

Filed: September 19, 2016

Filed on behalf of:

Patent Owner Voip-Pal.com Inc.

By: Kerry Taylor

John M. Carson

KNOBBE, MARTENS, OLSON & BEAR, LLP

2040 Main Street, 14<sup>th</sup> Floor

Irvine, CA 92614

Tel.: (858) 707-4000

Fax: (858) 707-4001

Email: BoxDigifonica@knobbe.com

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

**APPLE INC.**

Petitioner,

v.

**VOIP-PAL.COM, INC.,**

Patent Owner

---

Case No. IPR2016-01201  
U.S. Patent 8,542,815

---

**PATENT OWNER'S PRELIMINARY RESPONSE TO PETITION  
FOR *INTER PARTES* REVIEW**

## **TABLE OF CONTENTS**

	<b>Page No.</b>
I. INTRODUCTION .....	1
II. ARGUMENT.....	3
A. Introduction to Claimed Subject Matter.....	3
B. Petitioner’s two obviousness grounds are redundant.....	5
C. Chu ‘366 is not prior art under pre-AIA 35 U.S.C. 102(e).....	7
D. The Petition is flawed and inadequate .....	9
1. The claim charts fall well below the requirement to explain the grounds of unpatentability “with particularity” .....	9
E. Ground 1 fails because the combination of Chu ‘684 and Chu ‘366 does not disclose all claim elements and because the combination is not obvious.....	15
1. Chu ‘684 and Chu ‘366 are completely unrelated documents naming completely different inventors.....	15
2. Overview of Chu ‘684 .....	16
3. Overview of Chu ‘366 .....	17
4. The combination of Chu ‘684 and Chu ‘366 fails to render obvious “classifying the call” as recited in element [1d] .....	18
5. The combination of Chu ‘684 and Chu ‘366 fails to render obvious “locating a caller dialing profile” as recited in element [1b] .....	26

**TABLE OF CONTENTS**  
***(cont'd)***

	<b>Page No.</b>
6. Petitioner fails to articulate a proper reason to combine the references and overlooks reasons why the combination is undesirable.....	38
F. Ground 2 fails because the combination of Chu '684 and Chen does not disclose all claim elements and because the combination is not obvious.....	47
1. Overview of Chen .....	47
2. The combination of Chu '684 and Chen fails to render obvious "classifying the call" as recited in element [1d] .....	48
3. The combination of Chu '684 and Chen fails to render obvious "locating a caller dialing profile" as recited in element [1b] .....	52
4. Petitioner fails to articulate a proper reason to combine the references and overlooks that the combination is undesirable .....	59
III. CONCLUSION.....	65

## TABLE OF AUTHORITIES

	Page No(s).
<i>Apple Inc. v. Rensselaer Polytechnic Institute,</i> IPR2014-00077, Paper 14 (P.T.A.B. June 13, 2014) .....	15, 41, 61
<i>Cisco Sys., Inc. v. C-Cation Techs., LLC,</i> IPR2014-00454, Paper 12 (P.T.A.B. Aug. 29, 2014).....	15
<i>Eaton v. Evans,</i> 204 F.3d 1094 (Fed. Cir. 2000) .....	7
<i>Globespanvirata, Inc. v. Tex. Instruments, Inc.,</i> 2005 WL 3077915 (D. N.J. 2005) .....	14
<i>In re Gordon,</i> 733 F.2d 900 (Fed. Cir. 1984) .....	25, 51
<i>K-TEC, Inc. v. Vita-Mix Corp.,</i> 696 F.3d 1364 (Fed. Cir. 2012) .....	39
<i>KSR Int'l Co. v. Teleflex Inc.,</i> 550 U.S. 398 (2007)..... <i>passim</i>	
<i>Liberty Mutual Ins. Co. v. Progressive Casualty Ins. Co.,</i> CBM2012-00003, Paper 7 (Representative Order) (P.T.A.B. Oct. 25, 2012).....	7
<i>In re Magnum Oil Tools Int'l, Ltd.,</i> No. 2015-1300, 2016 WL 3974202 (Fed. Cir. July 25, 2016) .....	12, 13
<i>In re McLaughlin,</i> 443 F.2d 1392 (C.C.P.A. 1971) .....	46, 52, 64
<i>Mformation Techs., Inc. v. Research in Motion Ltd.,</i> 764 F.3d 1392 (Fed. Cir. 2014) .....	19
<i>Nautilus Hyosung Inc. v. Diebold Inc.,</i> IPR2016-00633, Paper 9 (P.T.A.B. Aug. 22, 2016).....	12, 13

**TABLE OF AUTHORITIES**  
**(cont'd)**

	<b>Page No(s).</b>
<i>Unified Patents Inc. v. William Grecia,</i> IPR2016-00789, Paper 8 (P.T.A.B. Sept. 9, 2016).....	39, 60
<b>OTHER AUTHORITIES</b>	
37 C.F.R. § 42.1 .....	6
37 C.F.R. § 42.6 .....	11, 14, 15, 41, 61
37 C.F.R. § 42.22 .....	9
37 C.F.R. § 42.65 .....	42, 62
37 C.F.R. § 42.104 .....	<i>passim</i>
37 C.F.R. § 42.107 .....	1
35 U.S.C. § 102.....	7, 8
35 U.S.C. § 103.....	2
35 U.S.C. § 312.....	<i>passim</i>
35 U.S.C. § 313.....	1
35 U.S.C. § 314.....	2
35 U.S.C. § 316.....	6
Fed. Reg. 77 (Aug. 14, 2012).....	14

**EXHIBIT LIST**

<b>Exhibit No.</b>	<b>Description</b>
2001	Comparison of Ground 1 and Ground 2 of Petition

Pursuant to 35 U.S.C. § 313, 37 C.F.R. § 42.107, and the Notice of Filing Date Accorded to Petition (Paper 3), dated **June 18, 2016**, Voip-Pal.com, Inc. (“Voip-Pal”) hereby timely submits this Preliminary Response to the Petition for *Inter Partes* Review of U.S. 8,542,815 (the ’815 Patent) (Paper 1) by Apple Inc. (“Apple”).

## I. INTRODUCTION

Digifonica, a real party-in-interest to this proceeding and wholly owned subsidiary of Patent Owner Voip-Pal, was founded in 2004 with the vision that the Internet would be the future of all forms of telecommunications. As a startup company, Digifonica did not have existing customers or legacy systems. Instead, Digifonica had the opportunity to start from a blank slate. Digifonica employed top professionals in the open-source software community. Three Ph.D.s with various engineering backgrounds held the top positions at the Company. Digifonica’s engineers developed an innovative software solution for routing communications, which by the mid-2000s it implemented in the four nodes spread across three geographically different regions. Digifonica also obtained patents on this technology, namely the ‘815 Patent, and continuation patent U.S. 9,179,005. The ‘815 Patent, obtained as part of Digifonica’s R&D efforts, is the subject of the present proceeding.

Petitioner challenges Claims 1, 7, 27, 28, 34, 54, 72, 73, 74, 92, 93 and 111 of the '815 Patent on two grounds:

1. Alleged obviousness under § 103(a) over U.S. Patent No. 7,486,684 to Chu et al. ("Chu '684") in view of U.S. Patent No. 8,036,366 to Chu ("Chu '366").
2. Alleged obviousness under § 103(a) over U.S. Patent No. 7,486,684 to Chu et al. ("Chu '684") in view of U.S. Patent Publication No. 2007/0064919 to Chen et al. ("Chen").

Petitioner also submitted a Declaration by declarant Henry H. Houh, Ph.D. Ex. 1006 ("Declaration").

As Voip-Pal explains below, Petitioner's arguments and assessments of the cited art fail to establish a reasonable likelihood that Petitioner would prevail as to its asserted grounds, as required under 35 U.S.C. § 314(a). Accordingly, institution of this proceeding should be denied as to both asserted grounds.

Petitioner's two grounds fail to provide all claim elements. For example, Chu '684 teaches that "classifying" is performed before any "locating," but the "classifying" as recited in step [1d] is based on information determined in the preceding "locating" step [1b]. Chu '684 also does not disclose classifying the call when the "match" meets criteria as recited in step [1d]. Furthermore, the proposed combinations would render the primary reference, Chu '684, inoperative or unsuitable for its intended purpose. Most of Petitioner's obviousness arguments

are premised on a fundamental misinterpretation of the term “subscriber” in Chu ‘684 as referring to an *individual* rather than to an *enterprise*. This error undercuts Petitioner’s assertions that the combined references teach certain claim elements. In particular, this distortion of Chu ‘684 has led to the Petition incorrectly asserting that the “dial plan” of an *enterprise* subscriber is a disclosure of an individual caller’s “dialing profile.” Petitioner also fails to articulate any plausible reason to combine the cited references, and any motivation to do so is further undermined by the misinterpretation of Chu ‘684.

## II. ARGUMENT

### A. Introduction to Claimed Subject Matter

Petitioner directed its analysis almost entirely to Claim 1, which recites:

1. [1p] A process for operating a call routing controller to facilitate communication between callers and callees in a system comprising a plurality of nodes with which callers and callees are associated, the process comprising:

[1a] in response to initiation of a call by a calling subscriber, receiving a caller identifier and a callee identifier;

[1b] locating a caller dialing profile comprising a username associated with the caller and a plurality of calling attributes associated with the caller;

[1c] determining a match when at least one of said calling attributes matches at least a portion of said callee identifier;

[1d] classifying the call as a public network call when said match meets public network classification criteria and classifying the call as a private network call when said match meets private network classification criteria;

[1e] when the call is classified as a private network call, producing a private network routing message for receipt by a call controller, said private network routing message identifying an address, on the private network, associated with the callee;

[1f] when the call is classified as a public network call, producing a public network routing message for receipt by the call controller, said public network routing message identifying a gateway to the public network.

By way of technology background, a public switched telephone network (PSTN) uses traditional telephone technology including dedicated telephone lines from a service provider to transmit calls over a circuit-switched network. Voice over Internet protocol (VoIP) is used for the delivery of digital voice communications and multimedia sessions over Internet protocol (IP) networks,

such as the Internet. Digital information delivered over IP networks is packetized, and transmission occurs as IP packets over a packet-switched network.

The method of Claim 1 is directed to telecommunications call routing. The routing method allows a call to be classified and routed as a “public network call” or as a “private network call” based on whether a match of at least one calling attribute and at least a portion of the callee identifier, meets certain network criteria. For example, when a caller initiates a call to a callee the call may be routed to, e.g., a traditional circuit switched network such as the PSTN, or to, e.g., a packet switched network such as the Internet, based on a calling attribute *matching* at least a portion of callee information. The method of Claim 1 does not evaluate the callee identifier in isolation, but matches the callee identifier based on attributes in the caller’s dialing profile. Each caller has a dialing profile including a plurality of calling attributes, at least one caller attribute of which is matched with at least a portion of a callee identifier, e.g., a callee phone number, before the system makes a network classification decision, e.g., PSTN or Internet routing.

**B. Petitioner’s two obviousness grounds are redundant**

The two above obviousness grounds asserted in the Petition are, by Petitioner’s own words, redundant.

