

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC,
Petitioner,

v.

FLYPSI, INC. (D/B/A FLYP),
Patent Owner.

Case No. IPR2023-00361
U.S. Patent No. 10,051,105

**PATENT OWNER FLYPSI, INC.'S
PATENT OWNER RESPONSE**

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PATENT OWNER'S EXHIBIT LIST

Ex. No.	Brief Description
2001	Order Denying Petition for Writ of Mandamus, No. 6:22-cv-00031-ADA, <i>Flypsi, Inc. v. Google LLC</i> , Case: 23-112, Federal Circuit, Document 19, March 6, 2023
2002	Order Denying Motion to Stay, Case Number: 6:22-cv-00031-ADA, <i>Flypsi, Inc. v. Google, LLC</i> , Western District of Texas, March 30, 2023
2003	Amended Scheduling Order, Case Number 6:22-cv-00031-ADA, <i>Flypsi, Inc. v. Google, LLC</i> , Western District of Texas, Document 112, April 21, 2023
2004	Lex Machina statistics Judge Alan D Albright of the U.S. District Court for the Western District of Texas. https://law.lexmachina.com/federal-court/district/judge/5198506/cases?pending-
2005	Declaration of Michael A. Bittner in Support of Motion for <i>Pro Hac Vice</i> Admission
2006	Declaration of William M. Logan in Support of Motion for <i>Pro Hac Vice</i> Admission
2007	Declaration of Matthew R. McCullough in Support of Motion for <i>Pro Hac Vice</i> Admission
2008	Demonstrative Exhibit Used at Deposition of Bill Lin, Ph.D.
2009	Deposition Transcript of Bill Lin, Ph.D.
2010	Declaration of Robert Akl, D.Sc.
2011	Curriculum Vitae of Robert Akl, D. Sc.

I. Introduction

The '105 patent describes a novel and non-obvious invention allowing users to have multiple phone numbers for a single phone, so that the user can, for example, use a secondary phone number as a business phone number and receive calls placed to that secondary number. To accomplish this, for an incoming call to the secondary number, the invention transmits a pre-call notification with a bridge number via a data channel to the user's handset, so the handset can then select a call processing rule for that incoming call or dial the bridge number to connect to a switch, which will then connect the user to the incoming call.

Ground 1 of the Petition argues that Backhaus and Logan render independent claim 1 obvious but fails to show obviousness for at least three reasons.

First, Backhaus and Logan do not render obvious transmitting a bridge telephone number for connecting the handset to an incoming call that has been received at the switch. Backhaus only describes *a server* forwarding a call to the handset, but not transmitting a bridge number to the handset for *the handset* to use in connecting to the call. Backhaus thus teaches the exact opposite of the claims, and does not render the claims obvious.

Second, Backhaus and Logan do not render obvious transmitting pre-call information via a data channel. The Petition offers two alternative theories, both of

which fail. The first theory fails because it relies on a field of the call, which is not a “data channel” as properly construed. The second theory fails because it relies on an outgoing call, and does not relate to a pending incoming call, as the properly construed claims require. And both theories fail because they improperly rely on separate embodiments of Backhaus without providing any justification for combining those separate embodiments.

Third, Backhaus and Logan do not render obvious storing information relating to primary call processing rules at a server memory. Both Backhaus and Logan only describe storing rules for calls to a *secondary* number, but not for a primary number, and therefore fail to render obvious.

Ground 2 of the Petition argues that Backhaus and Winbladh render the independent claim 2 obvious. But a POSITA would not be motivated to combine these references because of teachings away in Backhaus and the lack of any motivation to combine these extremely different references. Moreover, this combination fails to render obvious using the same switch for both legs of the call in light of the purported cost-savings benefit of using a local number. A POSITA would understand that cost savings would only be possible by reconnecting to a *different* switch, meaning either the claims are not obvious or there is no rationale to combine Backhaus and Winbladh together. Finally, Backhaus and Winbladh do not render obvious that the pre-call information allows “the handset to accept the

incoming call ... by making a first bridge call using the first bridge telephone number to connect the incoming call to the telephone handset via the switch.” In Backhaus, the call is connected by *the server* forwarding the call to the handset, not *the handset* using a bridge number to connect, which is the opposite of the claims. In Winbladh, the same is true. The Petition’s attempt to rely on Winbladh’s reconnect process fails, because Winbladh clearly teaches that the acceptance and connection of the call is done by the server originally and that the later reconnection is different and does not constitute “accept[ing]” an “incoming” call.

Because Grounds 1 and 2 fail, the Petition fails to show invalidity of any claim. The remaining grounds either expressly depend on Grounds 1 or 2 or propose combinations that incorporate the deficiencies of Grounds 1 or 2, confirming that all grounds fail.

Finally, the Board should disregard Petitioner’s expert opinion. It is highly conclusory and virtually identical to the Petition. At deposition, the Petitioner’s expert could not explain the basis for his opinion and repeatedly tried to evade answering questions about the basis of his opinions. This was especially true on questions related to the “channel” terms which were disputed in the Patent Owner’s Preliminary Response and discussed in the Institution Decision. Despite there being clear notice of the relevance of these issues, Petitioner’s expert was wholly

unprepared to defend or explain his opinions relating to the “channel” terms (as well as a host of other issues), and the Board should therefore disregard his opinion. *See Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9, at 15 (PTAB Aug. 24, 2022) (precedential) (“We have reviewed this excerpt from Dr. Jones’ declaration and note that it merely repeats, verbatim, the conclusory assertion for which it is offered to support. ... Thus, the cited declaration testimony is conclusory and unsupported, adds little to the conclusory assertion for which it is offered to support, and is entitled to little weight.”).

II. Overview of the ’105 Patent

The ’105 patent describes systems and methods for “delivering telephone calls using the combination of a data channel and a voice channel.” Ex. 1001, Abstract. The invention of the ’105 patent “permit[s] the same handset to be associated with multiple secondary telephone numbers from which calls appear to have been made and to which calls appear to have been placed.” *Id.* The specification of the ’105 patent describes both incoming calls (calls from a third party to one of multiple telephone numbers associated with a handset) and outgoing calls (calls from one of the telephone numbers associated with a handset to a third party), but the focus of the independent claims of the ’105 patent is solely on incoming calls.

The '105 patent describes that a handset may be associated both with a “primary telephone number,” such as the one assigned at activation, and one or more “secondary telephone numbers.” *Id.* at 4:64-5:14. When a third party makes an incoming call to the user’s secondary telephone number, the call is routed to “switch 110” which coordinates with a “Call Manager 104 application” associated with a “server 100.” *Id.* at 5:51-63. The Call Manager can look up or assign a “bridge telephone number to be used for completion of the call,” which may be “automatically routed to this switch.” *Id.* at 5:66-6:4. The system then sends a “pre-call notification” to the handset that includes the “bridge telephone number.” *Id.* at 6:32-37. The pre-call notification is transmitted “via the data channel connection, i.e., over the Internet 316 and Mobile Data Network 348.” *Id.* If the user accepts the call, then the application running on the handset calls the bridge telephone number to connect to the switch. *Id.* at 6:62-7:2. The switch then connects the two halves of the call, so that the parties are now connected by a voice channel. *Id.* at 7:2-6.

The '105 patent contrasts the use of data channels, which can allow “communications between the server 100 and the handset 340 over the Internet 316,” for example, using “IP as a protocol,” with the use of voice channels, which allow communications “over the [Public Switched Telephone Network]” that may use “CDMA, GSM or like standards.” *Id.* at 4:35-46. In the invention of the '105

patent, only certain functionality is performed via a data channel, such as transmitting the pre-call notification, while other functionality is performed via a voice channel, such as the handset placing an outgoing call to the bridge number.

III. Level of Skill in the Art

For the purposes of this Response only, Patent Owner does not dispute the level of skill identified in the Petition (Petition at 4-5) because the prior art fails to invalidate under any possible level of skill.

IV. Claim Construction

The Petition does not propose construction of any term. Patent Owner proposes the following constructions.

A. “channel” (all claims)

The Petition is based on a construction of “channel” that is both improper and inconsistent with the intrinsic evidence.¹ As such, Patent Owner proposes the Board construe “channel” as follows to rectify the error in the Petition:

¹ Petitioner should not be permitted to raise “new claim construction issues that were not previously raised in its petition” (Trial Practice Guide at 45) including, but not limited to, offering support for the construction that Petitioner misleadingly attempted to hide in its claim analysis in violation of the Trial Practice Guide’s instruction that “the petitioner must include a statement identifying a proposed construction” (*id.* at 44).

Term	Proposed Construction
channel	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.

