second way" of addressing limitation [1.c]. (*See* Inst. Dec., 17.) Therefore, while Flyp's arguments regarding the "first way" are incorrect, as explained below, this reply begins by demonstrating how Flyp's arguments regarding the "second way" are incorrect.

1. The Petition's "Second Way" Discloses Limitation [1.c].

As discussed in the Petition's "second way" for addressing limitation [1.c], Backhaus discloses that subscriber TD 110 requests from SLS platform 115 a new relationship number, along with the third party number the subscriber desires to call. (Pet., 26; *see also* Ex. 1005, [0071].) SLS platform 115 then returns the next available relationship number to TD 110. (Pet., 26; *see also* Ex. 1005, [0071]-[0074].) Backhaus further discloses that TD 110 may communicate its request with SLS platform 115 using various protocols/mechanisms, such as IP-based interaction ("data channel"). (Pet., 28; *see also* Ex. 1005, [0072]-[0073].)

Flyp asserts that the Petition's "second way" does not disclose that the "*specific* transmission [of the claimed "information"] occurs 'via a data channel.'" (POR, 21-22.) In particular, Flyp argues that "the mere fact that Backhaus describes that unspecified communications can occur via various channels is not enough for anticipation.'" (*Id.*) However, as explained in the Petition, Backhaus discloses "data communication" processes between subscriber TD 110 and SLS platform 115 over network 125 involving platform 115 to transmit the next available relationship number to TD 110. (Pet., 26-27; Ex. 1005, [0071]-[0074].) Backhaus discloses using "an IP-based interaction over the TD's data service" for "setting up the relationship databases" and "sharing information between the SLS module 105 and the SLS platform 115." (Pet., 28-29; Ex. 1005, [0073].) Thus, Backhaus discloses

a specific transmission of information, *i.e.*, the relationship number, from SLS platform 115 to TD 110, via a data channel. (*See also* Inst. Dec., 18-19.)

Flyp contends that "[t]he fact that some information shared between the SLS module and platform may occur via IP and that one piece of information shared is a relationship number does not mean that the relationship number specifically is transmitted via IP." (POR, 22.) Contrary to Flyp's assertion, Backhaus specifically discloses using "an IP-based interaction over the TD's data service" for "sharing information between the SLS module 105 [of subscriber TD 110] and the SLS platform 115." (Pet., 28-29; Ex. 1005, [0073].) Backhaus also explains that the piece of information shared between SLS platform 115 and TD 110 is a relationship number. (Pet., 28-29; Ex. 1005, [0072]-[0074]; *see also* Inst. Dec., 18-19.)

2. The Petition's "First Way" Discloses Limitation [1.c]

As discussed in the Petition's "first way" in addressing limitation [1.c], Backhaus discloses that SLS platform 115 transmits to subscriber TD 110 "a specially encoded message," which contains a combination of the relationship number and the calling third party's number, for the SLS phone app of subscriber TD 110 to store the combination of numbers in the phone's local SLS database 106. (Pet., 23-25.) As previously explained, a POSITA would have understood that the encoded message (containing the combination of numbers) is transmitted to subscriber TD 110 via a data channel because a voice path is not connected and

Backhaus discloses that communication protocols, including IP-based communications ("data channel"), may be used for establishing the relationship between various numbers and associated databases. (Pet., 25.)

Flyp asserts that the Petition's "first way" fails to disclose limitation [1.c] "because the caller ID field is part of a call, and thus not a 'data channel' as properly construed." (POR, 15.) None of Flyp's assertions have merit, as discussed below.

Flyp asserts that "there is no teaching in Backhaus, and no argument in the Petition, that [the] 'calling party field of the call' is a 'data channel' or that it is any different from the call itself (e.g., a voice channel)." (POR, 15.) To the contrary, the Petition explained in the "first way" that Backhaus discloses the "specially encoded message" (or the "calling party field of the call") may be transmitted using communication protocols such as IP-based communications ("data channel"). (Pet., 23-26.) This IP-based communication ("data channel") is separate and different from communications over the PSTN ("second channel" or voice channel) as discussed for limitation [1.e]. (Pet., 35-42.)