Petitioner expressly admits that Ground 1 (Chu ‘684 & Chu ‘366) and Ground 2 (Chu ‘684 & Chen) are redundant: “the substance between the two

Apple Inc v. Voip-Pal

secondary references is largely identical.” Petition at 37. Petitioner explains that Ground 2 is presented “to account for the possibility that the Patent Owner may attempt to ‘swear behind’ the Chu ’366 reference” while Chen predates the ‘815 Patent’s priority date “by a significant amount.” *Id.*

Patent Owner agrees with Petitioner’s admission of the redundancy of Grounds 1 and 2. Attached as Exhibit 2001 is a comparison of the arguments presented in Ground 1 to the arguments presented in Ground 2. As is clear from Exhibit 2001, Petitioner relies on identical citations to Chu ‘684 in both grounds, Petitioner’s use of the secondary references is nearly identical, and Petitioner’s arguments in these two Grounds are essentially verbatim.

Petitioner fails to explain how Ground 1 is distinct from Ground 2, other than the fact that Patent Owner may antedate Chu ‘366 (Ground 1). As discussed *infra*, Patent Owner reduced the claimed invention to practice with working source code well before Chu ‘366’s effective date. Accordingly, Patent Owner intends to antedate Chu ‘366 if trial is instituted on Ground 1.

The Statute and accompanying Rules provide that administration of IPRs should “secure the just, speedy, and inexpensive resolution of every proceeding.” 37 C.F.R. § 42.1(b); 35 U.S.C. § 316(b). Institution on Ground 1, which Petitioner admits is “largely identical” to Ground 2, would run contrary to these goals.

*Liberty Mutual Ins. Co. v. Progressive Casualty Ins. Co.*, CBM2012-00003, Paper 7 (Representative Order) at 2 (P.T.A.B. Oct. 25, 2012).

Accordingly, by Petitioner's own admission, the two Grounds presented are redundant in substance. Since Petitioner asserts Ground 2 is superior by virtue of Chen's earlier effective date, Petitioner's own admission dictates that Ground 1 should be denied as redundant to Ground 2.

**C. Chu '366 is not prior art under pre-AIA 35 U.S.C. 102(e)**

In Ground 1, Petitioner asserts that "U.S. Patent No. 8,036,366 to Chu ("Chu '366") was filed on Aug. 4, 2006 and therefore qualifies as prior art with regard to the '815 Patent under 35 U.S.C. §102(e)." Petition at 12. But Chu '366 can only be prior art if it is "a patent granted on an application for patent by another filed in the United States **before the invention by the applicant** for patent . . ." 35 U.S.C. § 102(e) (emphasis added). Chu '366 was not filed **before the invention by the inventors** of the '815 Patent.

Prior invention can be established by an actual reduction to practice before the priority date. *Eaton v. Evans*, 204 F.3d 1094, 1097 (Fed. Cir. 2000). The inventors of the '815 Patent reduced the claimed subject matter to practice before Chu '366's filing date of August 4, 2006. The '815 Patent inventors started a company in 2004 and subsequently developed a system that allowed calls to be placed between two IP phones and between an IP phone and traditional phones.

The system developed by the inventors included four test “supernodes” that were operating before August 4, 2006, one in London, UK, one in Dangaard, Denmark, and two in the Vancouver, Canada area.

One of the components of the system developed by the inventors was a software and hardware platform that received information related to the initiation of a call and responded with call routing messages. This platform implemented a call routing controller, which corresponds to the Routing Controller 16 illustrated in Fig. 1 of the ‘815 Patent and discussed in the specification. This platform was engineered, developed, tested and validated before August 4, 2006.

All of the claims of the ‘815 Patent challenged in the Petition were practiced by the system that included this call routing platform that was operating before August 4, 2006. Thus, the inventor’s actual reduction to practice preceded the filing date of Chu ‘366 of August 4, 2006. Accordingly, Chu ‘366 is not prior art under 35 U.S.C. § 102(e).

If Ground 1 is instituted, Patent Owner intends to submit evidence such as computer source code, design documents and corroborating communications establishing that well before the filing date of Chu ‘366, the inventors of the ‘815 Patent reduced to practice the inventions of all of the challenged claims.

**D. The Petition is flawed and inadequate**

Petitioner has the burden of explaining “with particularity” the specific evidence that allegedly supports each of the petition’s challenges of the claims. 35 U.S.C. § 312(a)(3). A petition must identify “[h]ow the construed claim is unpatentable” and “must specify where each element of the claim is found in the prior art patents or printed publications relied upon . . . .” 37 C.F.R. § 42.104(b)(4). The petition must also include a “full statement of the reasons for the relief requested, including a detailed explanation of the significance of the evidence.” 37 C.F.R. § 42.22(a)(2).

As discussed below, only the Petition’s claim charts address the claim language and attempt to link the claim language to the cited references to explain “[h]ow the construed claim is unpatentable,” but those explanations are terse and insufficient.

The failures of the Petition are not inconsequential. As explained in subsequent sections *infra*, these shortcomings of the Petition and Declaration belie the insufficiencies of the references to render the claims unpatentable.

**1. The claim charts fall well below the requirement to explain the grounds of unpatentability “with particularity”**

The entirety of Petitioner’s attempt to link each element of Claim 1 to the teachings of the cited references is found in the claim charts. Patent Owner understands that under the present Rules of practice, it is not improper to include

arguments in the claim charts. However, the present Rules cannot be read in a manner that excuses Petitioner from meeting their burden of providing a meaningful explanation with particularity as to the grounds for challenging each claim.

The Petition's claim charts fail to carry Petitioner's burden.

**a. The Claim Charts Do Not Explain How The References Teach All Claim Elements**

As discussed in detail below at section II(E)(5)(a), Petitioner has mistakenly interpreted Chu '684's "subscriber" as being the "caller" recited in Claim 1, part b. Petition at 21-22, 43-44. Chu '684's "subscriber" is an enterprise or a corporation, not an individual user such as the "caller" of element [1b]. *Infra* at II(E)(5)(a). At a minimum, Petitioner was required to explain "with particularity" how the evidence supports each of the Petitioner's challenge of the claims (35 U.S.C. § 312(a)(3)), including explaining "where each element of the claim is found in the prior art patents or printed publications relied upon . . ." 37 C.F.R. § 42.104(b)(4). The Petition does not attempt to explain how Chu '684's "subscriber" is the "caller" recited in [1b].

Instead, the Petition incorporates by reference its Declarant's explanation. Petition at 22, 43 (citing Ex. 1006, ¶ 45). Even a cursory review of ¶ 45 shows that attempting to link Chu '684's "subscriber" to the "caller" recited in [1b] is a contorted path requiring inferences cobbled from multiple distinct portions of Chu

‘684 as well as an invocation of inherency. Ex. 1006, ¶ 45. Thus, Petitioner’s own Declarant put Petitioner on notice that linking Chu ‘684’s “subscriber” to the “caller” in [1b] was non-trivial and required substantial explanation. Yet, instead of complying with the requirements of 37 C.F.R. § 42.104(b)(4) to explain how element [1b] is found in Chu ‘684, the Petition merely cites to the Declaration and summarizes the Declarant’s explanation in a parenthetical. Petition at 22, 44. Absent this improper incorporation by reference (*see* 37 C.F.R. § 42.6(a)(3)), the Petition fails the statutory requirement to explain “with particularity” how the evidence supports each of the Petitioner’s challenge of the claims. 35 U.S.C. § 312(a)(3). And even if the Declarant’s testimony is wholesale incorporated by reference, Chu ‘684’s disclosure still does not meet the requirements of claim element [1b]. *See infra* at II(E)(5).

**b. The Claim Charts Do Not Provide Even *De Minimis* Analysis of Claims 27, 28, 34, 54, 73, 74, 92, 93 and 111**

Even more egregious than the shortcomings of the claim chart in discussing Claim 1, the claim chart’s explanation for nearly all other claims is essentially nonexistent. The Petition asserts that 6 independent claims and 12 total claims are obvious. These various claims are directed to different concepts using different language. Yet the claim chart nearly exclusively incorporates by reference its analysis of Claim 1 for the other claims without addressing the subject matter encompassed by those claims or the language used in those claims to explain how

the analysis for Claim 1 can be identically applied to render those claims obvious.

Four of the five other independent claims (Claims 27, 54, 74 and 93) are attacked by incorporation by reference to the analysis of Claim 1 without explanation. And the fifth independent claim (Claim 28) is attacked solely by incorporation by reference to the analysis of the Declarant, without citation to the text of the asserted references.

Regarding the claim chart's attack on independent Claims 27, 54, 74 and 93 (and also dependent Claim 92) by mere reference to the analysis of Claim 1, the Board has held that such practice is insufficient to carry Petitioner's burden: "As the Federal Circuit has made clear, the Board cannot rely on conclusory statements by Petitioner that the same analysis applies without further explanation; rather, Petitioner must present 'particularized arguments explaining why its arguments . . . would be cross-applicable.' . . . Thus, in this case in light of the differences in the claim language, Petitioner's conclusory statements implying that the same analysis for claim 1 also applies to independent claim 17 do not satisfy Petitioner's burden to demonstrate obviousness." *Nautilus Hyosung Inc. v. Diebold Inc.*, IPR2016-00633, Paper 9 at 32 (P.T.A.B. Aug. 22, 2016) (*citing In re Magnum Oil Tools Int'l, Ltd.*, No. 2015-1300, 2016 WL 3974202, at \*9 (Fed. Cir. July 25, 2016)) (internal citations omitted).

The present Petition is even more deficient than the petition discussed in *Nautilus*, because the present Petition doesn't even contain "conclusory statements implying that the same analysis for claim 1 also applies" to the other claims. Instead, the entirety of the claim chart's assertion of obviousness of Claims 27, 28, 54, 74, 92 and 93 consists of incorporation by reference to the analysis of other claims. There is no consideration of claim language differences or claim constructions, and no explanation why these arguments are cross-applicable. As the Board in *Nautilus* held, such conclusory analysis is insufficient. *Magnum Oil*, 2016 WL 3974202 at \*9. Thus, at a minimum, the Petition fails for these claims in which Petitioner chose to do no analysis beyond a simple incorporation by reference.

For those claims not attacked by mere reference to Claim 1, the attack is solely by incorporation by reference to the analysis of the Declarant, without citation to the asserted references themselves. In particular, the claim charts attack Claims 28, 34, 73 and 111 by citing to one or more paragraphs in the Houh Declaration. The claim charts allude to the references generally, but without quoting teachings of the references and without identifying what text of the references is being relied upon. This is a fundamental failure of the Petition to explain "with particularity" how the evidence supports each of the Petitioner's challenge of the claims (35 U.S.C. § 312(a)(3)) and to identify "where each

element of the claim is found in the prior art patents or printed publications relied upon . . . .” 37 C.F.R. § 42.104(b)(4).