One of the features of the challenged claims is that particular information is transmitted via different channels. For example, in claim 1, information that indicates an access telephone number is transmitted to the mobile device via a “data channel,” whereas the switch receives an outgoing call “via a second channel.” The specification also teaches and emphasizes the importance of using different channels, such as data and voice channels, in the invention:

The present invention relates to systems and methods for setting up and connecting telephone calls, and delivering information related to such telephone calls using an Internet Protocol (IP) or other data channel while delivering the voice portion of the call in accordance with CDMA, GSM or like voice channel delivery standards.

Ex. 1001, at 1:18-23.

The 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. *See, e.g.*, Petition at 24 (“A POSITA would have understood that the encoded message ... is transmitted via a ‘data channel’ because Backhaus discloses that that

a voice path is not connected until the call is answered by the callee.”). The Petition is based on the improper assumption that voice and data channels are the only possible channels, and that anything that does not have a voice path connected is therefore a data channel. Petitioner’s expert likewise confirmed that his opinions were based on the same misunderstanding:

Q. Your understanding that a voice path has to be connected in order for something to qualify as a voice channel, what is that based on?

A. That is based on -- that is based on my understanding when I read these patents.

Q. What specifically in the patents led you to that understanding?

A. I, it is my opinion that a person of skill in the art would have understood when reading this patent that a channel, when carrying voice, is a voice channel.

And when it is not carrying voice, it is carrying non-voice data, it would be a data channel.

Ex. 2009, at 75:10-18; *see also id.* at 53:8-10, 57:2-4.

The Board should therefore construe the term “channel” to confirm that whether something qualifies as a voice, data, or other channel does not depend on whether a voice path is connected or the channel is actually carrying voice (or any other type of) data. The Board need not define the full boundaries of the “channel” terms, it need only reject Petitioner’s improper construction, which is sufficient to

resolve the dispute between the parties. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (“[W]e need only construe terms ‘that are in controversy, and only to the extent necessary to resolve the controversy.’” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

This construction is consistent with the intrinsic evidence. Ex. 2010, ¶¶ 39-41. The patent repeatedly gives examples of protocols/standards that can be used as data or voice channels. For example, the patent describes “[t]he present invention” as involving both “an Internet Protocol (IP) or other data channel” and “CDMA, GSM or like voice channel delivery standards.” Ex. 1001, at 1:18-23. The specification repeatedly describes IP as an exemplary data channel and CDMA, GSM, 3G, 4G, and/or LTE as an exemplary voice channel. *Id.* at 1:50-53, 4:5-8, 4:35-46.

The specification never suggests that a voice path must actually be connected and transmitting voice (i.e., that a call must be answered and thus connected on both ends and actively transmitting voice) to qualify as a voice channel. Ex. 2010, ¶¶ 42, 47. To the contrary, the specification expressly teaches that calls occur over a voice channel *before* they are connected, directly contradicting the Petition’s construction. *Id.*, ¶ 43. Specifically, in describing an incoming call, the patent describes that if the user accepts the call, “the handset

application may automatically cause the handset 340 to call the bridge telephone number in step 422 *over a voice channel*.” Ex. 1001, at 6:62-65. Then, the patent explains that once the call from handset is received at the switch, the switch “may ‘bridge’ the incoming *voice channel* call to the bridge telephone number with the incoming *voice channel* call to the secondary telephone number to thereby connect the incoming call from the calling party to the handset 340 via a voice channel.” *Id.* at 7:2-6. As this description makes clear, the patent expressly describes the two pending legs of the call as being “voice channel” calls *before* the calls are bridged together to actually connect the voice path. Ex. 2010 ¶¶ 43-44. Thus, the intrinsic evidence makes clear that channels are not defined by whether a voice path is connected or voice is actually being carried. *Id.*

The Petition does not cite to any intrinsic evidence in support of its construction. *See* Petition at 33. Petitioner’s expert likewise failed to identify any support for this construction. Ex. 1002 ¶ 106. Dr. Lin also could not identify any basis for his opinion at deposition. Ex. 2009, at 75:4-76:3. The only time the Petitioner’s expert describes channels is in his overview of the ’105 patent, where he cites to the ’105 patent’s teaching that “[s]uch CDMA, GSM or like governed communications, when used to carry voice information, are referred to herein as being conducted over a ‘voice channel.’” Ex. 1001, at 4:40-46, *cited in* Ex. 1002, ¶ 27. To the extent Petitioner attempts to rely on the statement “when used to carry

voice information,” that does not support the Petition’s construction because the specification is expressly clear that calls can occur over a “voice channel” ***before*** a call is connected (and thus, before any voice is actually transmitted). *See id.* at 6:62-7:6. Any attempt to rely on the “when...” statement in isolation would violate settled law that “[i]n construing terms used in patent claims, it is necessary to consider the specification ***as a whole***, and to read all portions of the written description, if possible, in a manner that renders the patent internally consistent.” *See Budde v. Harley-Davidson, Inc.*, 250 F.3d 1369, 1379-80 (Fed. Cir. 2001) (emphasis added).

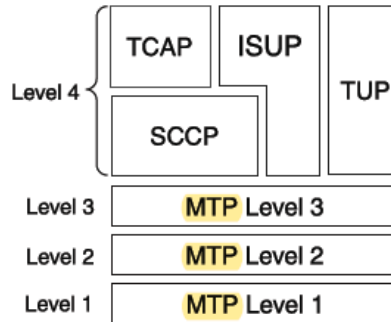
A POSITA, reading the whole specification, would understand that this “when...” statement refers to the fact that different protocols can be used on top of one another and that a data protocol such as IP can be used to send information over GSM. Ex. 2010, ¶ 45 (Dr. Akl explaining a POSITA would be familiar with using multiple protocols on top of one another and would understand the specification to be referring to this concept). Thus, a POSITA would understand the “when used to carry voice information” qualifier not to impose a temporal limitation advocated by the Petition (and directly contradicted by a later example in the specification), but to refer to using combinations of different types of protocols on top of one another. *Id.* In such a case, a POSITA would look to the protocol that is set to be used to transmit information, not any underlying protocols

used for bare transmission of across wires (or air waves). *See id.* (Dr. Akl explaining a POSITA would look to the protocol set to be used to transmit information, not other protocols used merely for transport).

Indeed, although the Board should not consider extrinsic evidence because the intrinsic evidence resolves any dispute on this claim term,² Petitioner's own extrinsic evidence supports Patent Owner's construction. Petitioner's reference describing the SS7 protocol (Ex. 1011) teaches that SS7 can be transported over MTP protocols (as is conventional) or IP (in newer applications), but the reference refers to the transmission as SS7 regardless of the protocol used merely for transport (MTP vs. IP):

² *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996) (it is "improper to rely on extrinsic evidence" when "an analysis of the intrinsic evidence alone will resolve any ambiguity").

Figure 4-18 *Introductory SS7 Protocol Stack*



Such a stack uses TDM for transport. This book focuses on traditional SS7 because that is what is implemented. Newer implementations are beginning to appear that use different transport means such as IP and that have associated new protocols to deal with the revised transport.

The SS7 physical layer is called MTP level 1 (MTP1), the data link layer is called MTP level 2 (MTP2), and the network layer is called MTP level 3 (MTP3). Collectively they are called the *Message Transfer Part (MTP)*. The MTP protocol is SS7's native means of packet transport. In recent years there has been an interest in the facility to transport SS7 signaling over IP instead of using SS7's native MTP. This effort has largely been carried out by the Internet Engineering Task Force (IETF) SigTran (Signaling Transport) working group. The protocols derived by the SigTran working group so far are outside the scope of this introductory chapter on SS7. However, full details of SigTran can be found in Chapter 14, "SS7 in the Converged World."

Ex. 1011 at 83 (emphasis added); Ex. 2010, ¶ 46.

The Board should therefore construe "channel" to make clear that whether something qualifies as a voice, data, or other channel does not depend on whether a voice path is connected or the channel is actually carrying voice (or any other type of) data.

**B. “transmitting pre-call information ...” (limitation [1.g]) /
“transmitting ... pre-call information ...” (limitation [2.a])**

Both independent claims of the ’105 patent recite a limitation of transmitting “pre-call information.” The Board should construe these claim limitations as follows:

Term	Proposed Construction
[1.g] transmitting pre-call information via a data channel to the handset under the control of the server, said pre-call information including a bridge telephone number for connecting the handset to the incoming call at the switch	The transmission must occur after the indication of an incoming call is received in step [1.d]. The “pre-call information” must be information relating to the specific call received in step [1.d].
[2.b] transmitting, from the server to the telephone handset via at least one data channel, pre-call information including the first bridge telephone number ...	The transmission must occur after the incoming call is received in step [2.a]. The “pre-call information” must be information relating to the specific call received in step [2.a].