Flyp also asserts that "a POSITA would understand that caller ID is delivered over the same voice channel as the call itself." (POR, 15.) But this is based on the assumption, unsupported by evidence, that Backhaus's "encoded message" is akin to a conventional caller ID (or CLID). (POR 15; Ex. 2010, ¶¶ 59-60.) Flyp's argument requires one to ignore Backhaus's express teaching that the "encoded

message" is transmitted for sharing the combination of the relationship number and the third party number and setting up TD 110's relationship database (Ex. 1005, [0055]-[0057]), and that IP-based communications may be used for "setting up the relationship databases" and "sharing information between the SLS module 105 and the SLS platform 115" (*id.*, [0073]). Dr. Lin explained that the way in which a CLID is transmitted "depend[s] on the implementation." (Ex. 2009, 60:21-61:13.) On the other hand, Dr. Akl refused to answer questions about whether a caller ID can be transmitted using a data channel and stated that he does not have an opinion on it. (Ex. 1102, 50:13-18 (when asked "[c]an a caller ID be transmitted using a data channel," Dr. Akl stated "I don't believe that I have an opinion on it."); *see also id.*, 50:19-53:10.)

Backhaus's "encoded message" is also functionally different from the conventional CLID. Backhaus explains that the "encoded message" includes a combination of numbers, *i.e.*, "the relationship number established by the SLS platform 115…and the actual primary number of the calling third party" for the SLS phone's app to store the combination of numbers in a local database. (Pet., 24; Ex. 1005, [0055]-[0057].) The encoded message enables subscriber TD 110 to later "originate a call to the third party from his/her SLS number by leveraging the relationship combination" that is established/stored both the databases of SLS platform 115 and TD 100 using the transmitted message. (Pet., 24-25; Ex. 1005,

[0058]-[0070].)

Flyp also contends that "the plain language used by Backhaus—'calling party field *of the call*'—confirms this field is part of the call itself." (POR, 15-16.) Flyp overlooks that Backhaus uses the term "call" more broadly than to refer to a voice call. (Ex. 1005, [0030] ("the term[] 'call'…envision[s]…a voice transmission, a text message, a video message, a page, a data transmission, etc."); Pet., 8; Ex. 1002, ¶49.)

Flyp also asserts that "voice calls, while ringing…, are still using a voice channel," appearing to suggest that this necessitates that the "encoded message" of the calling party field is also sent via a voice channel. (POR, 16; *see also id.*, 17.) To the contrary, regardless whether the voice channel exists when the call is ringing, that does not impact the existence of a separate data channel. The Petition does *not* argue the same "channel" serves as a data channel before a voice call is connected and then as a voice channel after a voice call is connected. Indeed, Dr. Lin, when he was asked whether a POSITA "consider[s] the call to be using a voice channel when it is ringing," explained that "the teaching that [he has] applied doesn't bring that into question." (Ex. 2009, 54:3-11; *see also id.*, 54:12-16.)

Flyp also asserts that the Petition's "first way" using IP-based communications ("data channel") for establishing the relationship between numbers and databases "is not enough for anticipation" as "Backhaus [0073] does not

describe any specific transmission of information." (POR, 17.) Moreover, Flyp asserts that the "first way" relies on an incoming call from a third party while the process described in Backhaus [0073] "is not an incoming call from a third party." (*Id.*, 17-19.) Contrary to both of Flyp's assertions, Backhaus [0073] discloses communication mechanisms, including "an IP-based interaction over the TD's data service," and "[s]uch channels can be used in setting up the relationship databases, sharing information between the SLS module 105 and the SLS platform 115." (Ex. 1005, [0073]; Pet., 25-26.) Thus, given that the "encoded message" is transmitted for "setting up the relationship databases" and "sharing information between the SLS module 105 and the SLS platform 115" as described in Backhaus [0073], Backhaus discloses that the encoded message may be transmitted using IP-based communications ("data channel") as discussed in the "first way." (Pet., 25-26; *see also* Ex. 1005, [0010] and [0054]-[0070].)[1]

Moreover, Flyp's assertion that the "first way" relates to an incoming call process and thus does not address the '094 patent's claims that relate to outgoing