Instead, the Petition relies wholesale on the Declarant’s explanation of how the evidence supports Petitioner’s challenge. But use of a Declaration to comply with statutory requirements of a Petition far oversteps the bounds limiting incorporation by reference in these proceedings. 37 C.F.R. § 42.6(a)(3). The PTAB has consistently warned parties to avoid such improper incorporation by reference:

The prohibition against incorporation by reference minimizes the chance that an argument would be overlooked and eliminates abuses that arise from incorporation and combination. . . . *Globespanvirata, Inc. v. Tex. Instruments, Inc.*, 2005 WL 3077915, \* 1 (D. N.J. 2005) (Defendants provided cursory statements in motion and *sought to make its case through incorporation of expert declaration and a claim chart*. Incorporation by reference of argument not in motion was held to be a violation of local rules governing page limitations and was not permitted by the court) . . . .

Fed. Reg. 77 at 48617 (Aug. 14, 2012).

In fact, Apple, when previously acting as Petitioner, was specifically warned that information from a supporting declaration cannot be incorporated by reference:

*We decline to consider information presented in a supporting declaration*, but not discussed in a petition, because, among other reasons, doing so would encourage the use of declarations to circumvent the page limits that apply to petitions. Along those lines, our rules prohibit arguments made in a supporting document from being incorporated by reference into a petition. See 37 C.F.R. § 42.6(a)(3).

*Apple Inc. v. Rensselaer Polytechnic Institute*, IPR2014-00077, Paper 14 at 5 (P.T.A.B. June 13, 2014). *See also Cisco Sys., Inc. v. C-Cation Techs., LLC*, IPR2014-00454, Paper 12 at 9-10 (P.T.A.B. Aug. 29, 2014).

Incorporation by reference in claim charts cannot serve as a substitute for complying with the statutory requirement of the petition itself to explain “with particularity” how the evidence supports each of the Petitioner’s challenge of the claims under 35 U.S.C. § 312(a)(3). As such, the claim charts fail to provide a reasoned basis for the unpatentability of Claims 28, 34, 73 and 111.

**E. Ground 1 fails because the combination of Chu ‘684 and Chu ‘366 does not disclose all claim elements and because the combination is not obvious**

**1. Chu ‘684 and Chu ‘366 are completely unrelated documents naming completely different inventors**

While the first named inventors of the Chu ‘684 and Chu ‘366 patents share the same surname, they are two distinct individuals who worked for different companies in different parts of the country. Chu ‘684 names inventor *Thomas P.*

Chu of Englishtown, New Jersey, and identifies Alcatel-Lucent as the assignee.

Chu ‘366 names inventor *Lon-Chan* Chu of Redmond, WA, and identifies the Microsoft Corporation as the assignee. Thus, despite both being labeled “Chu,” Chu ‘684 and Chu ‘366 are unrelated documents by unrelated individuals working at separate locations for unrelated entities.

## **2. Overview of Chu ‘684**

Chu ‘684 discloses a network architecture for providing a voice over IP virtual private network (VoIP VPN) service to an organization (“subscriber”) having multiple IP-PBXs, and a method of connecting all of the IP-PBXs of the organization into a single logical network. *See* Chu ‘684 at 1:44-46, 3:52-56. The organization typically “subscribe[s] to many services” (e.g., both data and voice services) from the same service provider (SP). *Id.* at 5:3-6. FIG. 2 illustrates a subscribing customer’s IP-PBX communication system with multiple phones and a server 110 located at the subscribing customer’s premises 105 and configured to communicate with a soft-switch 220 and packet switch 210 located at the SP’s central office 205:

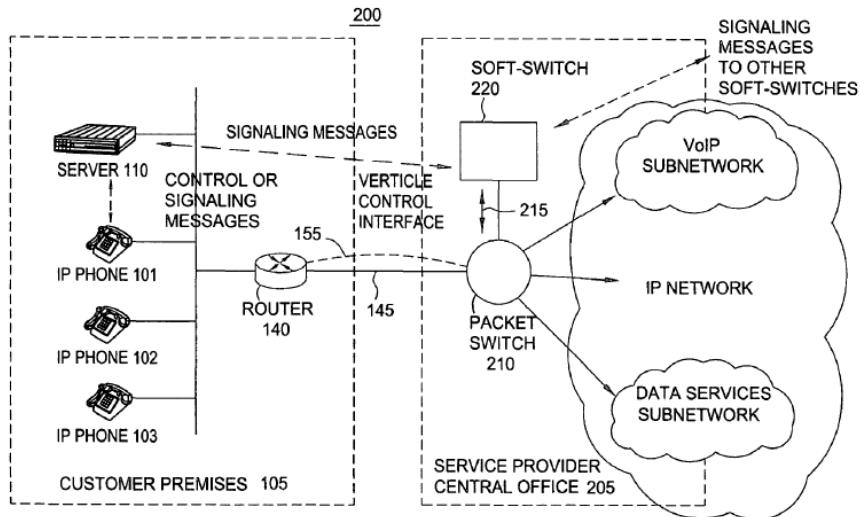


FIG. 2

While many organizations, each with multiple locations, may share the SP's network infrastructure (e.g., soft-switch 220 and packet switch 210), the system of Chu '684 allows each organization to have its own "dial plan" and allows calls to be routed internally to the IP-PBX, to a different IP-PBX, and to the public switched telephone network (PSTN). *See Chu '684 at 12:60-67 and 8:65-9:1.*

### **3. Overview of Chu '366**

Chu '366 discloses a method of formatting a dialed telephone number according to the E.164 standard based on a "call origin location profile." *See Chu '366 at 1:62-2:14.* A dialed number in Chu '366 can be formatted into the E.164 format based on the PSTN dialing conventions of a variety of geographic locations. *See Chu '366 at 2:16-28.* Chu '366's method allows travelling users, initiating VoIP telephone calls from different locations, to selectively adjust their dialing patterns to the location from which they are dialing. *See Chu '366 at 5:3-14.*

**4. The combination of Chu ‘684 and Chu ‘366 fails to render obvious “classifying the call” as recited in element [1d]**

Claim 1 recites, *inter alia*, [1d] “classifying the call as a public network call when said match meets public network classification criteria and classifying the call as a private network call when said match meets private network classification criteria.” The combination of Chu ‘684 and Chu ‘366 fails to render obvious the “classifying” recited in this claim element.

Petitioner argues that “Chu ‘684 determines whether the callee is a private packet network subscriber or a public PSTN customer (i.e., whether the call “meets public network classification criteria” or “private network classification criteria”).” Petition at 23. Petitioner cites only to a brief statement at 8:65-9:1 of Chu ‘684 in support of this argument. No other portion of the Petition provides further explanation or citation to any of the asserted references in support of the references teaching “classifying” as recited in element [1d].

While Chu ‘684 discloses “determin[ing] whether a call is local, to another on-net phone, or to a phone that is on the PSTN,” this decision does not involve classifying the call when the “match” meets criteria as recited in element [1d].

**a. Chu ‘684 fails to disclose “[1d] classifying the call... when said match meets... network classification criteria”**

“[C]lassifying” in step [1d] is based on “said match” which is a reference to “match” in step [1c], which recites, *inter alia*, “determining a match when at least

one of said calling attributes matches ....” Thus, “classifying” in step [1d] occurs after “determining a match” in step [1c]. The “classifying” in step [1d] must also occur after the “locating” in step [1b] because “calling attributes” as recited in step [1c] finds antecedent basis in step [1b]. “[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, or the specification directly or implicitly requires’ an order of steps.” *Mformation Techs., Inc. v. Research in Motion Ltd.*, 764 F.3d 1392, 1398 (Fed. Cir. 2014) (citations omitted).

Petitioner identifies a feature of Chu ‘684 as corresponding to the step of “classifying” and another feature of Chu ‘684 as corresponding to the step of “locating.” But the “locating” step of Chu ‘684 occurs *after* Chu ‘684’s “classifying” step. Stated differently, Chu ‘684’s “classifying” step is distinct from the “classifying” step in claim [1d] because Chu ‘684’s “classifying” step is not based on the “match” recited in claim 1. Thus the features do not satisfy Claim 1.

Petitioner cites a single sentence of Chu ‘684 (8:65-9:1) as disclosing “classifying.” Petition at 23. This sentence is in Chu ‘684’s discussion of a determination made by the server *before* communicating with the soft-switch. Referring to the process depicted in FIG. 6, Chu ‘684 states:

At step 608, after receiving all the dialed digits from the phone 101, server 110 consults its dial plan to determine whether the call is local, to another on-net phone, or to a phone that is on the PSTN. In this

example, the call is to another on-net phone in another location. The server 110 then sends an SIP “invite” message to soft-switch 220 at the central office 205. [Chu ‘684 at 8:65-9:4, emphasis added]

Petitioner cites to Chu ‘684 at 4:59-63, 9:30-33, 12:60-66 and 3:56-64 as teaching the step of “locating.” Petition at 21-22. But “consult[ing] the dial plan for this subscriber,” cited in 9:30-33 as disclosing the step of “locating,” relates to a dial plan lookup that occurs *after* the soft-switch 220 has been contacted:

At step 610, upon receipt of the SIP “invite” message from the server 110, the soft-switch 220 consults the dial plan for this subscriber. The dial plan to use can be determined from the ID of the server 110.

[Chu ‘684 at 9:30-33; quote in claim chart of Petition for step [1b] omits “At step 610”; emphasis added]

See also steps 608 and 610 in FIG. 6 of Chu ‘684, which, according to Petitioner, correspond to the steps of “classifying” and “locating”, respectively:

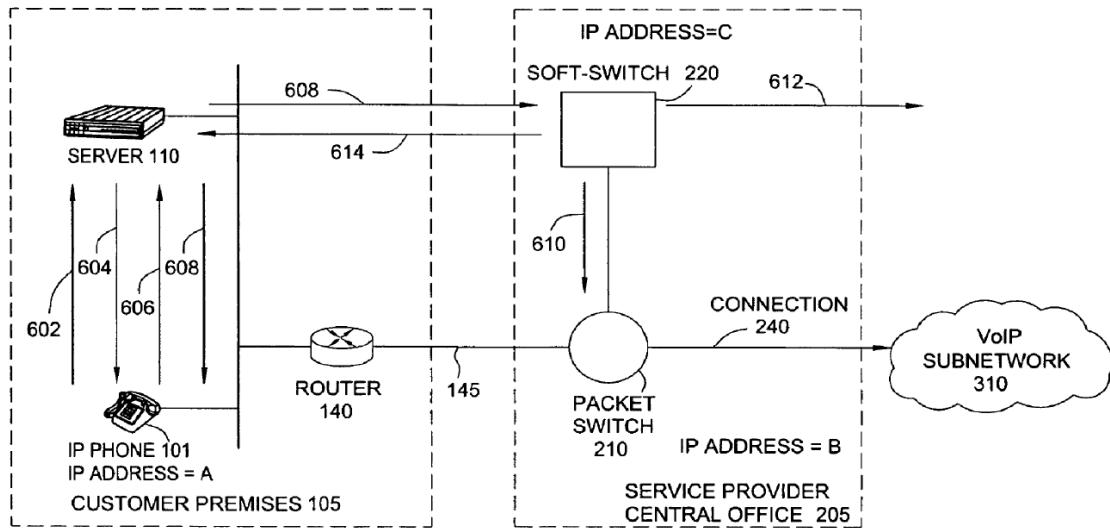


FIG. 6 200

The Petition relies on Chu '684's "classifying" step 608 of FIG. 6 for meeting claim step [1d]. But Chu '684's step 608 occurs *before* the "locating" step 610, which the Petition relies on for meeting claim step [1b]. That is, Chu '684 teaches that "classifying" step 608 is performed before any "locating" step. As discussed above, "classifying" as recited in step [1d] is based on information determined in the preceding "locating" step [1b]. Chu '684's "classifying" step 608 is not. Thus, Chu '684's "classifying" step 608 is distinct from "classifying" element [1d].