The plain claim language clearly supports the two requirements of each of the above proposed constructions, i.e., that (1) the pre-call information is transmitted after receiving a call; and (2) that the pre-call information relates to the specific call that has been received in a previous claim limitation. Ex. 2010, ¶¶ 50-52.

“[A] claim ‘requires an ordering of steps when the claim language, as a matter of logic or grammar, requires that the steps be performed in the order written.’ *Mformation Techs., Inc. v. Rsch. in Motion Ltd.*, 764 F.3d 1392, 1398

(Fed. Cir. 2014). Here, the claim language for both terms clearly indicates that the transmitting step must occur after receiving the call by using antecedent basis to refer to the already-received call:

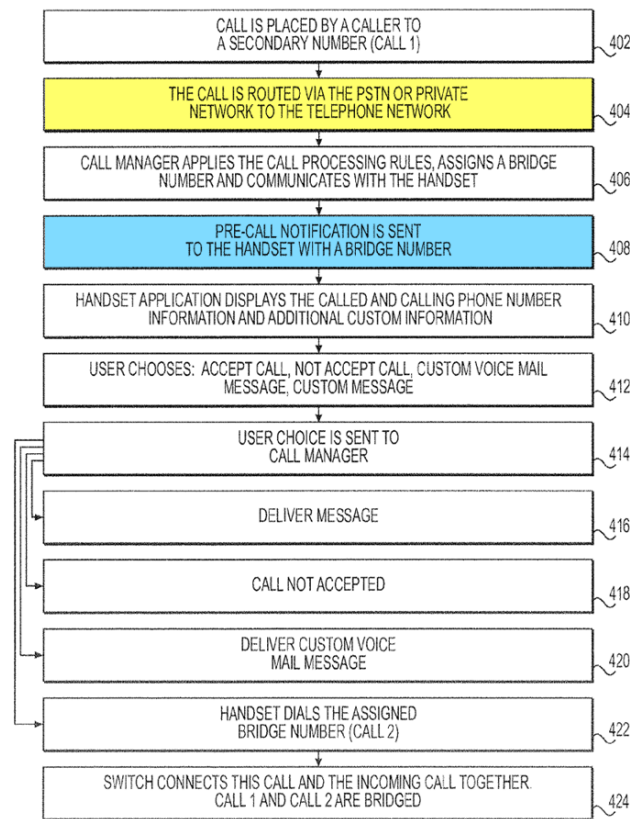
[1.g] transmitting pre-call information via a data channel to the handset under the control of the server, said pre-call information including a bridge telephone number for connecting the handset to ***the incoming call at the switch***

[2.b] transmitting, from the server to the telephone handset via at least one data channel, pre-call information including the first bridge telephone number, whereby the pre-call information allows the telephone handset to accept ***the incoming call to the secondary telephone number*** by making a first bridge call using the first bridge telephone number to connect ***the incoming call*** to the telephone handset via the switch

The use of antecedent basis supports that the claim steps must occur in sequential order. *See Hytera Commc'ns Co. v. Motorola Sols., Inc.*, 841 F. App'x 210, 218 (Fed. Cir. 2021) (affirming Board construction imposing order of steps requirement based on antecedent basis). Additionally, the use of “the” to refer to the incoming call confirms that the pre-call information must relate to that specific call (as opposed to any other calls, or potential hypothetical future calls that have not yet been placed). A POSITA would also understand, based on the use of antecedent

basis and “the” that the claims logically impose an order and relationship between the pre-call information and the received call. Ex. 2010, ¶¶ 50-52 (Dr. Akl confirming a POSITA would understand the claims to impose this logical and temporal relationship). Thus, the plain claim language makes clear that Patent Owner’s proposed construction should be adopted.

Additionally, the specification of the patent further supports that the “pre-call” information occurs after a specific call is received and relates specifically to that call. Ex. 2010, ¶ 53. Every teaching in the ’105 patent is consistent with these two requirements. Specifically, the patent teaches that a call is received over the PSTN at a switch 110. Ex. 1001, 5:55-59. If the call is permitted to go through (according to call processing rules), “the Call Manager 104 may transmit pre-call notification information to the handset 340, which includes the assigned/looked up bridge telephone number, via the data channel connection.” *Id.*, 6:32-37. The handset may then display information about the call and/or choices for whether to accept the call. *Id.*, 6:45-61. If the user accepts the call, the handset then completes the call by “caus[ing] the handset 340 to call the bridge telephone number in step 422 over a voice channel,” which is then bridged with the first leg of the call at the switch. *Id.*, 6:62-7:6. The temporal relationship described in the specification is also shown in Figure 4, which unambiguously depicts that the pre-call notification is transmitted (in blue) **after** the call is received (in yellow):

**FIG. 4**

Every other description of a pre-call notification for an incoming call in the specification is consistent in describing the pre-call notification as occurring after a call is received and relating to that specific received call. *See, e.g.*, Ex. 1001 at 1:64-2:16, 3:25-30.

Thus, all of the intrinsic evidence makes clear that the transmitting pre-call information limitations must meet two requirements: (1) the pre-call notification is transmitted *after* receiving a call; and (2) that the pre-call notification relates to the specific call that has been received. The Board should therefore adopt Patent Owner's constructions, which properly reflect these two requirements.

C. “a bridge telephone number for connecting the handset to the incoming call at the switch” (limitation [1.g])

Claim 1 of the '105 patent recites that the bridge telephone number is “for connecting the handset to the incoming call at the switch.” The Board should construe this term as follows:

Term	Proposed Construction
[1.g] a bridge telephone number for connecting the handset to the incoming call at the switch	The bridge telephone number must be capable of being used by the handset to connect to the specific incoming call previously received in [1.d].

The plain claim language supports that the bridge telephone number must be capable of being used by the handset to connect to the specific incoming call. Specifically, the claim recites receiving an incoming call (limitation [1.d]) and then transmitting pre-call information with a bridge telephone number. The way the claim describes the bridge telephone number confirms that it must be capable of being used by the handset to connect to the specific incoming call at the switch:

[1.g] transmitting pre-call information via a data channel to the handset under the control of the server, said pre-call information including a bridge telephone number *for connecting the handset to the incoming call* at the switch

The claim’s use of antecedent basis to refer to “the” incoming call confirms that the bridge telephone number must be capable of being used to connect to the

specific incoming call previously received (as opposed to any other call or potential future call). *See Innovative Mem. Sys., Inc. v. Micron Tech., Inc.*, 781 F. App'x 1013, 1016 (Fed. Cir. 2019) (relying on antecedent basis to hold “[t]he phrase ‘the correspondence’ establishes there is a preexisting connection or relationship between [the claim elements]”). The claim language also confirms the bridge telephone number is for use by “the handset.” The plain language thus confirms there must be a relationship between the pre-call information and the already-received incoming call, and that relationship is that the bridge number is capable of being used by the handset to connect to the call. Ex. 2010, ¶ 57.

The surrounding claim language provides further support. Limitation [1.i] (which is optional, given the claim requires performance of [1.h] “or” [1.i]) requires “*the handset* calling the switch *using the bridge telephone number.*” Limitation [1.i] is thus consistent with Patent Owner’s construction and additionally imposes an extra requirement that the handset must call the switch using the bridge number. Ex. 2010, ¶ 58.

The specification provides further support. *Id.*, ¶ 59. In the context of incoming calls, the bridge telephone number is always described as a number used by the handset to connect the call. Specifically, the ’105 patent teaches that the pre-call information may include a “bridge telephone number to be used for completion of the call in step 406. The bridge telephone number may be associated

with the switch 110, and calls to the bridge telephone number may be automatically routed to this switch.” Ex. 1001, 5:66-6:4. This description provides an exemplary way of using the bridge telephone number to connect to the switch, which allows the two legs of the call to be bridged together. Consistent with the fact that limitation [1.i] is optional, the bridge telephone number may not actually be used, for example if the user drops the call, sends a responsive text message, or sends a custom voice message. *Id.*, 6:48-61. But if the user accepts the call, “the handset application may automatically cause the handset 340 to call the bridge telephone number in step 422 over a voice channel.” *Id.*, 6:62-65. Once received, this call can be bridged with the first leg at the switch to connect the call. *Id.*, 6:67-7:6. Figure 4 depicts, consistent with the description in the specification, that the bridge telephone number can be used by the handset to connect to a specific incoming call in step 422:

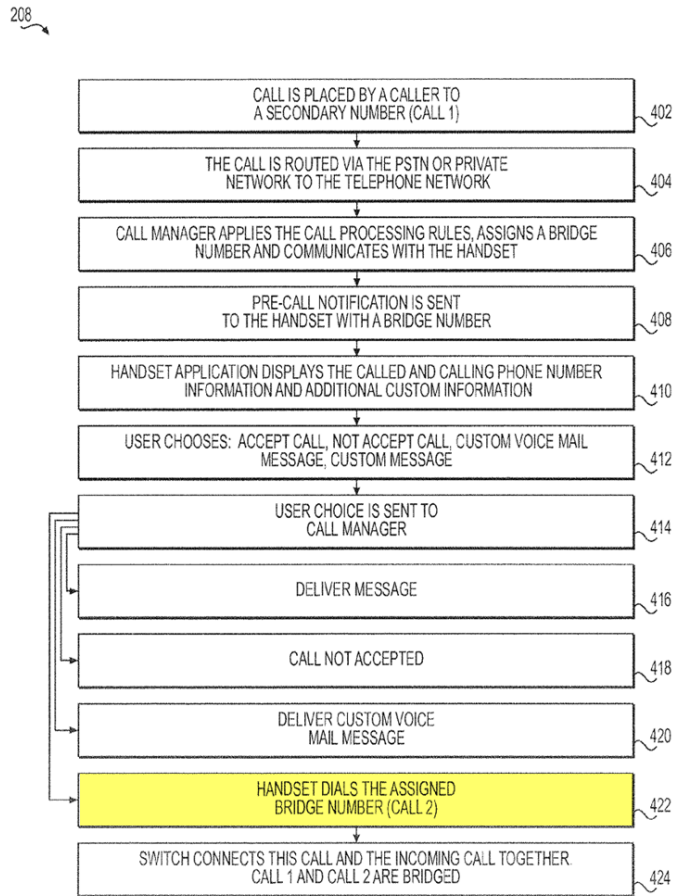


FIG. 4

Thus, the intrinsic evidence is consistent and clear that the bridge telephone number must be a number that is capable of being used by the handset to connect to the specific, previously-received incoming call recited in limitation [1.d]. Ex. 2010, ¶ 60. The Board should therefore adopt Patent Owner's proposed constructions.

V. The Petition fails to establish the invalidity of any claim.

The Petition fails to establish the invalidity of any claim, for at least the reasons described below. Further, the Petitioner's expert declaration is highly conclusory and substantially identical to the Petition's argument. It therefore fails

to show invalidity for the same reasons, and the Board should also disregard this declaration because it is conclusory, internally contradictory, and the expert could not explain his opinions at deposition (*see infra* Section V.I).

A. Ground 1: Backhaus and Logan do not render obvious limitation [1.g]’s requirement to transmit “pre-call information” including a bridge telephone number “via a data channel,” where the bridge telephone number is “for connecting the handset to the incoming call at the switch.”

Limitation [1.g] recites as follows:

transmitting pre-call information via a data channel to the handset under the control of the server, said pre-call information including a bridge telephone number for connecting the handset to the incoming call at the switch; and

1. Backhaus and Logan do not render obvious that the bridge telephone number is “for connecting the handset to the incoming call at the switch” as properly construed.

As explained above, limitation [1.g] as properly construed requires that:

“[t]he bridge telephone number must be capable of being used by the handset to connect to the specific incoming call previously received in [1.d].”

In addressing the “for connecting the handset to the incoming call at the switch,” the Petition’s only argument is that the SLS platform “calls subscriber’s TD 110 *using the relationship number*.” Petition at 36. This is consistent with how Backhaus describes incoming calls: it merely forwards the call to an SLS

number to the user’s phone. Ex. 2010, ¶ 73. Backhaus does not use a bridge telephone number to connect, as in the claims. *Id.*, ¶ 74. The Petition’s argument thus fails to meet the construction because, as properly construed, the bridge telephone number must be capable of being used *by the handset* to connect to the call. The Petition’s argument is directed solely to use of the number *by the server*, and thus fails to render this limitation obvious.

Moreover, the Petition’s argument that the server “calls ... using the relationship number” is incorrect. Backhaus states that the SLS platform “places the call to the primary number.” Ex. 1005, [0054]. The relationship number is only provided as information in the “calling party field of the call.” *Id.*, [0055]. A POSITA would understand that the calling party field in Backhaus is not used to connect the call. Ex. 2010, ¶ 74.

2. The Petition’s “first way” fails to render obvious because the caller ID field is part of a call, and thus not a “data channel” as properly construed.

The Petition alleges, under its first theory, that the information is transmitted via a data channel because the “calling party field of the call” may include the relationship number. Petition at 32-33 (quoting Ex. 1005, [0055]). But there is no teaching in Backhaus, and no argument in the Petition, that this “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). A POSITA would be very familiar with the concept of caller ID

and would not consider the caller ID field of a call to be delivered over a separate channel from the call itself. Ex. 2010, ¶¶ 76-77. To the contrary, a POSITA would understand that caller ID is delivered over the same voice channel as the call itself, whether that be the PSTN or a wireless voice channel such as GSM, LTE, 3G, or 4G. *Id.* (Dr. Akl explaining that caller ID was well known in the art and a POSITA would consider it to be delivered over same channel as the call, which may be PSTN or a wireless protocol such as 3G or 4G).

Further, the plain language used by Backhaus—“calling party field *of the call*”—confirms this field is part of the call itself. Ex. 1005, [0055] (emphasis added). The surrounding teachings in Backhaus further support that this “calling party field” is part of the call itself. Backhaus begins describing an incoming call scenario in paragraph 52, where the third party making the incoming call does not yet have an assigned relationship number. *See id.*, [0052]. In paragraph 53, the relationship number is created. *Id.*, [0053]. Then, in paragraph 54, “SLS platform 115 places the call to the primary number ... per its primary service provider 201.” *Id.*, [0054]. Thus, a POSITA would clearly understand that the “calling party field of the call” in paragraph 55, which the Petition relies on, is part of the call itself. Ex. 2010, ¶ 76.

The Petition further alleges that “[a] POSITA would have understood the encoded message ... is transmitted via a ‘data channel’ because Backhaus discloses

that a voice path is not connected until the call is answered by the callee.” Petition at 33 (citing Ex. 1005, [0052], [0056]). As noted above, this is an improper and incorrect claim construction, and the Board should reject it.

Furthermore, a POSITA would understand that the voice calls, while ringing (i.e., before the recipient picks up and the call is connected), are still using a voice channel. Ex. 2010, ¶¶ 42, 44, 47 (Dr. Akl explaining that a conventional voice call is considered to use a voice channel even when ringing, before the voice path is connected). Petitioner’s own expert would not even fully embrace the Petition’s argument (despite the same argument being virtually copy-pasted in his declaration), refusing to characterize the ringing state as using a data channel and instead claiming “[i]t is something before the call.” Ex. 2009 at 50:12-57:5. But he refused to identify what “something” channel was used while ringing. *Id.* Petitioner’s expert failure to explain the basis of his opinion confirms that there is no supporting factual basis for this opinion and the Board should therefore disregard it. Indeed, the Board should disregard the entire expert declaration because it is conclusory, internally contradictory, and Dr. Lin repeatedly could not explain the basis for his opinions at deposition, as explained further below in Section V.I.

The Petition proceeds to argue that “Backhaus discloses that communication protocols, including IP-based communications (‘data channel’), may be used for

establishing the relationship between various numbers and associated databases (as described above).” Petition at 33 (citing Ex. 1005, [0073]). But the description in Backhaus [0073] does not describe any specific transmission of information and the Petition contains no explanation of why it would be obvious for this particular transmission to be made on a data channel.

Further, the description in Backhaus [0073] is expressly related to a path in Figure 4 starting with Figure 4D (Ex. 1005, [0071]), which is reached by following the “no” branch of block 432 of Figure 4C (*id.*), which is in turn reached from following the “no” branch of block 404 of Figure 4A (*id.*, [0069]). Block 404 of Figure 4A is determining whether a call is received from a third party. *Id.*, [0062]. Thus, the disclosure in paragraph 73, which can only be reached by following the “no” branch of block 404 of Figure 4A (meaning there is ***not*** an incoming call from a third party) is irrelevant to the Petition’s first way (which expressly relies on an incoming call from a third party, *see* Petition at 20, 22-23). A POSITA would understand these are different embodiments used in different processing paths. Ex. 2010, ¶¶ 80-86 (Dr. Akl describing the flow path of Figures 4A-4D and the different embodiments disclosed therein).