[1] Backhaus also makes clear that "FIGS. 4A-4D collectively illustrate an exemplary method for routing calls between a third party TD and a Subscriber TD." (Ex. 1005, [0020]; *see also id.*, [0062].)

calls is misplaced. (POR, 20.) The "first way" addresses limitation [1.c], which generally requires transmitting information indicating a certain number to the handset via a data channel. The limitation does not require an outgoing call process, much less "imposing a requirement relating to incoming calls" to limitation [1.c], as Flyp alleged. (*Id.*)

B. Ground 1: The Petition Takes Consistent Positions on the "Channel" Limitations

Flyp asserts that the Petition's analysis of limitation [1.c] contradicts its analysis of limitation [1.e]. (POR, 23-25.) In particular, Flyp asserts the Petition for limitation [1.c] relies on Backhaus's disclosure associated with SLS platform 115 establishing a call leg to subscriber's TD 110 (*id.*, 23-24), and, for limitation [1.e], relies on Backhaus's disclosure associated with subscriber TD 110 establishing a call leg to SLS platform 115 (*id.*, 24-25). Flyp argues that there is "no relevant difference between these two call legs," asserting that the Petition "offers no justification for why a substantially identical call leg is allegedly received over a 'data channel' in limitation [1.c] but somehow qualifies as a 'voice channel' for limitation [1.e]." (*Id.*)

As an initial matter, however, all of Flyp's arguments are directed to the "first way" that the Petitioner addressed limitation [1.c]. (POR, 23-28.) For instance, Flyp again points to the Petition's discussion of a data channel that is used before the

voice path is connected. (*Id.*, 23 (citing Pet., 25).) As such, once again, if the Board relies on the "second way" discussed above, *see* Section III.A.1, rather than the "first way," the Board need not reach this issue.

Flyp is also incorrect. For one, Flyp relies on the same incorrect representation of the "first way" discussed above in Sections II and III.A.2. For example, contrary to Flyp's suggestion, the "first way" relies on a channel different from the "second channel," i.e., IP-based communications for establishing the relationship between various numbers and databases, to address the claimed "data channel." (POR, 23-24; *see also* Pet., 23-26 (the "first way" for limitation [1.c]).)

Flyp's assertion that there is "no relevant difference between these two call legs," e.g., "both [legs] have a calling party field," is divorced from Backhaus's disclosure. (POR, 25.) According to Backhaus, when SLS platform 115 establishes a call leg to subscriber TD 110 (as described in the "first way" of addressing limitation [1.c]), the SLS platform sends a "**calling party field**" (a **"specially encoded message"**) containing a combination of a relationship number and a third party number for setting up the phone's database, **which may be transmitted using IP ("data channel")**. (Pet., 23-26; *see also* Ex. 1005, [0055].) On the other hand, when subscriber TD 110 establishes a call leg to SLS platform 115 (as discussed for limitation [1.e]), Backhaus does not disclose transmitting such a "calling party field" or "encoded message" for setting up the phone's database. Thus, contrary to Flyp's

assertion, these two legs are different.

Flyp contends that Dr. Lin "could not identify any reason why the [1.c] call leg would be received on a data channel whereas the [1.e] call leg qualified as being received on a voice channel." (POR, 26-28 (citing to Ex. 2009 at 182:6-183:20).) This again mischaracterizes the Petition. In particular, as discussed above, the Petition did not rely on an argument where the same channel serves as a data or voice channel before or after a voice call is connected to address limitation [1.c]. Rather, as explained above, and as Dr. Lin further elaborated, the "first way" in which limitation [1.c] was addressed involves an "encoded message" containing "information about the relationship number and the actual number of the actual calling party" that is transmitted by IP:

> So, the **first way** that I explain is in that scenario, the SLS platform is, is **providing information that are not just for that second half of the call**. It is providing information about the relationship number and the actual number of the actual calling party. And so, that information, as I discussed, Backhaus teaches that it -- the **IP can be used for that communication**. And so that would be **the channel**.
>
> So, I think the issue is that Limitation 1B, I am showing how Backhaus describes how this information is sent over data channel. And **this information is the specially encoded message**.

(Ex. 2009, 183:5-20; POR, 27.)[2] Thus, Flyp's alleged contradiction in addressing limitations [1.c] and [1.e] is nonexistent.