**b. Chu ‘366 fails to disclose “classifying the call” based on “network classification criteria” as recited in element [1d]**

Petitioner does not cite to any disclosure in Chu ‘366 in support of element [1d]. Indeed, Chu ‘366 fails to disclose “classifying the call” based on “network classification criteria” as recited in element [1d].

Chu ‘366 discloses call origin location profiles that are used to format dialed telephone numbers, but does not disclose any classification of calls according to network type. Chu ‘366 does not disclose *any* private network call option, let alone “private network classification criteria.<sup>1</sup>” All calls in Chu ‘366 are assumed to be destined for the PSTN. Therefore, Chu ‘366 does not disclose “public network classification criteria” as required by element [1d]. For these reasons, Chu ‘366 fails to disclose “classifying the call” as required by element [1d].

**c. Petitioner’s proposed combination of Chu ‘684 and Chu ‘366 not only fails to practice “classifying the call” as recited in element [1d], but would not work**

As established above, neither Chu ‘684 nor Chu ‘366 disclose “classifying the call” based on “network classification criteria” as recited in element [1d]. Petitioner does not cure these deficiencies in proposing that Chu ‘684 be combined with Chu ‘366 because Petitioner’s proposed combination not only fails to practice element [1d], but renders Chu ‘684 unsuitable for its intended purpose.

Petitioner groups together its claim chart analysis of elements [1c] and [1d] such that Chu ‘366 alone is relied upon to disclose element [1c] and Chu ‘684

Apple Inc v. Voip-Pal

alone is relied upon to disclose element [1d]. Petition at 23. Thus, Petitioner does not even assert that Chu ‘366 discloses element [1d] or that any proposed modification based on Chu ‘366 would be applicable to element [1d].

Petitioner specifically argues in its claim chart that the “reformatting” steps of Chu ‘366 would be combined with Chu ‘684 by inserting the “reformatting” *before* what has been identified as the step of “classifying” in element [1d]: “Once the callee identifier is reformatted, Chu ‘684 determines ...”. Petition at 23 (emphasis added). However, such a combination would fail to classify private network calls as required by element [1d]. Specifically, element [1d] recites, *inter alia*, “classifying the call as a private network call when said match meets private network classification criteria.” In contrast, the “match” of Chu ‘366 entails reformatting of a dialing string according to the E.164 standard. But this reformatting in Chu ‘366 is directed only to public telephone numbers, not private numbers.

Petitioner overlooks the fact that Chu ‘684 discloses the use of *private telephone numbers* from a “private numbering scheme” (or “private numbering plan”) for placing private network calls. This “private numbering plan” is distinct from, and works in parallel with, the “public E.164 number plan” used for placing calls using public telephone numbers. For example, Chu ‘684 includes information about “whether the number plan is the private numbering plan or the public E.164

number plan.” Chu ‘684 at 9:16-17 (emphasis added); *see also id.* at 16:50-54 (“dialed digits” may be a “private number from a private numbering scheme” *or* a “public telephone number”) and 13:8-9 (distinguishing between the “private telephone number” and “E.164” number of a particular IP phone).

Chu ‘684 thus discloses that private numbers follow a numbering scheme that is different from public numbers. There is no disclosure or suggestion in Chu ‘684 that a private telephone number would follow PSTN conventions such as using an “area code.” A skilled person would understand that the purpose of using a “private numbering scheme” within an organization is precisely to be free from the strictures of PSTN conventions.

Petitioner overlooks Chu ‘684’s private telephone number functionality, and therefore fails to address how private telephone numbers in Chu ‘684’s system would be affected by Petitioner’s proposed combination with Chu ‘366.

Petitioner’s proposal to insert Chu ‘366’s “reformatting” prior to Chu ‘684’s “classification” of a call would render Chu ‘684’s system unreliable. Petitioner’s combination would result in invalidly reformatting *private* telephone numbers (based on an organization’s internal “private numbering plan”) in the same manner as *public* telephone numbers (compatible with the public E.164 number plan) are reformatted in Chu ‘366. A reformatted private number would either be rejected by Chu ‘684’s classification method as invalid or interpreted incorrectly as a public

number or different private number than was intended. Thus, Petitioner’s proposed combination of Chu ‘684 and Chu ‘366 would undermine the “private numbering plan” calling functionality of the Chu ‘684 system or would render it inoperative. Consequently, Petitioner’s proposed modification to Chu ‘684 fails to meet the standard for a legal finding of obviousness. *In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984) (finding no suggestion or motivation to make a modification to the prior art invention that caused it to be unsatisfactory for its intended purpose).

While the ‘815 Patent discloses a mechanism for private network classification using a reformatted number (e.g., step 269 in Fig. 8B), there is no comparable disclosure in either Chu ‘684 or Chu ‘366. Chu ‘366 discloses formatting that is valid *only* for public switched telephone network calls and does not contemplate the possibility of a private network number or of routing over a private network. Chu ‘684 discloses private numbering as distinct from public numbering, but fails to disclose the use of reformatting in either case. Petitioner relies on impermissible hindsight (i.e., the Patent Owner’s disclosure in the ‘815 Patent) to combine together incompatible features from Chu ‘684 and Chu ‘366 because only knowledge of the ‘815 patent’s disclosure and Claim 1 itself would provide the guidance to combine these two distinct references in a manner that meets the “classifying” recited in element [1d].

Because Petitioner failed to appreciate that Chu ‘684 allows private network calls to be placed by dialing a private telephone number from a private numbering plan, the Petitioner’s proposed manner of combining Chu ‘366 and Chu ‘684 would render the Chu ‘684 system unsuitable for its intended purpose. Since neither Chu ‘684 nor Chu ‘366 individually disclose element [1d] and the combination also doesn’t lead to element [1d], Ground 1 cannot establish Claim 1 unpatentable.

**5. The combination of Chu ‘684 and Chu ‘366 fails to render obvious “locating a caller dialing profile” as recited in element [1b]**

Element [1b] recites: “locating a caller dialing profile comprising a username associated with the caller and a plurality of calling attributes associated with the caller.” The Petition fails to establish that Chu ‘684 discloses a *caller dialing profile* comprising a *username*, and indeed, has misinterpreted Chu ‘684 as disclosing a *user-specific* (rather than *enterprise-specific*) “dial plan”. The Petition further does not explain how to apply Chu ‘366’s teaching of a *user-specific* “call origin location profile” to Chu ‘684’s *enterprise-wide* “dial plan.”

**a. Petitioner fundamentally misinterprets the dial plans of Chu ‘684 as being *user-specific* instead of *enterprise-specific***

Petitioner asserts that Chu ‘684 teaches a *caller dialing profile* comprising a *username*. But Petitioner’s argument relies on a mischaracterization of Chu ‘684. Petitioner’s assertions about the nature of subscriber dial plans in Chu ‘684 are unsupported by any teaching in Chu ‘684 and contradict Chu ‘684’s clear

teachings. As explained below, including information such as E.164 telephone numbers within a dial plan is neither disclosed by Chu ‘684 nor desirable when the term “subscriber” in Chu ‘684 is properly understood.

i. **Petitioner misinterprets the word “subscriber” in Chu ‘684**

Petitioner’s arguments rely on the false premise that the term “subscriber” in Chu ‘684 refers to an individual phone user. However, Chu ‘684 uses the term “subscriber” to refer to an *enterprise* or *corporate entity* that controls one or more local IP-PBX systems, and not to an individual person. When Chu ‘684 refers to an individual, it uses the term “user.”

Chu ‘684 *never* states that a “*subscriber*” places or answers calls. Rather, all of Chu ‘684’s calling examples disclose that the “*user*” of an IP phone places or receives calls: the *user* “picks up the handset” (8:51-52), receives the dial tone (8:58-59), provides the “dialed digits” (8:60-63), is “alerted” of an incoming call (11:1-2), and “picks up” the phone (11:13-17). *Id.*

In contrast, Chu ‘684 explains that a “*subscriber*” is associated with multiple IP-PBX systems, multiple IP addresses and multiple phones:

The VoIP VPN service connects all the IP-PBXs of a subscriber into a single logical network. In one embodiment, the present invention provides a virtual private network service where subscribers can use their own internal dial plan. [...] Similarly, a subscriber can use

their own IP address assignment plan in assigning IP addresses to the IP-PBX server and the IP phones.

[Id. at 3:55-58, 61-64 emphasis added]

This quote demonstrates that each “subscriber” controls not just a *single* phone, but rather an entire “virtual private network” which could include multiple inter-connected IP-PBX *systems*, each comprising an “IP-PBX server” and “IP phones” (plural) that are assigned respective “IP addresses” (plural) based on the subscriber’s “own IP address assignment plan”. *Id.*, *see also* 12:55-57.

FIG. 2 is an example of one such IP-PBX system at one particular location (i.e., customer premises 105), the IP-PBX system including a server 110 and multiple phones 101-103. *Id.*, *see FIG. 2* (below) and Chu ‘684 at 4:24-33.

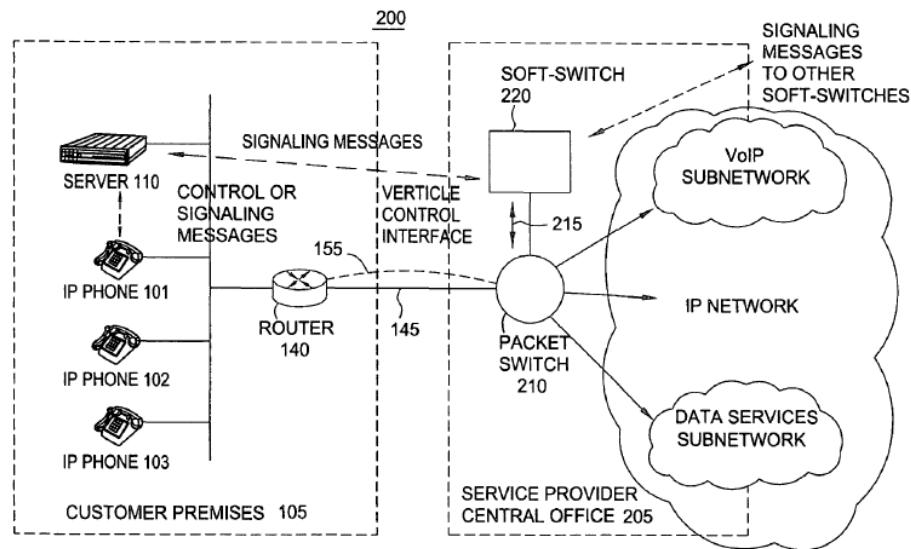


FIG. 2

Moreover, Chu ‘684 repeatedly discloses that a single “subscriber” controls multiple “locations” (like Customer Premises 105), each location having its own

respective IP-PBX interconnected via the SP's infrastructure to other IP-PBXs to form an enterprise-wide corporate network. *Id.*, see 1:44-45; 3:66-67 ("[c]onnecting IP-PBXs together to form a **corporate network**"); 12:37-38 ("Multiple locations from the **same subscriber** may be connected to the same packet switch 210"); 12:59-60 ("establishing a call between **two IP phones** at **two locations** of the **same subscriber**"); 12:64-65; and 15:22-23 ("FIG. 15 depicts... a call between **two locations on the same subscriber**..."). (emphasis added).