In fact, getting to the point in the path where Backhaus [0073] is discussed is only possible by following the “no” branch of block 404 (meaning there is no incoming call from a third party, Ex. 1005, [0062]) and the “no” branch of block

432 (meaning the communication is not a call to a relationship number, Ex. 1005, [0069]). Backhaus expressly describes this as the SLS platform “determin[ing] that the communication is a data communication over network 125 that originated from an SLS client of a subscriber TD.” *Id.*, [0071]. Thus, the discussion of using IP-based communication in Backhaus [0073] (which relates to a data communication that has been determined is **not** an incoming call) is a different embodiment from the Petition’s first way (which relies on an incoming call) and a POSITA would understand that it is not possible to get to the processing path described in [0073] as part of an incoming call from a third-party. Ex. 2010, ¶¶ 84-86 (Dr. Akl explaining the disclosure of paragraph [0073] is impossible to reach for an incoming call from a third-party based on the flow path in Figures 4A-4D). The Petition does not acknowledge that these are two separate embodiments and fails to provide any explanation of why or how a POSITA would combine these two separate embodiments. *See, e.g., Princeton Biochemicals, Inc. v. Beckman Coulter, Inc.*, 411 F.3d 1332, 1337 (Fed. Cir. 2005) (obviousness “requires a showing that an artisan of ordinary skill in the art ... would have selected the various elements from the prior art and combined them in the claimed manner. *Id.* In other words, section 103 requires some suggestion or motivation, before the invention itself, to make the new combination.”).

The Institution Decision found that the Petition’s argument on this limitation was sufficient based on teachings in Backhaus [0072] and [0074]. Paper 9 at 23. As an initial matter, neither the Petition nor its expert rely on paragraphs [0072] and [0074] in connection with the first way (*see* Petition at 30-33, Ex. 1002, ¶¶ 102-107), and as such the Board should not consider these paragraphs in connection with this argument. But even if the Board considers their disclosure, paragraphs [0072] and [0074] relate to the same flow path described above, which is impossible to reach in connection with an incoming call. Ex. 2010, ¶¶ 80-86 (Dr. Akl explaining paragraphs [0072] and [0074] are part of same flow as paragraph [0073] and equally impossible to reach for an incoming call from a third-party). Thus, paragraphs [0072] and [0074] are equally irrelevant to the Petition’s first way.

3. The Petition’s “first way” fails to render obvious even under the Petition’s improper construction of “channel.”

The Petition’s “first way” also fails to render obvious—even under the Petition’s improper construction—because, as explained above, the teaching about using an IP protocol in Backhaus [0072]-[0074] is impossible to reach in the flow path for an incoming call. A POSITA would understand these are separate embodiments. Ex. 2010, ¶¶ 84-86. The Petition therefore fails to render obvious because it relies on two distinct embodiments and makes no argument as to why

this combination of distinct embodiments would be obvious. *See Princeton Biochemicals*, 411 F.3d at 1337.

The Petition's argument also fails as a matter of common sense. It is true that, when making phone calls—including on conventional, landline phones—“a voice path is not connected until the call is answered by the callee.” Petition at 33. But the fact that the voice path is not connected until the call is answered does not mean that there is a separate “data channel” being used prior to the moment of connection. The Petition fails to justify this leap in logic or the introduction of a second channel not mentioned in Backhaus [0052]-[0056]. Nor does the Petition argue that the use of a data channel for this particular transmission is somehow inherent. The Petition merely offers an unsupported conclusion, which cannot meet Petitioner's burden.

Finally, the Petition proposes an alternative obviousness argument, based solely on Backhaus, of using IP communication allegedly because it minimizes delay. Petition at 33-34. The Petition offers no reason why a POSITA would take Backhaus' existing method (using the “calling party field of the call,” Ex. 1005, [0055]) remove the relationship ID from the call itself and split it into a separate transmission that would be made over IP. A POSITA would not agree with the Petition's delay argument because it does not make sense and would lead to a bad experience for users. Ex. 2010, ¶¶ 88-89. In unmodified Backhaus, the

relationship number is transmitted in the “calling party field of the call” (Ex. 1005, [0055]), and a POSITA would understand this means that the calling party field (relationship number) and call are transmitted together and would arrive together. Ex. 2010, ¶ 89. Because these are transmitted together, a POSITA would understand there is no delay between these two features, and thus no reason to modify the system to reduce a delay that doesn’t exist. *Id.* In the Petition’s proposed modification however, the calling party field (relationship number) and the call would be transmitted separately and could arrive separately. *Id.* This would actually lead to a bad user experience: either the relationship number arrives before the call, which means that the phone would be displaying an incoming call notification before the call is even ready to accept, or the relationship number arrives after the call, in which case the phone will start ringing before it receives the information it needs to populate the caller ID. *Id.* Either experience would be bad for the user, which is why a POSITA would not remove the caller ID from the call and put it in a second transmission as the Petition proposes. *Id.*

4. The Petition’s “second way” fails to render obvious the use of a “data channel” under any construction.

The Petition’s second theory relates to an outgoing call made by the subscriber. The Petition argues that when the user makes an outgoing call to a new number, the SLS platform “returns the next available relationship number to TD 110.” Petition at 25 (citing Ex. 1005, [0074]). The Petition does not ever appear to

contend this *specific* transmission occurs “via a data channel.” *See id.* at 34-35. The cited portion of Backhaus does not identify any specific channel as being used for this transmission. *See* Ex. 1005, [0074]. The Petition argues that “TD 110 may communicate with SLS platform 115 using various protocols/mechanisms” that allegedly include IP, cellular, Wi-Fi and other protocols. Petition at 25 (citing Ex. 1005, [0072]-[0073]). But Backhaus contains no teaching and the Petition does not explain why it would be obvious to use a data channel for this specific transmission. Ex. 2010, ¶ 92.

Moreover, this “second way” relies on the teachings in Backhaus ¶ [0074], which as explained above is impossible to reach in connection with an outgoing call, and thus this teaching is irrelevant to the Petition’s second way. The Petition offers no reason to or explanation of how to combine these distinct embodiments, and thus the Petition’s second way fails to render obvious the use of a “data channel” (under any possible construction). *See Princeton Biochemicals*, 411 F.3d at 1337.

5. The Petition’s “second way” fails to render obvious because it violates the proper construction that the transmitting pre-call information must occur after receiving the call in step [1.d] and must relate specifically to that call.

As explained above, this limitation should be construed as follows: “The transmission must occur after the indication of an incoming call is received in step [1.d]. The “pre-call information” must be information relating to the specific call

received in step [1.d].” The Petition’s “second way” fails both of these requirements.

The Petition’s second theory relates to an outgoing call made by the subscriber. The Petition argues that when the user wants to make an outgoing call to a new number, the SLS platform “then returns the next available relationship number to TD 110.” Petition at 34. The Petition does not allege this second call is being made *after* the incoming call is received in limitation [1.d] and therefore fails to satisfy the order of steps required by the claim language. Ex. 2010, ¶¶ 95-96.

The Petition’s second theory also fails because the alleged pre-call information is not related to the specific incoming call received in limitation [1.d]. The Petition simply relies on the relationship number created for an outgoing call. Petition at 34. There is no allegation that the transmission of this relationship number relates to a pending incoming call, and it does not. The mere fact that the same relationship number may be used in a hypothetical later incoming call is not sufficient, because the proper construction of the claim requires that the pre-call information relate to a specific, already-received incoming call, not some hypothetical future call. Ex. 2010, ¶ 96.

* * *

The Petition therefore fails to show that Backhaus and Logan render obvious limitation [1.g], and thus Ground 1 fails to show obviousness of any claim.

B. Ground 1: Backhaus and Logan do not render obvious limitation [1.b]’s requirement to store information indicating “a selection of call processing rules for the primary telephone number” in a computer memory associated with a server.

Limitation [1.b] requires storing “electronic information that indicates a selection of call processing rules for the primary telephone number in the computer memory.” The phrase “the computer memory” refers back to limitation [1.a], which recites “a computer memory associated with a server.” Thus, the information relating to the primary call processing rules must be stored in the memory associated with a server. Neither Backhaus nor Logan, alone or in combination, teach storing primary call processing rules at a server memory.

Backhaus never discloses storing call processing rules for a *primary* number at a server memory. Ex. 2010, ¶ 99. The Petition only relies on voicemail, messaging, and automated response services “when a subscriber elects not answering a call to the SLS [i.e., *secondary*] number.” Petition at 12 (citing Ex. 1005, [0035], [0068]). The Petition argues Backhaus ¶ [0068] suggests services for the primary number, but it does not. That paragraph states:

That is, it is envisioned that an SLS service may provide features and services dedicated to the SLS subscriber and

separate from similar features and services associated with the subscriber's primary number.