C. Ground 1: Backhaus Discloses The Same Local Switch ("Switch") as Required in Limitations [1.e], [1.f], and [1.g]

The Petition explained that network 125 of Backhaus necessarily includes the claimed "switch," such as the signal switching points (SSPs, which are knowns as "switches" or "exchanges") included in the disclosed PSTN. (Pet., 37.) As discussed in the Petition, the PSTN includes a local SSP/switch that connects to a telecommunication device or server so as to allow the device/server to access the PSTN. (Pet., 38-39; *see also* Ex. 1011, 6-7, 82; Ex. 1007, [0004], FIG. 1A; Ex. 1002, ¶83.) Because the calls in Backhaus are routed through network 125 (which includes the PSTN) to SLS platform 115, a POSITA would have understood that **a local switch** (the claimed "switch") in network 125 necessarily receives the calls before routing the same to SLS platform 115. (Pet., 39-40.) The Petition showed that Backhaus discloses "receiving, at a switch, an outgoing call," as required by

[2] In these lines of the transcript, Dr. Lin was answering questions associated with limitation [1.b] of the '585 patent in a related IPR proceeding, case no. IPR2023-00357, where the limitation, like limitation [1.c] of the '094 patent in the current proceeding, recites "transmitting information…via a data channel."

limitation [1.e]. (Pet., 35-42.) The Petition went on to show that the same local "switch," referred to in limitation [1.e], meets limitation [1.f] (*id.*, 42-43) and limitation [1.g] (*id.*, 43-47).

Flyp asserts that Backhaus does not disclose that "the same 'switch' perform[s] limitations [1.e], [1.f], and [1.g]." (POR, 28-33; *see also id.*, 33-34 (asserting that an endpoint, e.g., a server, could be connected to multiple switches).) Flyp is incorrect. (*See, e.g.*, Inst. Dec., 21-22 (finding Flyp's arguments associated with Backhaus using different switches unavailing).)

As an initial matter, Flyp takes inconsistent positions. Flyp asserts that "[t]he Petition does not contend that Backhaus discloses any switch, and it does not" but then immediately acknowledges that the Petition does argue "network 125 [of Backhaus] necessarily includes the claimed 'switch,' such as the signal switching points (SSPs, which are knowns as 'switches' or 'exchanges') included in the disclosed PSTN." (POR, 29.) Dr. Akl's position with regard to the claimed "switch" is also inconsistent. For example, he initially stated "I don't think that Backhaus discloses switches at all" (Ex. 1102, 83:15-17) but soon pivoted to Backhaus does "[n]ot directly" disclose the claimed "switch" (*id.*, 83:22-23), and then said "I don't provide an opinion that it discloses the switch" (*id.*, 84:17-22).

In any event, Flyp alleges that limitations [1.e]-[1.g] are not met "because using the same switch to perform all three limitations is merely a possibility or a

probability." (POR, 29-30.) In particular, Flyp contends that "at least one alternative possible arrangement is readily apparent: using two different switches and bridging the call on Backhaus' SLS platform server." (POR, 30-31.) For instance, Flyp asserts that a call could be received at a first switch and that the Backhaus server could direct a different switch to connect the outgoing call. (*Id.*, 30.) Flyp alleges that its multi-switch "alternative design" may be beneficial, "such as for load balancing." (*Id.*) There are several problems with Flyp's argument.

Flyp's only alleged support is its own expert's declaration, which is unsupported by any evidence. (Ex. 2010, ¶¶89-93.) On the other hand, the Petition's position regarding the claimed "switch" is supported by state of the art references and Backhaus itself. For example, Backhaus discloses use of the PSTN and associated governing SS7 protocol, consistent with a POSITA's knowledge. (Pet., 37; Ex. 1005, claim 10; Ex. 1011, 5-6, 43 (SS7 is "the key enabler of the public switched telephone network (PSTN)…."), 103-105 (discussing the use of SS7 protocol in the PSTN since the 1990s); Ex. 1002, ¶81.) Moreover, consistent with a POSITA's knowledge and the state of the art references, calls are established and routed through the PSTN by SSPs, including the use of a local SSP, which is a switch that connects to a telecommunication device or server so as to allow the device/server to access the PSTN. (Pet., 35-47; Ex. 1011, 6-7, 62-63, 81-82; Ex. 1007, [0004], FIG. 1A; Ex. 1002, ¶¶19-26, 80-90.)