Thus, the term "subscriber" in Chu '684 represents an *enterprise* that controls all of the phones within an IP-PBX network of the enterprise, not an individual person. Chu '684 uses a different term to refer to an individual: "user." Petitioner misinterpreted Chu '684's "subscriber" as an individual phone *user*. This led to Petitioner misinterpreting Chu '684's disclosure that each "subscriber" has their *own* "dial plan" as meaning that each caller of a subscriber has a unique identifier:

*Chu '684 teaches locating a subscriber's dial plan that includes a unique subscriber identifier (e.g., E.164 telephone number) ("username") and calling attributes of the subscriber.*

[*Id.* at 21 and 41; italics in original; underlining added]

... Chu '684 must necessarily use unique subscriber-specific information in addition to the server ID to identify the caller's dial plan. Such subscriber-specific information would be the subscriber's

E.164-compliant telephone number, globally unique database key, or the like.

[Declaration at ¶ 45]

However, Chu ‘684’s disclosure that each enterprise (“subscriber”) has its own “*internal dial plan*” (*id.* at 3:58), is not a disclosure of a *user-specific* “dial plan.” Rather, Chu ‘684 discloses that subscribers have multiple IP phones that share this common “dial plan.” Chu ‘684 nowhere discloses that *different* users or phones would have their own *unique* dial plan, and thus Petitioner’s assertion to the contrary is in error. Indeed, as explained below, by failing to recognize that a “dial plan” in Chu ‘684 is *enterprise-wide*, not *user-specific*, Petitioner invented a new feature of a *unique* caller identifier being associated with a *particular* caller’s dial plan.

ii. **Petitioner invents a non-existent feature in Chu ‘684 to resolve a contradiction in its interpretation of Chu ‘684**

Chu ‘684 discloses that a “dial plan” can be identified from the ID of the server 110, however, as shown in FIG. 2, each server is associated with *multiple* IP phones 101-103. *Id.* at 9:31-33. By equating “subscriber” with the user of a particular phone, Petitioner is forced to infer that each server would be required to utilize *multiple* dial plans, but Chu ‘684 does not describe such features. Thus, Petitioner *invents* the notion that there must necessarily be *additional* information

besides a server ID that is used to identify a dial plan, including an ID unique to a phone. Petition at 22, 43 (citing Declaration at ¶ 45). The Declarant at ¶ 45 misinterprets Chu '684, noting that an apparent contradiction arises between the use of a *single* server ID to identify a “dial plan” and the fact that *multiple users* (which Declarant incorrectly refers to as “subscribers”) use the same server:

For example, Chu '684 teaches that each subscriber is assigned their own dial plan, a unique IP address, and a unique E.164-compliant telephone number. Ex. 1003, Chu '684 at 3:56-64. Chu '684 expressly notes that a subscriber's dial plan can be determined “from the ID of the server,” **but** also teaches that multiple subscribers may use the same server. Id. at 9:30-33 and 4:25-28.

[Declaration at ¶ 45, emphasis added]

The Declarant misinterprets Chu '684 by combining different portions that, when read in context, do not provide the alleged teachings.

The first sentence in the above quote cites to 3:56-64 of Chu '684, but that portion merely discloses that each “subscriber” has an “*internal* dial plan” and can assign each IP phone its own E.164 number and its own IP address:

In one embodiment, the present invention provides a virtual private network service where subscribers can use their own internal dial plan. This does not preclude each IP phone from being assigned its own E. 164 number (the international standard dial plan) and receiving calls from the PSTN directly. Similarly, a subscriber can use

their own IP address assignment plan in assigning IP addresses to the IP-PBX server and the IP phones. The VoIP VPNs from all the subscribers share a common physical network.

[*Id.* at 3:55-65; emphasis added]

The Declarant's second sentence cites to 9:30-33 and 4:25-28 of Chu '684:

At step 610, upon receipt of the SIP "invite" message from the server 110, the soft-switch 220 consults the dial plan for this subscriber. The dial plan to use can be determined from the ID of the server 110.

[*Id.* at 9:30-33]

The system 200 comprises a Customer Premise 105 having a plurality of IP phones (101, 102, 103) and a server 110 connected to a VoIP-VPN SP at the SP's central office 205.

[*Id.* at 4:25-28; *see also* FIG. 2]

The above passages are not unclear and do not create the contradiction asserted by the Declarant.

First, Chu '684 does not teach that "each subscriber is assigned ... a unique IP address." Rather, Chu '684 teaches that "a subscriber can use their own IP address assignment plan in assigning IP addresses." *Id.* at 3:61-64; *see also* 2:19-23, and 13:4-6 ("...the subscriber can use... its own private IP addressing scheme").

Second, Chu ‘684 does not teach that “each subscriber is assigned ... a unique E.164-compliant telephone number.” Rather, Chu ‘684 teaches that each *phone* is assigned such a number. *Id.* at 3:59-60; *see also* 13:3-9 and 14:56-60. As discussed above, each subscriber in Chu ‘684 has multiple phones. *Id.* at FIG. 2; *see also* 3:55-56.

Third, Chu ‘684 at 4:25-28 does not teach that “multiple *subscribers* may use the same server,” but rather that multiple *phones* (101, 102, 103 in FIG. 2) may use the same server. *Id.* at 4:25-28 and FIG. 2 (shown above); *see also* 1:23-24. Again, each subscriber in Chu ‘684 has multiple phones.

Since there is only a single server 110 per subscriber location, the server ID alone is sufficient to identify a dial plan shared by all phones associated with the server. *Id.* at 9:30-33; *see also* 4:59-63 and 10:43-47 (a dial plan lookup can also be based on a *subscriber’s* VPN-ID). There is no suggestion in Chu ‘684 that each phone has its own dial plan, let alone a dial plan that includes a unique ID specific to a phone (*e.g.*, an E.164 telephone number).

In Chu ‘684, a “subscriber” (an entity, *e.g.*, a corporation), which has one or more IP-PBX systems (*Id.* at 3:55-56), each including an IP-PBX server and multiple phones (*Id.* at Fig. 2) is associated with a “dial plan” (*Id.* at 9:30-33). Multiple phones of a subscriber would use the *same* dial plan. Chu ‘684 does not disclose using a *phone-specific* identifier to identify a dial plan; rather, Chu ‘684

discloses identifying the subscriber's dial plan by using the IP-PBX server ID or a subscriber's VPN-ID, neither of which are user-specific. *Id.* at 9:30-33, 4:59-63 and 10:43-47.

It is not necessary to contradict the explicit statements of Chu '684 (as has the Declarant) to explain Chu '684. When the word "subscriber" is properly understood, Chu '684 is internally consistent and, as explained below, does not describe the features recited in the claims.

b. **Apart from Petitioner's misinterpretation, Chu '684's consulting a subscriber "dial plan" is distinct from "locating a caller dialing profile" as recited in element [1b]**

Petitioner's misinterpretation of Chu '684 has led to a cascade of shortcomings of the Petition. The Petition does not show that a "dial plan" in Chu '684 possesses the features of a "caller dialing profile" as recited in [1b]. Chu '684's "dial plan" is not associated with any particular "caller." Petitioner also fails to establish that the "dial plan" includes a "username" because Chu '684 does not disclose that the "dial plan" includes an E.164 number. Finally, Petitioner does not demonstrate that the "dial plan" includes any "calling attributes associated with the caller" since the "dial plan" is not associated with the caller, but rather with the enterprise.

As discussed above, Chu '684 discloses a "dial plan" is shared by multiple phones on a subscriber's IP-PBX network; it is not associated with any particular

phone or phone user. Consequently, Chu ‘684’s disclosure of a “dial plan” is not a disclosure of a “caller dialing profile” as recited in element [1b].

Further, element [1b] recites that the “caller dialing profile” includes “a username associated with the caller.” Petitioner argues Chu ‘684 discloses a unique identifier associated with a user that is part of a “dial plan.” Petitioner equates the unique identifier with a “username.” But this argument is based on a series of misinterpretations of Chu ‘684 by the Declarant. The Declarant assumed that Chu ‘684’s “subscriber” was an individual, and failed to recognize that Chu ‘684’s “subscriber” is an enterprise or corporation that subscribes to the virtual private network (VPN) services of a VPN “service provider” (SP). Compare Declaration at ¶45 to Chu ‘684 at 5:3-6.

For all these reasons, Chu ‘684 fails to disclose element [1b].

- c. The proposed combination of Chu ‘684 and Chu ‘366 likewise fails to disclose “locating a caller dialing profile” as recited in element [1b]
  - i. Chu ‘684’s enterprise “dial plan” is incompatible with Chu ‘366’s individual call origin location profile

As discussed above, Chu ‘684 discloses that a “dial plan” is shared by a group of users on a subscriber’s IP-PBX network. In contrast, Chu ‘366 discloses “call origin location profiles” for multiple geographic locations from which a specific user may place VoIP telephone calls. The teachings of these two patents

are incompatible, as it is unclear how to combine a caller-specific call origin location profile with an enterprise's IP-PBX network-specific "dial plan."

Indeed, Petitioner's Declarant acknowledged that the way in which Chu '684 discloses identifying a (group) "dial plan" is incompatible with the way in which an individual caller's dial plan or dialing profile would need to be identified: "Chu '684 expressly notes that a subscriber's dial plan can be determined 'from the ID of the server' ...." Declarant at ¶ 45 (citing Chu '684 at 9:30-33). Attempting to rationalize this incompatibility, the Declarant states: "but [Chu '684] also teaches that multiple subscribers may use the same server.... Accordingly, one of skill in the art would understand that the system described by Chu '684 must necessarily use unique subscriber-specific information in addition to the server ID to identify the caller's dial plan." *Id.* (citing Chu '684 at 4:25-28) (emphasis added). However, this conclusion is in error because Chu '684 only teaches that multiple *phones* may use the same server, not that multiple *subscribers* may use the same server. *See supra* II(E)(5)(a).

ii. **Petitioner fails to explain how Chu '684's enterprise network "dial plan" would be modified based on Chu '366's teaching**

Because of Petitioner's fundamental misinterpretation of Chu '684, as described above, Petitioner does not explain *how* to combine the disparate teachings

of Chu ‘684 and Chu ‘366. Thus, Petitioner fails to carry its burden to establish a *prima facie* case of obviousness.

Petitioner does not explain how Chu ‘366’s teaching of a *user-specific* “call origin location profile” could be applied to Chu ‘684’s *IP-PBX network-specific* “dial plan” or what modifications to Chu ‘684’s system would be required.

For example, Petitioner doesn’t explain *how* to modify Chu ‘684’s method of identifying a dial plan from the ID of the server to a method of identifying a dial plan that is specific to an individual user.