Ex. 1005, [0068] (emphasis added). This paragraph only states that an SLS service may provide features and services “separate from” any features associated with the primary number. This passage does not state Backhaus provides features to a *primary* number, much less that any rules relating to the primary number are stored at a server memory. A POSITA would understand this statement to only teach providing services to a *secondary* number, which does not render obvious storing rules for a *primary* number at a server memory. Ex. 2010, ¶ 100. Thus, a POSITA would understand that Backhaus does not describe storing any call processing rules for the primary number at the server. *Id.*

The Petition's obviousness argument depends on Logan's rules relating to voicemail or location/time-based features. But Logan does not describe storing rules for processing calls to a *primary* number at a server memory. Ex. 2010, ¶¶ 101-107. The Petition relies on Logan's voicemail (Petition at 13, citing Ex. 1015, [0026]), but the cited paragraph of Logan relates only to “calls dialed to the virtual [i.e., *secondary*] phone numbers.” Ex. 1015, [0026]. The Petition claims Logan discloses “MNC 140” receives calls to the base and virtual numbers (Petition at 14), but MNC 140 is the cellphone itself (Ex. 1015, [0029]), and a POSITA would understand that a teaching about the handset receiving calls does

not disclose anything about whether and what rules may be stored on a server memory. Ex. 2010, ¶ 102.

The Petition next argues Logan discloses transmitting preferences to the server (Petition at 14-15, citing Ex. 1015, [0029]). But paragraph [0028] makes clear that Logan is describing rules for the “virtual number [that] was dialed by the calling party.” Ex. 1015, [0028]. None of the other portions of Logan cited by the Petition describes rules stored on a server for the *primary* number. Paragraphs [0005], [0011], [0043], [0046], and [0055] do not describe storing rules at a server at all. Claim 2 depends from claim 1, which makes clear that the user preferences are for the virtual numbers: “user preferences to each of the virtual telephone numbers.” Ex. 1015, cl. 1; *see also id.* (“A system for forwarding telephone calls to virtual numbers...”). Paragraph [0027] expressly relates to “virtual office number[s]” and “virtual home number[s].” Paragraph [0039] describes a call to “virtual #1.” *See also id.*, [0038] (stating Figure 2 relates to calls to “one of a plurality of ‘virtual’ numbers”). Thus, a POSITA would conclude that none of the paragraphs cited by the Petition teach storing call processing rules for the *primary* number at a server memory. Ex. 2010, ¶¶ 103-107.

Because neither Backhaus nor Logan discloses storing call processing rules relating to a *primary* number in a server memory, and the Petition does not propose any modifications to either Backhaus or Logan that would provide this feature, the

combination of Backhaus and Logan does not render obvious the limitation of storing an indication of such rules on a memory associated with a server. Ex. 2010, ¶ 108. The Petition therefore fails to show that Backhaus and Logan render obvious limitation [1.b], and thus Ground 1 fails to show obviousness of any claim.

The Petition argues that there is a motivation to implement “server-based call processing rules features ... similar to as discussed in Logan.” Petition at 16-19. But, as discussed above, Logan does not include such a feature and thus these obviousness arguments fail because they incorrectly presume Logan teaches the claimed feature when it does not. Furthermore none of the rationales identified in the Petition are specific to *primary* call processing rules. The Petition thus fails to identify any reason a POSITA would implement this feature, particularly in light of the fact that Backhaus acknowledged primary call providers already provide services like voicemail “separate from” Backhaus’ SLS platform. Ex. 1005, [0068]; Ex. 2010, ¶ 108.

C. Ground 2: Backhaus and Winbladh do not render obvious any claim because a POSITA would not combine these references.

As described by the Petition, Winbladh appears to be a system for managing end-to-end connections between terminals on wireless phone networks. Petition at 47-48. A POSITA would understand that Winbladh is a replacement for the routing of the conventional telephone system and would involve its own system for routing calls. Ex. 2010, ¶ 113.

Backhaus, however, is much more limited: it discloses an SLS platform used only in connection with calls to and from virtual secondary lines. Backhaus expressly teaches that calls to the primary number are handled “as is understood in the art.” Ex. 1005, [0033]. And even for calls to the secondary number, they are routed to SLS platform through the conventional telephone network. Ex. 1005, [0034]. A POSITA would understand that Backhaus is uniquely focused on providing service across conventional phone networks and repeatedly identifies “cross carrier” functionality as an important feature of the invention. Ex. 1005, [0001], [0122]; Ex. 2010, ¶¶ 109-111. Indeed, Backhaus expressly describes a need for providing a second line service “without having to coordinate with the subscriber’s primary service provider.” Ex. 1005, [0008]. A POSITA would therefore understand Backhaus to teach away from a reference like Winbladh, which requires either coordination with or completely taking over the functionality of providing routing to the primary line. Ex. 2010, ¶ 112. A POSITA therefore would not be motivated to combine Backhaus and Winbladh. *Id.*, ¶ 113.

The Petition never explains how or why a POSITA would combine these two systems together given their vastly disparate scopes. The Petition never addresses how calls would be routed to primary or secondary numbers, or how the system would be able to continue to provide the cross-carrier functionality that Backhaus teaches is important.

In fact, the Petition entirely fails to articulate its specific proposed combination, much less justify that a POSITA would be motivated to make that specific combination or would have an expectation that the specific modifications necessary would be successful. The Petition's analysis appears to be a moving target, driven by matching the combination to the claims, which is an improper application of hindsight bias.

The Petition's only proposed justification for its combination is that "long distance or international calls are relatively expensive." Petition at 50. But this rationale makes no sense in the context of Backhaus. In Backhaus, the second call leg is placed from the switch to the user's handset. Ex. 1005, [0054]. If the Backhaus second call leg is long distance, then reversing the direction of the call and having the handset call the switch instead would also be long distance, so there would be no motivation to make the Petition's proposed alteration to Backhaus. A POSITA would understand that the cost of calls is based on the physical path between terminals and would be the same in both directions. Ex. 2010, ¶ 115. And if the Backhaus second call leg is already local, then reversing the direction would also be local and would not save any money and thus there would be no motivation to combine. *Id.*, ¶ 116. Moreover, a POSITA motivated to save money would consider other, simpler ways of modifying Backhaus, such as using multiple SLS servers rather than modifying the entire routing system using Winbladh's

convoluted hang up and redial multi number system. Ex. 2010, ¶ 117. Either way, the cost saving motivation does not support the proposed obviousness combination.

Moreover, the proposed combination would create difficulties with Backhaus's relationship numbers. If the Backhaus relationship numbers must be local in the Backhaus-Winbladh combination, then they would not work when a user is traveling (or would have to be regenerated every time the user leaves one calling zone for another). Moreover, whether a particular number is local or not may also depend on the handset's carrier, whether the user is roaming, whether the user's carrier has deals with the operators of any local cell towers, or other unknown factors. APOSITA would not make such a combination and would not understand how to obtain a working system given the conflicting teachings in Backhaus (where relationship numbers are fixed) and Winbladh (where relationship numbers change based on location). Ex. 2010, ¶ 118.

The Petition ignores all these difficulties to simply cherry-pick elements of Winbladh to try to match the claims, but that is an improper hindsight-driven way to argue obviousness and fails to meet Petitioner's burden. *In re Gorman*, 933 F.2d 982, 987 (Fed. Cir. 1991) ("It is impermissible, however, simply to engage in a hindsight reconstruction of the claimed invention, using the applicant's structure as a template and selecting elements from references to fill the gaps."); *see also ATD*, 159 F.3d at 546 ("Determination of obviousness can not be based on the hindsight

combination of components selectively culled from the prior art to fit the parameters of the patented invention.”); *Princeton Biochemicals, Inc. v. Coulter, Inc.*, 411 F.3d 1332, 1337 (Fed. Cir. 2005).

The Petition further argues that “[i]t was well known to accept an incoming call by making an outbound call to a bridge number.” Petition at 50 (citing Ex. 1021, [0016]). But Exhibit 1021 relates to switching between data and voice mode in a wireless phone. *See* Ex. 1021, [0016]. The bridge number there is unrelated to allowing handsets to use multiple numbers, as in the ’105 patent. Ex. 2010, ¶ 119. Moreover, the mere fact that a limitation may have been known in one entirely unrelated context does not support that it would have been obvious to incorporate such feature into Backhaus (or Winbladh). *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (“a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.”).

Finally, the Petition contends that a “POSITA would have the skill in implementing, and expectation of success in achieving, the above-discussed Backhaus-Winbladh combination given the well-known call-back process and similarity of the Backhaus and Winbladh’s systems.” Petition at 51. The Petition also alleges the combination “would have involved applications of known technologies (e.g., known use of a server for connecting two legs of a call)

according to known methods (e.g., known techniques for connecting to an incoming call by calling the server provided telephone number) to yield the predictable result.” *Id.* These highly conclusory allegations gloss over the significant differences in Backhaus and Winbladh and fail to show what modifications are necessary, how to perform those modifications, or why a POSITA would expect those specific modifications to be successful. Thus, a POSITA would not combine the highly distinct systems of Backhaus and Winbladh. Ex. 2010, ¶ 120.