Flyp's multi-switch theory, which purportedly uses a first switch for an *incoming* call and a second switch for an *outgoing* call (POR, 30), i.e., using the switches in an unidirectional manner, is also inconsistent with the "bi-directional" nature of the switch described in the state of the art. (Pet., 41; Ex. 1011, 99 ("The switch is responsible for many tasks, but one of its primary function is connecting voice channels to create a bi-directional conversation path between two phone subscribers….").) And Dr. Akl, in a declaration associated with a related IPR proceeding (IPR2023-00361), stated that "Backhaus clearly teaches that call routing is done through the *conventional* PSTN." (Ex. 1103 (Dr. Akl's declaration in IPR2023-00361), ¶109) (emphasis added). Thus, to the extent that Flyp's "alternative design" would be feasible, it has nothing to do with Backhaus that discloses a *conventional* PSTN.

Flyp also asserts that the Petition should not rely on the Taylor reference (Ex. 1007) as it is allegedly "a completely separate reference from Backhaus." (POR, 31-32.) However, Taylor is a state of the art reference that shows a POSITA's knowledge associated with the PSTN and how a server is connected thereto. (Ex. 1002, ¶48 n.2 ("Such exhibits reflect the state of the art known to a person of ordinary skill in the art at the time of the alleged invention").) Indeed, Dr. Akl agrees that Taylor discloses "a conventional PSTN network." (Ex. 1102, 85:23-86:4.) Thus, the Petition's reliance on Taylor is entirely proper.

Finally, Flyp asserts that "the concept of a 'local' switch is not some fixed, pre-defined exclusive relationship, but merely refers to which switch is being used for a particular call." (POR, 34.) However, the challenged claims are all associated with a single "outgoing call" and thus the possibility for the switch to change between different calls is a red herring. (*See* limitations [1.e]-[1.g] (reciting processes associated with a "switch" and an "outgoing call").)

D. Backhaus Discloses Claims 2 and 4 under Ground 1, and Discloses Claim 3 in View of Saksena under Ground 2

Flyp does not separately argue that claims 2 and 4 are not disclosed by Backhaus under Ground 1. Likewise, Flyp does not separately argue that claim 3 is not disclosed and/or suggested by the Backhaus-Saksena combination. (*See* POR, 34-35.) Thus, for the reasons discussed above and in the Petition, claims 2-4 are disclosed and/or suggested by the prior art.

E. Grounds 3-4: Each of the Prior Art Combinations in Grounds 1 and 2 in view of Taylor Renders Obvious the Challenged Claims

As explained in the Petition, to the extent that the claimed "switch" is interpreted as required to be a device separate from the PSTN, it would have been obvious to implement the claimed "switch" in light of Taylor's disclosure associated with the PSTN interface. (Pet., 53-58.)

Flyp asserts that the PSTN interface is not a switch. (POR, 35-36.) According to Flyp, the fact that Taylor's PSTN interface 52 is similar to the switch described

in the '094 Patent's examples is "not enough" to address the claimed "switch." (*Id.*, 36-37.) Flyp's assertions are misplaced because the requirement is not to meet the "the switch described in the '094 Patent's examples" but the "switch" recited in the challenged claims. As discussed in the Petition, Flyp acknowledges that the claimed "switch" "may describe a broad category of well-known structures in the art" (Ex. 1009, 20-23), and may be "an element in the communications networks that facilitates connections between transmitters and receivers" (*id.*, 22). (Pet., 55.) Dr. Akl likewise testified that an example of a switch may be broadly understood as "a combination of hardware and software or hardware or software that's going to, you know, take an input and provide an output." (Ex. 1102, 89:13-19.) Taylor's PSTN interface, connected between an exchange 12 of the PSTN and CT server 50 "to receive and process calls" (Ex. 1007, [0008]; Pet., 54-55) is certainly an element in the communications networks that facilitates connections between transmitters and receivers (or takes an input and provides an output), i.e., a "switch" as acknowledged by Flyp.