Applying the teachings of Chu ‘366 to modify Chu ‘684’s system would also require coordinated changes among multiple pieces of equipment, including at least the subscriber’s IP-PBX server 110 and the SP’s soft-switch 220, to permit the components of Chu ‘684’s system to continue to work together once the methods of Chu ‘366 were applied.

Petitioner also fails to recognize that such modifications are inconsistent with Chu ‘684. User-specific “dial plans” would need to be updated at both the enterprise server (Chu ‘684 at 8:66) and SP soft-switches (*id.* at 9:31) whenever users (e.g., the subscriber’s employees) are added or removed. This would undermine Chu ‘684’s goal of reducing expenses by “minimiz[ing] administrative coordination between the subscriber [enterprise] and the SP.” *Id.* at 13:3-11.

Petitioner does not even acknowledge that these modifications would be required, much less how it would have been obvious to make them.

Thus, Petitioner fails to show how the teachings of Chu ‘684 and Chu ‘366 can be combined to provide all the limitations recited in element [1b], and does not carry its burden to establish a *prima facie* case of obviousness.

**6. Petitioner fails to articulate a proper reason to combine the references and overlooks reasons why the combination is undesirable**

Petitioner fails to provide articulated reasoning with some rational underpinning to support the legal conclusion of obviousness as required by *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007). In particular, Petitioner fails to provide facts, data, or plausible reasoning that would explain *why* one of ordinary skill in the art would have combined Chu ‘684 and Chu ‘366 to arrive at the claimed features.

Petitioner fails to explain how the proposed combination would improve Chu ‘684 based on the teaching of Chu ‘366. The Petition contains only a single, conclusory sentence of explanation that ascribes to Chu ‘684, without evidentiary basis, a shortcoming that might be improved by Chu ‘366. Petitioner’s reason to combine does not originate from either reference, but is instead an unsupported artificial construct. Additionally, Petitioner’s fundamental misunderstanding of

Chu ‘684 overlooks that the proposed combination is *undesirable*, thereby undermining the conclusion of obviousness.

a. **The Petition’s Cursory Reason to Combine Chu ‘684 and Chu ‘366 is Insufficient**

The Petition at pages 18-19 discusses combining Chu ‘684 and Chu ‘366. But Petitioner’s proposed motivation to combine is mentioned in only a single sentence of page 19.

Page 18 of the Petition only avers that there is “significant overlap between Chu ‘684 and Chu ‘366.” The Petition states that “both references teach telecommunication systems in which VoIP subscribers can place calls to a customer on the public PSTN” and “[b]oth references expressly reference E.164 as an international standard dial plan.” Petition at 18. Such general allegations are merely assertions that the two references are in the “same technological field.” But being in the same field of endeavor alone is insufficient to support a motivation to combine references—“it is merely the jumping-off point” in an obviousness determination. *Unified Patents Inc. v. William Grecia*, IPR2016-00789, Paper 8 at 12 (P.T.A.B. Sept. 9, 2016) (citing *K-TEC, Inc. v. Vita-Mix Corp.*, 696 F.3d 1364, 1375 (Fed. Cir. 2012)). Nothing on page 18 provides an actual reason to combine Chu ‘684 and Chu ‘366.

Further, Petitioner's alleged similarity is factually incorrect. Chu '684 does not use "caller attributes" to determine call routing. *See supra* II(E)(5). And neither reference uses "caller attributes" in the manner claimed. *See id.*

On page 19, the Petition alleges that the proposed modification would be "straightforward" and would yield "predictable results" without "undue experimentation." *Id.* This does not explain *why* one of ordinary skill would want to make the modification in the first place. Further, these allegations are incorrect given Petitioner's misunderstanding of Chu '684 (see *supra* II(E)(5)(a)) and how the proffered combination with Chu '366 renders the combination inoperable (see *supra* II(E)(4)(c)).

The only sentence in the Petition proposing *why* one of ordinary skill would want to modify Chu '684 in view of Chu '366 is at page 19, which states:

Upon reading the disclosure of Chu '684, a person of ordinary skill in the art would have recognized that allowing users to place calls as if they were dialing from a standard PSTN phone would be desirable, creating a system capable of supporting a more intuitive and user-friendly interface. *See Ex. 1006, Houh Decl.* at ¶¶ 35-39.

This is a far cry from the articulated reasoning required under *KSR Int'l Co.* Petitioner fails to mention which *parts* of the disclosure of Chu '684 the skilled person would want to improve with a "more intuitive and user-friendly interface" and wholly omits any mention of how Chu '366 provides this improvement.

Rather than citing to Chu '684 or Chu '366, Petitioner cites to the Declaration at ¶¶ 35-39. These paragraphs are the Declarant's entire argument alleging the claims are obvious over Chu '684 and Chu '366. That is, the Petition relies on the Declarant's entire obviousness argument, not simply further details of motivation to combine references. This wholesale reliance on the Declarant's obviousness arguments amounts to an improper incorporation by reference of the Declaration. *See* 37 C.F.R. §§ 42.6(a)(3); *see also* Apple Inc., IPR2014-00077, Paper 14 at 5 ("***We decline to consider information presented in a supporting declaration, but not discussed in a petition***") (emphasis added).

Even if, *arguendo*, it were permissible to incorporate all Declarant's arguments into the Petition, none of these arguments elucidates Petitioner's sole "reason to combine" Chu '684 with Chu '366. The Declarant's argument closely parallels the arguments of the Petition, and includes the same sentence asserted in the Petition as the reason to combine:

Upon reading the disclosure of Chu '684, a person of ordinary skill in the art would have recognized that allowing users to place calls as if they were dialing from a standard PSTN phone would be desirable, creating a system capable of supporting a more intuitive and user-friendly interface. **Ex. 1006, Hough Decl.** at ¶ 38 (emphasis added).

The Declaration, just like the Petition, fails to cite to any evidence in Chu '684 or Chu '366 supporting this assertion. Thus, as with the Petition, this

unsupported statement does not provide an articulated reasoning with rational underpinnings to explain why the references would be combined.

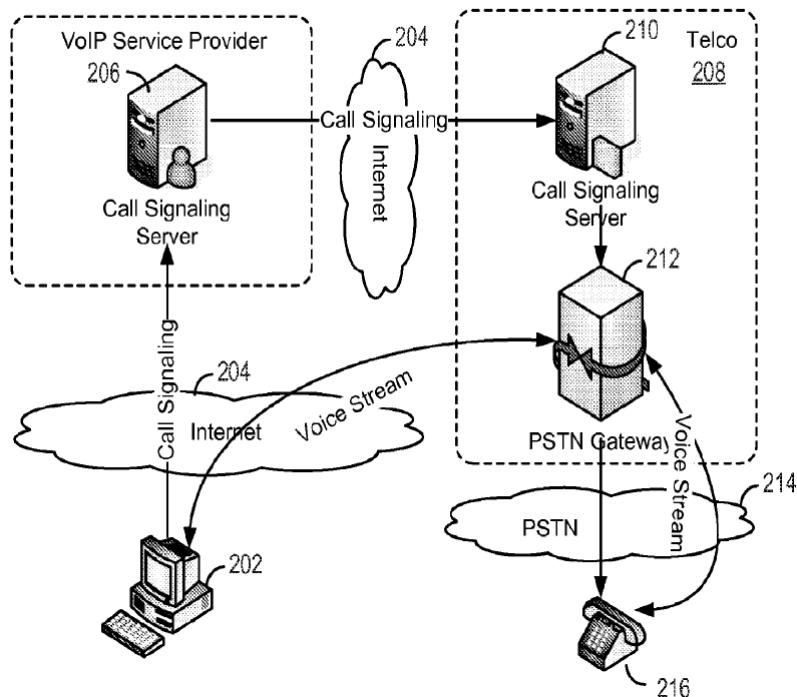
The Declarant argues that Chu ‘684 suffers from the alleged deficiency of “[not] allowing users to place calls as if they were dialing from a standard PSTN phone.” *See Declaration ¶ 38; see also Petition at 19.* But the Declarant and Petition cite nothing in Chu ‘684 for support. Likewise, the Declaration does not cite to Chu ‘684 or provide articulated reasoning to explain why Chu ‘684’s system is not “intuitive” or “user-friendly.” Declaration ¶ 38. Contrary to 37 C.F.R. § 42.104(b), page 19 of the Petition does not cite to any specific teaching in Chu ‘684 or Chu ‘366 for the proffered rationale. The closest parallel in the Declaration, ¶ 38, also fails to contain a single citation to the references. Declarant testimony that does not disclose the underlying facts or data should be entitled to little or no weight. 37 C.F.R. § 42.65(a). Thus, the motivation asserted in the Petition and Declaration does not originate from the references, but from Petitioner’s and Declarant’s own artificial construct. Thus, the Petition and Declaration fail to provide adequate rational underpinning for why Chu ‘684 and Chu ‘366 would be combined to meet the process of Claim 1.

**b. Petitioner reads into Chu '684 a problem identified in Chu '366, but there is no evidence that Chu '366's problem is relevant to Chu '684**

Chu '366 discloses that, when that patent was filed, Internet-based VoIP service providers imposed special limitations on dialing, which Chu '366 purports to ease, especially for users that travel to multiple destinations. *See* Chu '366 at 1:44-58, 2:1-4, and 5:3-16. However, there is no suggestion in Chu '684 that its users faced any such constraints.

Moreover, Chu '684 does not disclose the same network architecture as Chu '366. *Compare* Fig. 10 of Chu '366 with FIG 2. of Chu '684 (below).

*Fig. 10*



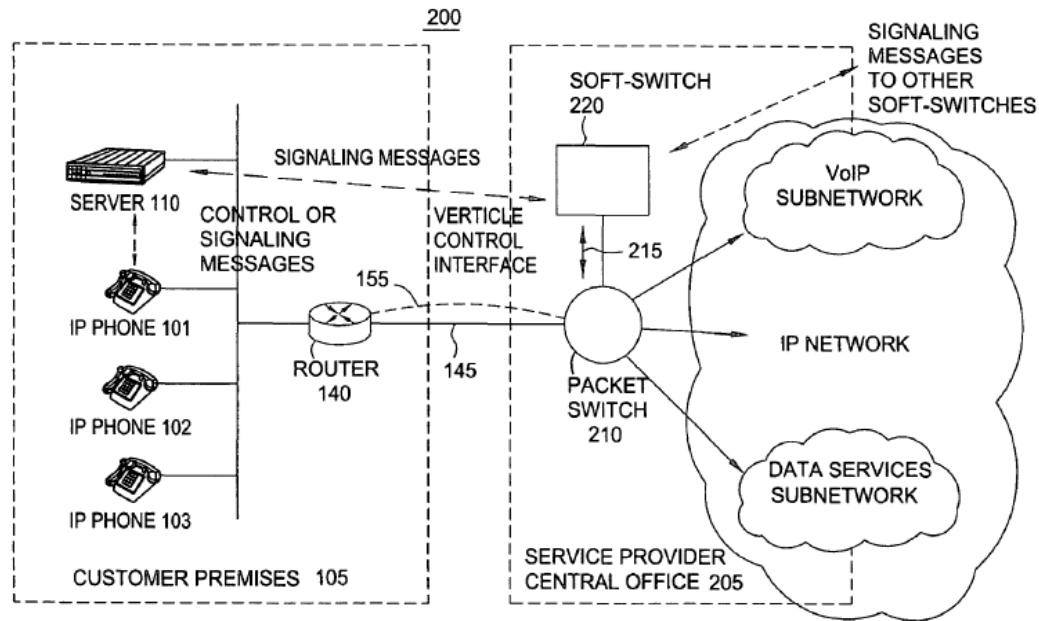


FIG. 2

Chu '684 does not disclose a VoIP system that directly connects over the Internet to global VoIP service providers for connectivity, as described in Chu '366. In Chu '684, calls are made via an IP-PBX server 110 on a shared local area network (LAN). *Id.* at 1:20-25, 14:1; *see also* FIGS. 1 and 14a. Thus, IP phones in Chu '684 are associated with a particular location (customer premises 105), unlike the location-unaware prior art that Chu '366 criticizes. Chu '366 at 1:44-58.