D. Ground 2: Backhaus and Winbladh do not render obvious receiving the call on a switch in [2.a] and connecting with a bridge number via the same switch in [2.b].

Limitation [2.b] requires connecting to the incoming call via “the switch.” The use of antecedent basis makes clear that it must be the same switch as recited in limitation [2.a].

The Petition fails to show that the use of the same switch would be obvious in light of the argument that a POSITA would combine Backhaus and Winbladh to obtain savings based on local call rates. The Petition never articulates how this combination would actually achieve savings if the endpoints of a call leg (user device to switch) are fixed, which they would be if the same switch is used. Ex. 2010, ¶¶ 122-124. A POSITA would understand the only way to actually obtain cost savings by connecting “at a local-call rate” is to connect to a *different switch*.

Id. Thus, a POSITA would understand the combination is either different from the claims—because it involves cost savings by having the user reconnect to a different, local switch—or that there is no reason to make the combination—because if the same switch is used, then there will not be cost savings. *Id.* Either way, the Petition fails to show that the use of the same switch for receiving the incoming call from the third-party and for the handset connecting via the bridge number is obvious, and it is not.

E. Ground 2: Backhaus and Winbladh do not render obvious limitation [2.b]’s requirement that the pre-call information allow “the handset to accept the incoming call ... by making a first bridge call using the first bridge telephone number to connect the incoming call to the telephone handset via the switch.”

The claim expressly requires the “handset” can accept the call by “making a first bridge call using the first bridge telephone number” to connect to “the incoming call” (i.e., the same incoming call previously received in step [2.a]).

Backhaus expressly teaches that it connects an incoming call by the SLS platform *server* making a call to the subscriber:

the SLS platform 115 may proceed to establish the second half of the call—the call from the SLS platform 115 to the subscriber’s TD 110. The SLS platform 115 places the call to the primary number 1.408.544.1212 that points to subscriber TD 110 per its primary service provider 201.

Ex. 1005, [0054]. This is exactly the opposite of the claim limitation, which require the *handset* use the bridge number to connect. The Petition does not appear to contend that Backhaus ever discloses the handset making a call using the bridge number to connect an incoming call, and it does not. Ex. 2010, ¶ 127.

Winbladh likewise fails to teach this limitation. Ex. 2010, ¶¶ 128-132. As the Petition concedes, Winbladh “includes a host resource 110 that routes a call from terminal A to terminal B based on a combination of caller identity and ‘a first common telephone number α_n ’ and sets up a bi-directional primary connection between the terminals via the first and second legs L1 and L2.” Petition at 47. Thus, a POSITA would understand that in Winbladh it is the “host resource 110” that actually connects the incoming call. The Petition contends that Winbladh then receives a “termination request,” “disconnects” the second leg, and re-establishes a connection if a return call is received within a time period. Petition at 48-49. But the claims do not relate to reconnecting to a previously-terminated call. The claims recite that the handset can “accept the incoming call” using the bridge number. A POSITA would understand that the re-connection process in Winbladh is not “accept[ing] the incoming call” because the call had already been accepted and previously connected (and thus, is no longer “incoming”) before being terminated. Ex. 2010, ¶ 129. In fact, Winbladh itself is consistent with this understanding because Winbladh describes “accepting” a call as relating to the initial setup of a

call by the host resources. *See, e.g.*, Ex. 1020, [0011] (“the host resources is adapted to set up a bi-directional primary connection between the first terminal and the second terminal after having routed said call provided that a call-*accept* message is generated by the second terminal”), [0014] (again referring to the “call-accept message”), [0054] (“Upon acceptance of the call (i.e. reception of a call-accept message ...”). By contrast, Winbladh describes reconnecting at a local rate as “reestablish[ing]” the connection. *Id.*, [0056]. A POSITA would therefore understand, based on Winbladh’s own teachings, that Winbladh does not teach “accepting” an “incoming” call using a bridge number, but only using a special number to reestablish connection to a previously terminated (and thus no longer “incoming”) call. Ex. 2010, ¶¶ 130-132. But this is not the requirement recited in the claims, and thus Winbladh fails to disclose this limitation.

The Petition therefore fails to show that Backhaus and Winbladh render obvious limitation [2.b], and thus Ground 2 fails to show obviousness of any claim.

F. Ground 2: Backhaus and Winbladh do not render obvious claims 3, 4, or 6-11.

Claims 3, 4, and 6-11 depend (ultimately) on claim 2 and thus incorporate all of claim 2’s requirements. Because Backhaus and Winbladh do not render obvious claim 2, they cannot render obvious claims 3, 4, or 6-11.

G. Ground 3 fails for the same reasons as Ground 2.

Ground 3 relates solely to claim 5, which depends from claim 2. *See* Petition at 74-76. The Petition does not allege that any aspect of this three-reference combination is relevant to claim 2. *Id.* Thus, Ground 3 fails for the same reason Ground 2 failed to render obvious claim 2.

H. Grounds 4-6 fail for the same reason as Grounds 1-3.

Grounds 4, 5, and 6 correspond to Grounds 1, 2, and 3, respectively. For these Grounds, the Petition relies on Taylor in relation to the “switch” recited in various claim limitations. *See* Petition at 76-79. The Petition does not contend that any disclosure in Taylor is relevant to the disputed limitations of claims 1 and 2 discussed above. *Id.* Thus, Grounds 4, 5, and 6 fail for the same reasons that Grounds 1, 2, and 3 fail, respectively: the prior art fails to render obvious either claims 1 or 2 (upon which all other challenged claims depend).

I. The Petition’s conclusory expert declaration should be disregarded.

The expert declaration submitted with the Petition is virtually identical to the Petition, highly conclusory, internally contradictory, and the expert could not explain his opinions at deposition. The Board should therefore disregard this conclusory opinion. *See Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9 at 15 (PTAB Aug. 24, 2022) (precedential) (“We have reviewed this excerpt from Dr. Jones’ declaration and note that it merely repeats, verbatim, the conclusory

assertion for which it is offered to support. ... Thus, the cited declaration testimony is conclusory and unsupported, adds little to the conclusory assertion for which it is offered to support, and is entitled to little weight.”).

The declaration does not contain any statement of the legal standards the expert understood or was applying, such as standards relating to defining the person of ordinary skill in the art, anticipation, or obviousness. The expert could not identify a single standard that he applied in his analysis, and worse, Petitioner’s counsel gave plainly improper privilege cautions in an apparent attempt to hide whatever standards the expert was given and applied in his declaration:

Q. Were you given any legal standards that you considered or applied in your analysis?

MR. HERR: I would like to launch a little caution here. I caution the witness not to answer the question to the extent that the answer would reveal any attorney/client privileged communications.

Otherwise you may answer.

THE WITNESS: So, my declaration is my analysis how the prior art discloses certain teachings.

Ex. 2009, at 9:1-11; *see also id.* at 14:5-17:6 (Dr. Lin repeatedly failing to answer whether he relied on any standards given by Petitioner’s counsel in performing his analysis and Petitioner’s counsel repeatedly cautioning the witness under privilege grounds). Petitioner’s counsel conceded that instructions from counsel “regarding

the standards for invalidity that he relied on in his declaration” are not privileged (*id.* at 23:6-11), but repeatedly gave improper cautions to questions that were expressly limited to asking about instructions from Petitioner’s counsel that he relied on. After extensive questioning, the witness resorted to claiming he could not recall whether Petitioner gave him instructions on any legal principle. *Id.* at 25:3-10 (re defining level of skill), 26:9-22 (re applying level of skill), 33:11-34:1 (re anticipation), 34:3-11 (re obviousness). Thus, the standards that formed the basis of Dr. Lin’s opinion are a complete mystery, rendering his declaration conclusory and unreliable. When combined with the near-identical nature of the Petition and the declaration, and Petitioner’s counsel’s improper privilege cautions, this strongly suggests that the Petition is nothing more than an attempt by Petitioner to give its counsel’s legal argument the veneer of expert opinion so that they can qualify as factual evidence rather than unsupported argument. The Board should not endorse such sleight of hand and should instead disregard the declaration entirely.