Next, Flyp asserts that Taylor teaches "a network consists of multiple switches" and that the Petition does not show that it would have been obvious to use the same switch in limitations [1.e], [1.f], and [1.g]. (POR, 37-38.) Flyp's complaint of the PSTN's multiple switches is beside the point. (*See, e.g.*, Inst. Dec., 23-24.) As explained in the Petition, Grounds 3 and 4 are relevant "[t]o the extent that the

claimed 'switch' is interpreted as required to be **a device separate from the PSTN**." (Pet., 53.) Thus, Flyp's assertions associated with the PSTN having multiple switches are irrelevant with respect to Grounds 3-4. The Petition explained that a POSITA would have been motivated to connect SLS platform 115 with the PSTN and to also include **a single PSTN interface** similar to that of Taylor in order to facilitate such a connection when implementing Backhaus's system and processes. (Pet., 53-57; *see also* Ex. 1102, 87:16-88:8 (Dr. Akl testifying that the PSTN interface "would need to exist in Backhaus").) Given that SLS platform 115 (including the claimed "server") is connected to the PSTN via **the single PSTN interface** (the claimed "switch") to receive/process calls, **the same PSTN interface** meets the claimed processes recited in limitations [1.e]-[1.g].

Flyp also contends that "Petition offers no reason for replacing Backhaus' PSTN interface with that of Taylor and thus fails to justify its proposed combination." (POR, 38.) However, as explained above, the Petition does not argue "replacing Backhaus's PSTN interface" as Flyp alleges. Rather, it shows that a POSITA would have been motivated to "**include** a PSTN interface similar to that discussed in Taylor **when implementing** Backhaus's telephony service system." (Pet., 55-56.)

F. Dr. Lin's Declaration and Testimony Are Supported by the Prior Art and State of the Art References

Flyp argues that Dr. Lin's declaration should be "disregarded" because it is purportedly "conclusory." (POR, 38-39.) Flyp's argument is ironic given Dr. Akl's repeated refusal to answer questions at deposition (Ex. 1102, 30:2-31:4, 34:4-8, 34:14-35:5, 42:5-43:4, 49:3-8, 50:9-18), and his conclusory declaration testimony (*see*, *e.g.*, Ex. 2010, ¶¶59-60, 89-93). In any event, Flyp is wrong.

Dr. Lin's declaration provided a detailed, evidence-based analysis. For example, his declaration included a technical background for explaining the state of the art and understanding of a POSITA. (Ex. 1002, ¶¶17-26.) Moreover, Dr. Lin's declaration is supported by state of the art references (e.g., Exs. 1007, 1011), the prior art, and technical reasoning, "based on [Dr. Lin's] experience and expertise" and "how a person of ordinary skill in the art would have understood the state of the art, the prior art, and the claims and the specification…at the time of the alleged invention." (Ex. 1002, ¶¶14-16; *see also id.*, ¶¶3-11 and Ex. 1003 (Dr. Lin's background and qualifications including, e.g., Department Chair of the Electrical and Computer Engineering Department at the UCSD and studies of "the design of data networks, high-performance switches and routers, high-performance packet monitoring and measurements, wireless communications and mobile computing, multimedia and graphics systems, many-core processors, and systems-on-chip

designs").)

Flyp's reliance on *Xerox* is misplaced. To the extent the Petition and Dr. Lin's declaration are similar, the Board has explained that "[v]erbatim duplication between a brief and a declaration does not require giving the declarant's testimony 'little or no weight' under *Xerox*." *Netflix, Inc. v. GoTV Streaming, LLC*, IPR2023-00758, Paper 7 at 66-67 (P.T.A.B. Nov. 7, 2023) Instead, the analysis turns on whether the expert declaration "cite[s] to any additional supporting evidence or provide[s] any technical reasoning to support [the] statement." (*Id.*, 67.) Moreover, here the Petition was prepared based on Dr. Lin's declaration, and so it is no surprise that there is similarity between the two.