Chu '366 set out to address the problem of requiring users to enter "fully formatted E.164 telephone numbers," even when making a local call, including a "+" sign, "then the country code, then the area code, then the telephone number" which arises when the user's calling location is variable and unknown. Chu '366

at 1:44-58. In Chu ‘684’s system the IP phone locations are known and assigned location-based PSTN numbers. *See* Chu ‘684 at 13:1-4 (disclosing assignment of a block of PSTN telephone numbers, e.g., “732-949-xxxx,” where “732” is the New Jersey area code of the patent’s assignee). Thus Chu ‘684 does not face the shortcomings of the Internet-based “global VoIP service providers” that Chu ‘366 set out to address. Chu ‘366 is trying to solve Internet-based telephony problems that are inapplicable in the IP-PBX network context of Chu ‘684, especially given the very different architecture and call setup functionalities of the two systems.

In effect, Petitioner invents a non-existent defect in Chu ‘684’s system as the basis to combine the references. This cannot fulfill the requirement to provide rational underpinning to support Petitioner’s assertion of a motivation to combine. *See KSR Int’l Co.*, 550 U.S. at 418.

c. **The proposed reason to combine Chu ‘684 and Chu ‘366 would not lead to the modifications asserted by Petitioner**

Even accepting on its face Petitioner’s proposed reason to combine Chu ‘684 and Chu ‘366, this proposed reason would not lead to the combination of references asserted in the Petition.

The Petition’s claim chart is the only specific identification of how Chu ‘684 and Chu ‘366 would be combined. The claim chart states that the reformatting step of Chu ‘366 would be performed *before* the classifying step of Chu ‘684’s server 110. Petition at 23 (“Once the callee identifier is reformatted, Chu ‘684

determines...”). But the Petition does not explain why the dialed digits would not be reformatted at the server *after* the classification step, or be reformatted at the soft-switch 220, at the PSTN gateway 1302, or even in telco equipment downstream of the PSTN gateway. The Petition states “these improvements to Chu ‘684 could be achieved by merely programming the system of Chu ‘684 to analyze the dialed digits and reformat as necessary using caller attributes ....” *Id.* at 19. However, “the system” of Chu ‘684 includes a variety of programmable components, none of which are identified in the Petition as part of the motivation to combine. Only reference to the ‘815 Patent and its claims would lead a skilled person to select the specific arrangement of elements recited in Claim 1. But the use of Claim 1 as the blueprint for combining references constitutes impermissible hindsight. *In re McLaughlin*, 443 F.2d 1392, 1395 (C.C.P.A. 1971).

Petitioner also fails to explain why one of ordinary skill in the art would create “intuitive” and “user-friendly” PSTN dialing by *adding* reformatting to Chu ‘684 or why the skilled artisan would even want to use reformatting to solve the alleged problems in Chu ‘684.

**d. Petitioner’s misreading of Chu ‘684 obscures why it would be undesirable to combine Chu ‘684 and Chu ‘366**

Petitioner’s misreading of Chu ‘684 has led Petitioner to overlook a number of technical, administrative and usability reasons that a skilled person would have appreciated make it *undesirable* to apply the teachings of Chu ‘366 in Chu ‘684.

Chu ‘684’s “dial plan” applies to all users of an enterprise’s IP-PBX system.

*See supra* II(E)(5)(a). Thus, there is no need for user-specific dial plans. The dial plan simply could be configured to allow all user phones at a particular customer premises to dial based on customary dial conventions associated with the customer premises location. *See Chu* ‘684 at 8:65-9:17.

Furthermore, *user*-specific dial plans would be undesirable in Chu ‘684’s *enterprise* product, as they would: (1) increase administrative complexity of the corporate phone system; (2) allow inconsistent dialing rules across the enterprise; (3) increase technical support demands; and (4) create confusion for shared phones such as in conference rooms.

Thus, technical, administrative, and usability benefits accrue in Chu ‘684 by utilizing a single dialing plan for phones across the enterprise. Once Chu ‘684’s teachings of an enterprise dial plan are understood, Petitioner’s obviousness argument is implausible, as it would not be obvious for a skilled person to modify the “dial plan” and thereby lose the aforesaid benefits.

Thus, the Petition should be denied with respect to all Challenged Claims.

**F. Ground 2 fails because the combination of Chu ‘684 and Chen does not disclose all claim elements and because the combination is not obvious**

**1. Overview of Chen**

Chen discloses a communication method for placing phone calls using a fixed dial plan. Chen at [0002]. The method allows traveling users to place calls

in a familiar manner in any region or country. *Id.* at [0014]. The method provides translation functions from a dial plan (“dial plan A”) familiar to the user to a different dial plan (“dial plan B”), not familiar to the user but understood by a PSTN Telco switch that uses a different regional or countrywide dial plan. *Id.* at [0014], [0025] and [0026]. The method involves: receiving a dialing number; transforming this number into an E.164 format number (e.g., as shown in FIG. 6); and transforming the E.164 number into a final dialing number understood by the Telco switch (e.g., FIG. 7). *Id.* at [0016]; *see also* FIGS. 6-7, and claim 1 of Chen.

**2. The combination of Chu ‘684 and Chen fails to render obvious “classifying the call” as recited in element [1d]**

Claim 1 recites, *inter alia*, [1d] “classifying the call as a public network call when said match meets public network classification criteria and classifying the call as a private network call when said match meets private network classification criteria.” The combination of Chu ‘684 and Chen fails to render [1d] obvious.

**a. Chu ‘684 fails to disclose “[1d] classifying the call... when said match meets... network classification criteria”**

As described above in section II(E)(4)(a), the “classifying” in step [1d] of Claim 1 must occur after the “locating” in step [1b] because “calling attributes” recited in step [1c] finds antecedent basis in step [1b]. Petitioner identifies a feature of Chu ‘684 as corresponding to step [1d] (“classifying”), namely, the server 110 determining (step 604 of FIG. 6) whether a call is local, to another on-

net phone, or to a PSTN phone. Petition at 44-45, *citing* Chu ‘684 at 8:65-9:1.

Petitioner identifies another feature of Chu ‘684 as corresponding to step [1b] (“locating”), namely, the soft-switch 220 “consult[ing] the dial plan for this subscriber” (step 610 of FIG. 6). *Id.* at 43, citing Chu ‘684 at 9:30-33. However, Petitioner’s “locating” step of Chu ‘684 occurs *after* Chu ‘684’s “classifying” step, contrary to Claim 1. Stated differently, Chu ‘684’s “classifying” step is distinct from the “classifying” step in element [1d] because Chu ‘684’s “classifying” step is not based on the “match” recited in Claim 1. Thus, element [1d] cannot be met by the server 110.

**b. Chen fails to disclose “classifying the call” based on “network classification criteria” as recited in element [1d]**

Chen fails to disclose “classifying the call” based on “network classification criteria” as recited in element [1d], and Petitioner does not argue otherwise.

Chen discloses translations between different dial plans to allow a calls to be dialed according to a familiar dial plan, but the destination is *always* in the PSTN. Chen discloses, “A telephone number is... used to identify the destination in a PSTN.” Chen at [0005]; *see also* Abstract (mentions “PSTN” four times); FIGS. 1-2 and 4-5 mention “PSTN” and/or “Telco Switch”; and claim 1 (“PSTN telecommunication switch”).

Chen does not disclose any private network call option, let alone “private network classification criteria.” Also, all calls in Chen are assumed to be destined

for the PSTN, and, therefore Chen does not disclose “public network classification criteria” as required by element [1d]. For these reasons, Chen fails to disclose “classifying the call” as required by element [1d].

c. **Petitioner’s proposed combination of Chu ‘684 and Chen not only fails to practice “classifying the call” as recited in element [1d], but would not work**

As established above, neither Chu ‘684 nor Chen disclose “classifying the call” based on “network classification criteria” as recited in element [1d]. Combining Chu ‘684 with Chen does not cure these deficiencies because Petitioner’s proposed combination fails to meet element [1d] and also renders Chu ‘684 unsuitable for its intended purpose.

Petitioner groups together its claim chart analysis of elements [1c] and [1d] such that Chen alone is relied upon to disclose [1c] and Chu ‘684 alone is relied upon to disclose [1d]. Petition at 44-45. Thus, Petitioner does not even assert that Chen discloses element [1d] or any proposed modification based on Chen would be applicable to element [1d].

Petitioner specifically argues in its claim chart that the “reformatting” steps of Chen would be combined by inserting “reformatting” *before* the alleged step of “classifying” in Chu ‘684. See Petition at 44-45 (“Once the callee identifier is reformatted, Chu ’684 determines...”; emphasis added). However, such a combination would fail to meet the claim.

Specifically, element [1d] recites, *inter alia*, “classifying the call as a private network call when said match meets private network classification criteria.” In contrast the “match” of Chen that is relied on by Petitioner (i.e., reformatting of a dialing string) applies only to *public* telephone numbers.

Furthermore, Petitioner overlooks the fact that Chu ‘684 discloses the use of *private telephone numbers* from a “private numbering scheme” to place private network calls. *See supra* II(E)(4)(c) and Chu ‘684 at 9:16-17; 16:50-54; and 13:8-9.

Petitioner’s proposed combination to insert Chen’s “reformatting” prior to Chu ‘684’s “classification” of a call would render Chu 684’s system unreliable. Petitioner’s combination would result in corrupting *private* telephone numbers (based on an organization’s internal “private numbering plan”) by reformatting them in the same manner as Chen reformats *public* telephone numbers. A reformatted private number would either be rejected by Chu ‘684’s “classification” as invalid or interpreted incorrectly. Thus, Petitioner’s proposed combination of Chu ‘684 and Chen undermines the “private numbering plan” calling functionality of Chu ‘684 and renders the Chu ‘684 system unsuitable for its intended purpose. Such a combination fails to meet the standard for a legal finding of obviousness. *In re Gordon*, 733 F.2d at 900.