Furthermore, the declaration fails to explain critical points and contains contradictory positions. As noted above, the declaration fails to contain any explanation of the basis for the opinion that a “voice path” must be connected or else the communication is using a data channel. Ex. 1002, ¶ 69; Ex. 2009, at 75:4-76:3 (Dr. Lin failing to identify any basis and simply restating his conclusory

opinion). Worse, Dr. Lin directly contradicted himself (in the context of other petitions on related patents with the same specification by arguing that a virtually identical call leg is made over a voice channel). When confronted at deposition, Dr. Lin could not identify any material difference between these two call legs that justified him reaching diametrically opposed conclusions.

Q. Sure. So, I'm asking about the two different calls you rely on. First in Paragraph 68, what you call the first way.

And then the call from the subscriber's device to the relationship number that you are relying on for Limitation 1D.

And, both of those calls are between a subscriber's terminal device and the SLS platform. They both have a calling party field. They are both received before the voice path is connected.

So, why do you conclude that the call in Paragraph 68 is a voice -- or is a data channel but the call in Limitation 1D is a voice channel?

THE WITNESS: So, going back to 1B, the limitation just requires transferring information that indicates an access telephone number to the mobile device by data channel.

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, at 182:6-183:20. This long rambling answer does not identify one single relevant difference between the two scenarios. This inability to explain his opinions confirms that there is no basis for his conclusory opinion and the Board should simply disregard Dr. Lin's declaration.

Dr. Lin also repeatedly could not answer whether a call is using a voice channel when the phone is ringing before it is picked up. Instead, he tried to redirect to his opinions about Backhaus:³

³ Although some of the deposition testimony cited in this section references the '585 patent (which is challenged in Case No. IPR2023-00357), the '105 patent is related to the '585 patent and shares the same specification. Additionally, Dr. Lin offered substantially similar, if not identical, invalidity opinions for both patents, confirming this testimony remains relevant to this proceeding.

Q. In a conventional landline to landline call, would a person of ordinary skill in the art consider the call to be using a voice channel when it is ringing before the call has been picked up or answered?

THE WITNESS: Yeah, so I think the teaching that I have applied doesn't bring that into question.

Again, my analysis of Limitation 1B, for example in the '585, I describe how information that is sent before the voice path is connected, Backhaus teaches that to be sent over a data channel.

Ex. 2009, at 54:3-16; *see also id.* at 50:9-54:2, 54:17-57:5 (repeatedly declining to answer this question). But the understanding of a POSITA is a critical issue in this proceeding, particularly when Dr. Lin offers opinions based on a supposed understanding of a POSITA that depends on whether a voice path is connected. Dr. Lin's inability to answer questions about how a POSITA would understand the concept of a channel in the context of a conventional phone call confirms that he cannot explain the basis for his conclusory opinions (or worse, that these conclusory opinions are not based on expert technical knowledge but instead based on hindsight and using the claims to identify whatever Petitioner needs to show invalidity). The Board should disregard this declaration.

Dr. Lin also refused to answer questions about whether conventional caller ID is transmitted over a voice channel or data channel:

Q. I am asking about call routing as is known in the art. Not specific to Backhaus's SLS platform, but just a general phone call.

When the CLID is transmitted, is that using a voice channel or a data channel or something else?

THE WITNESS: So, again, in my analysis of 1B, I explain how Backhaus teaches that limitation or discloses that limitation.

And I would be happy to describe my opinion there.

Ex. 2009, at 60:6-19. He further claimed he could not answer the question because he has “not performed that analysis.” *Id.* at 63:10-21. But Dr. Lin should have analyzed the difference between a voice and data channel *before* offering the opinion that a channel was defined in a particular way. And of course, considering conventional technology in the field is part of what a POSITA would do. That Dr. Lin failed to do so confirms that he did not apply the correct legal standards and simply signed on to conclusory opinions that lacked support.

Dr. Lin also repeatedly refused to answer questions about whether calls were using a voice channel at the moment they were received by the platform in Backhaus. *See* Ex. 2009, at 67:3-73:19. Instead, he tried to deflect by answering about *different* time periods:

Q. I'm not talking about things that can happen after the call is received. Just at the one moment where the call

is very first received by the SLS platform, at that moment, is it being received on a voice channel?

THE WITNESS: So again, the call itself, I think the call itself, there is certainly, *once the voice path is established* is certainly over the voice channel.

But in the setup of that call and so forth, I think the information being exchanged is not voice.

Ex. 2009, at 73:20-74:12 (emphasis added). That he refused to answer this question and tried to instead talk about the different time period “once the voice path is established” confirms that he could not defend or support his opinions regarding the “channel” term.

Dr. Lin similarly refused to answer questions about whether calls described in the specification were made over a voice channel at a particular moment in time. The specification teaches the “the handset application may automatically cause the handset 340 to call the bridge telephone number in step 422 over a voice channel.” Ex. 1001, at 6:62-65. The ’105 patent is unambiguous that the voice path between the two ends of the call is not connected until later step 424 where the two call legs are bridged. *Id.* at 7:2-6. Despite this clear teaching, Dr. Lin repeatedly refused to confirm the call was made before the voice path was connected. *See* Ex. 2009, at 81:14-93:22. Instead, he contorted the teaching of the patent, claiming that the plain language “over a voice channel” actually meant over something “that can act as a voice channel”:

Q. And that call in step 422 is before the voice path is connected by bridging the two calls in step 424. Correct?

A. Well, I think when it says over a channel, over a voice channel, I think it is talking about making a call over something that, that can act as a voice channel.

Id. at 87:14-20. He then ultimately claimed that in this call “the voice channel becomes active when the calls, when the call is fully established.” *Id.* at 92:4-18. He also claimed that voice channels can be “there” without carrying voice (contradicting the opinion that it is not a voice channel before the “voice path” is connected on both ends):

Q. And when you say when the call is fully established, you are talking about when the two legs are bridged in step 424, correct?

A. So, I think the voice channels are still there. The voice channel is still there. They are just not yet acting. They are just not yet carrying voice. They are just not acting as voice channels.

Ex. 2009, at 92:20-93:5. Dr. Lin then refused to identify the specific step number (of this example in the patent specification) where the handset began using a voice channel (*id.* at 97:18-104:10) until finally admitting that in his opinion, the voice channel was not used until step 424 (*id.* at 104:12-107:1). This directly contradicts the specification, which teaches that earlier step 422 is a call “over a voice

channel” Ex. 1001, at 6:62-65. Dr. Lin’s opinions are thus inconsistent with the patent, perhaps because he was never instructed to apply the ordinary meaning in light of the specification. *See, e.g., Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005) (“claims ‘must be read in view of the specification, of which they are a part’”).

Dr. Lin’s opinions about the “channel” term are also inconsistent with the patent in another way. When asked about an express statement in the specification identifying exemplary voice channels, Dr. Lin disagreed that those examples were voice channels:

Q. Okay. Turn to the ’585 patent, which is, for the record, that is Exhibit 1001 in Petition Number 357.

...

Q. Column 1, Lines 62 to 64.

...

Q. Yes. Okay. And here the patent references, “Using a voice channel provided in accordance with a voice channel protocol, e.g., in accordance with CDMA or GSM, 3G, 4G, LTE or like future protocol channel standards.”

Do you see that?

A. Yes.

Q. And so you agree that in the context of the patents, CDMA, GSM, 3G, 4G, and LTE are all examples of voice channels. Correct?

A. I don't think a person of ordinary skill in the art reading this would make that conclusion.

Ex. 2009, at 76:4-77:9. Dr. Lin's admission that his opinions are inconsistent with the patent's teaching confirms that his opinions are unreliable and should be stricken.

In sum, Dr. Lin's opinions, particularly relating to the disputed "channel" terms, are highly conclusory and he could not explain the basis of these opinions at his deposition. His declaration is a virtual copy of the Petition and does not provide a sufficient explanation of the basis of his opinions. Thus, "the cited declaration testimony is conclusory and unsupported, adds little to the conclusory assertion for which it is offered to support, and is entitled to little weight." *Xerox*, IPR2022-00624, Paper 9, at 15. The Board should therefore disregard Dr. Lin's declaration in its entirety.

VI. Conclusion

For at least the foregoing reasons, the Petition has failed to show that any claim is invalid, and the Board should issue a Final Written Decision finding that no claim has been shown invalid.

Dated: October 26, 2023

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CERTIFICATE OF COMPLIANCE

This patent owner response complies with the word count limits set forth in 37 C.F.R. § 42.24(a)(1)(i) & (b)(2), because this patent owner response contains 12,441 words, excluding the parts of the patent owner response exempted by 37 C.F.R. § 42.24(a)(1) and determined using the word count provided by Microsoft Word, which was used to prepare this patent owner response.

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that the foregoing PATENT OWNER FLYPSI, INC.'S PATENT OWNER RESPONSE and Exhibits 2008-2011 were served electronically via email on October 26, 2023, in their entirety on the following counsel of record:

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