Flyp complains that Dr. Lin's "declaration does not contain any statement of the legal standards the expert understood or was applying." (POR, 39; *see also id.*, 40.) However, as Dr. Lin explained, the declaration contains his technical analysis regarding "how the prior art discloses certain teachings" and he "didn't offer any legal opinions in [his] declarations." (Ex. 2009, 9:1-18.) Dr. Lin explained that his opinions were formed "from the perspective of one of ordinary skill in the art…during the relevant timeframe" (Ex. 1002, ¶18), where Dr. Lin defined a POSITA's requisite background in paragraph 17 of his declaration (*id.*, ¶17), which Flyp does not dispute (POR, 5). Dr. Lin explained the same during the deposition. (*See*, *e.g.*, Ex. 2009, 16:5-10.) Flyp's argument appears grounded in a

misunderstanding on the role of expert testimony. *See Nutrition 21 v. United States*, 930 F.2d 867, 871 n.2 (Fed. Cir. 1991) ("An expert's opinion on the ultimate legal conclusion is neither required nor indeed 'evidence' at all.").

Flyp then launches a series of attacks against Dr. Lin's testimony that are essentially based on the same incorrect representation of the "first way" discussed above in Sections II and III.A.2. (*See* POR, 40-46.) For example, Flyp asserts that Dr. Lin "could not answer whether a call is using a voice channel when the phone is ringing before it is picked up," even though Dr. Lin already explained that "the teaching that [he has] applied doesn't bring that into question." (*Id.*, 41-42; *see also id.*, 43-45 (Flyp's similar assertions based on the same incorrect representation of the "first way"); *supra* Section III.A.2.)

Flyp also asserts that Dr. Lin refused to answer questions about conventional caller IDs "known in the art" and "[n]ot specific to Backhaus's SLS platform." (POR, 42-43.) However, Dr. Lin did explain that "the specifics depend on the implementation." (Ex. 2009, 60:21-61:13; *see supra* Section III.A.2.) Moreover, Flyp alleges that Dr. Lin "could not answer the question because he has 'not performed that analysis.'" (POR, 43.) But, the question at issue was: "[i]n conventional calls ***before*** **Backhaus**, is the calling line identification transmitted **as an analog signal**?" (Ex. 2009, 62:8-63:21.) Facing a question that is clearly not relevant to the Backhaus or the patent, Dr. Lin explained that "the caller ID may be

transmitted in different ways." (*Id.*, 62:13-17.)

Finally, Flyp asserts that Dr. Lin's testimony regarding whether certain cellular protocols are examples of voice channels is inconsistent with the patent's teaching. (POR, 46-47.) Flyp omits Dr. Lin's full answer in making this assertion. In particular, contrary to Flyp's suggestion, when asked why he said that a person of ordinary skill in the art would not conclude that CDMA, GSM, 3G, 4G, and LTE are always used as voice channels, Dr. Lin explained that at the time, these channels were *also* sometimes being used to exchange data. (Ex. 2009, 77:10-17.) Dr. Lin went on to explain that when such a network is "being used to carry voice, it is acting as a voice channel. And when it is being used to carry non-voice, it is acting as a data channel." (*Id.*, 78:13-20; *see also id.*, 77:18-79:9.) Thus, contrary to Flyp's assertion, Dr. Lin's testimony is entirely consistent with the patent as discussed in Section II. On the other hand, Dr. Akl, when asked a similar question, he stated "I don't have an opinion on that." (Ex. 1102, 34:14-35:5 (stating that he does not have opinions on whether a certain protocol, *e.g.*, CDMA, GSM, or LTE, qualifies as a data channel when used to transport data), 40:1-5 (stating that "I haven't rendered an opinion" on whether a cellular protocol qualifies as a voice channel or data channel when transmitting either voice or data).)

IV. CONCLUSION

For the reasons set forth above, in the Petition, and the Board's Institution

Decision, the Board should reject Flyp's arguments and find the challenged claims unpatentable.

Dated: January 25, 2024

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24(d), the undersigned certifies that the foregoing Petitioner's Reply contains, as measured by the word-processing system used to prepare this paper, 5,436 words. This word count does not include the items excluded by 37 C.F.R. § 42.24.

Respectfully submitted,

Dated: January 25, 2024

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CERTIFICATE OF SERVICE

I hereby certify that on January 25, 2024, a copy of the foregoing Petitioner's Reply was served by electronic means upon the following:

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