While the ‘815 Patent discloses a mechanism for private network classification using a reformatted number (e.g., step 269 in Fig. 8B), there is no comparable disclosure in either Chu ‘684 or Chen. Chen discloses formatting that is valid *only* for PSTN calls and does not contemplate private network calls or private network numbers. Chu ‘684 discloses private numbering, as distinct from public numbering, and does not disclose the use of reformatting in either case.

Only the ‘815 patent’s disclosure and Claim 1 provide the guidance to combine these two distinct references in the manner Petitioner proposes to perform “classifying” recited in element [1d]. Petitioner’s reliance on the ‘815 patent is impermissible hindsight. *In re McLaughlin*, 443 F.2d at 1395.

Since neither Chu ‘684 nor Chen individually disclose element [1d] and the combination also doesn’t lead to element [1d] being obvious, Ground 2 cannot establish Claim 1 unpatentable.

### **3. The combination of Chu ‘684 and Chen fails to render obvious “locating a caller dialing profile” as recited in element [1b]**

Element [1b] recites: “locating a caller dialing profile comprising a username associated with the caller and a plurality of calling attributes associated with the caller.”

As described above in section II(E)(5), the Petition (1) fails to establish that Chu ‘684 discloses *locating a caller dialing profile* comprising a *username*; (2) misinterprets Chu ‘684 as disclosing a *user-specific*, as opposed to *enterprise-*

*specific* “dial plan”; and (3) fails to explain how to combine Chen’s *user-specific* “fixed dial plan” with Chu ‘684’s *enterprise-specific* “dial plan.”

a. **Petitioner fundamentally misinterprets the dial plans of Chu ‘684 as being user-specific instead of enterprise-specific**

Referring to element [1b], Petitioner asserts:

Chu ‘684 teaches locating a subscriber’s dial plan that includes a unique subscriber identifier (e.g., E.164 telephone number) (“username”) and calling attributes of the subscriber. [Petition at 43]

Petitioner’s whole argument is premised on a fundamental *misunderstanding* of the term “*subscriber*” in Chu ‘684, leading to a misunderstanding of the nature of a “dial plan” in Chu ‘684, which ultimately leads the Petitioner to falsely assert that a “dial plan” in Chu ‘684 necessarily includes a “E.164 telephone number” as a “username.” Chu ‘684, in fact, contradicts these views. Once Chu ‘684 is correctly understood, Petitioner’s interpretations and arguments crumble.

i. **Petitioner misinterprets the word “subscriber” in Chu ‘684**

Petitioner’s arguments rely on the false premise that the term “*subscriber*” in Chu ‘684 refers to an individual phone user. However, Chu ‘684 uses the term “*subscriber*” to refer to an *enterprise* or *corporate entity* that controls one or more local IP-PBX systems, and not to an individual person.

1. When Chu '684 refers to an individual, it uses the term "user." Chu '684 *never* states that a "subscriber" places or answers calls, but gives examples of a "user" placing or receiving calls: see *id.* at 8:51-63, 11:1-2, 11:13-17.
2. Chu '684 explains that each "subscriber" may have a VPN including multiple interconnected IP-PBX *systems*, each including an "IP-PBX server" and "IP phones" (plural) that are assigned respective "IP addresses" (plural). *Id.* at 3:55-64. FIG. 2 shows an IP-PBX system at one location (105) *Id.*, see FIG. 2 (below) and Chu '684 at 4:24-33.

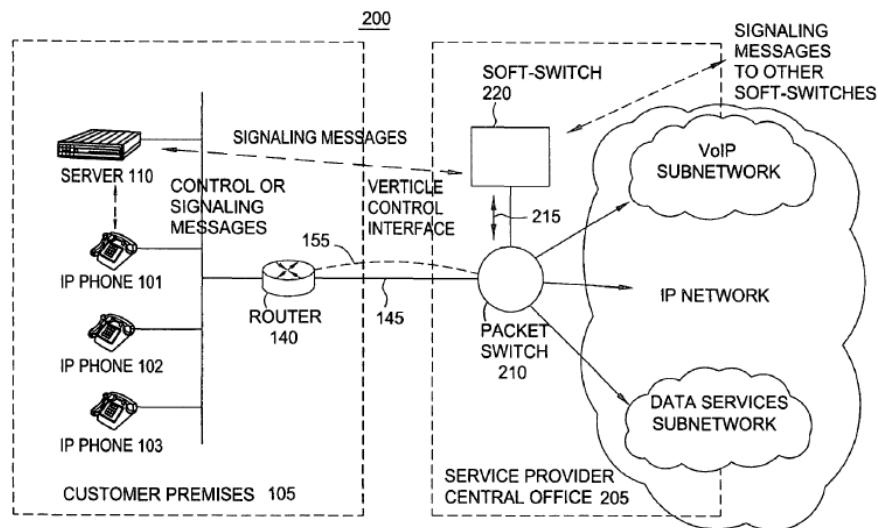


FIG. 2

3. Chu '684 repeatedly discloses that a single "subscriber" controls multiple "locations" (like Customer Premises 105), each having its IP-PBX interconnected to other locations to form an enterprise-wide

corporate network. *Id.*, see 1:44-45; 3:66-67; 12:37-38; 12:59-60; 12:64-65; and 15:22-23.

Thus, the term “subscriber” in Chu ‘684 represents an *enterprise* that controls all of the phones within an IP-PBX network, not an individual user.

Petitioner misinterprets subscriber’s dial plans in Chu ‘684 as being *user* dial plans that include a user identifier (e.g., phone number):

*Chu ’684 teaches locating a subscriber’s dial plan that includes a unique subscriber identifier (e.g., E.164 telephone number) (“username”) and calling attributes of the subscriber.*

[*Id.* at 21 and 41; *see also* Declaration at ¶ 45]

ii. **Petitioner invents a non-existent feature in Chu ‘684 to resolve a contradiction in its interpretation of Chu ‘684**

Chu ‘684 nowhere discloses that users have their own dial plans, or that a dial plan contains an “E.164 telephone number” as a user identifier. Rather than citing to Chu ‘684 for support for this proposition, Petitioner cites to Declarant at ¶ 45. Because Declarant fails to recognize that a “dial plan” in Chu ‘684 is *enterprise-wide*, not *user-specific*, Declarant is forced to deny Chu ‘684’s disclosure that a “dial plan” can be determined from a “server ID.” Instead, Declarant alleges that a *unique* caller identifier is associated with a *particular* caller’s dial plan. Declaration at ¶ 45. Here, Declarant conflates *subscriber* with

*user*, and makes a number of other errors, as explained in section II(E)(5)(a). In summary, Declarant misinterprets 3:56-64 of Chu ‘684 as follows:

1. Chu ‘684 does not teach that “each subscriber is assigned ... a unique IP address,” but that “a subscriber can use their own IP address assignment plan” *Id.* at 3:61-64; *see also* 2:19-23, and 13:4-6.
2. Chu ‘684 does not teach that “each subscriber is assigned ... a unique E.164-compliant telephone number,” but that each *phone* is assigned such a number. *Id.* at 3:59-60; *see also* 13:3-9 and 14:56-60. As discussed above, each subscriber in Chu ‘684 has multiple phones. *Id.* at FIG. 2; *see also* 3:55-56.
3. Chu ‘684 at 4:25-28 does not teach that “multiple *subscribers* may use the same server,” but that multiple *phones* (101, 102, 103 in FIG. 2) may use the same server. *Id.* at 4:25-28 and 1:23-24, FIG. 2. Again, each subscriber in Chu ‘684 has multiple phones.

Since there is only one server 110 per subscriber location, the server ID alone is sufficient to identify a dial plan shared by all phones associated with the server. *Id.* at 9:30-33. It is unnecessary to contradict Chu ‘684’s disclosure (as has the Declarant). When “subscriber” is properly understood, Chu ‘684 is internally consistent and, as explained below, does not describe the features of the claims.

b. **Apart from Petitioner’s misinterpretation, Chu ‘684’s consulting a subscriber “dial plan” is distinct from “locating a caller dialing profile” as recited in element [1b]**

As discussed in section II(E)(5)(a), Chu ‘684 discloses a “dial plan” is shared by multiple phones on a subscriber’s IP-PBX network, and is not associated with any particular caller. Thus, Chu ‘684’s disclosure of a “dial plan” is not a disclosure of a “caller dialing profile” as recited in element [1b].

Element [1b] also recites that the “caller dialing profile” includes a “username.” Petitioner’s allegation that Chu ‘684’s “dial plan” has an E.164 number as an “unique identifier associated with a user” was shown to be based not on Chu ‘684, but on a series of misinterpretations of Chu ‘684 by the Declarant.

Therefore, Chu ‘684 lacks element [1b].

c. **The proposed combination of Chu ‘684 and Chen likewise fails to disclose “locating a caller dialing profile” as recited in element [1b]**

i. **Chu ‘684’s enterprise “dial plan” is incompatible with Chen’s individual “fixed dial plan”**

Chu ‘684 discloses an *enterprise* “dial plan” for multiple users, but Chen discloses a fixed dial plan translation for a specific user to use in multiple geographic locations. The teachings of these two patents are incompatible, as it is unclear how to combine a *caller*-specific fixed dial plan with an *enterprise* “dial plan.”

Indeed, Petitioner's Declarant acknowledged that the way Chu '684 discloses identifying a server's "dial plan" is incompatible with the way an individual caller's dial plan would need to be identified, but erroneously attempted to rationalize this incompatibility, as described above in section II(E)(5)(a and c). Declaration at ¶ 45.

ii. **Petitioner fails to explain how Chu '684's network "dial plan" would be modified based on Chen's teaching**

Due to Petitioner's misapprehension of Chu '684, Petitioner does not explain *how* to combine the disparate teachings of Chu '684 and Chen, including:

1. how to apply Chen's teaching of an *individual* "fixed dial plan" to Chu '684's *enterprise-specific* "dial plan";
2. how to modify Chu '684's method from identifying a dial plan from the ID of the server to identifying a dial plan for an individual user;
3. what coordinated changes are required to various pieces of equipment (e.g., server 110 and soft-switch 220) to facilitate continued operation.

Petitioner does not even acknowledge that these modifications would be required, much less how it would have been obvious to make them. Petitioner fails to explain how the teachings of Chu '684 and Chen could be combined to provide all the limitations recited in element [1b], and thus does not carry its burden to establish a *prima facie* case of obviousness.

**4. Petitioner fails to articulate a proper reason to combine the references and overlooks that the combination is undesirable**

Petitioner fails to provide articulated reasoning with rational underpinning to support the legal conclusion of obviousness. *KSR Int'l Co.*, 550 U.S. at 418. In particular, Petitioner fails to provide facts, data, or plausible reasoning that would explain *why* one of ordinary skill in the art would have combined Chu '684 and Chen to arrive at the claimed features.

The Petition contains only a single, conclusory sentence of explanation that ascribes to Chu '684, without any evidentiary basis, a shortcoming that might be improved by Chen. Petitioner's reason to combine does not originate from either reference, but is instead an unsupported artificial construct. Additionally, Petitioner's fundamental misunderstanding of Chu '684 overlooks that the proposed combination is *not* desirable, thereby undermining the conclusion of obviousness.

**a. The Petition's Cursory Reason to Combine Chu '684 and Chen is Insufficient**

The Petition at pages 39-41 discusses combining Chu '684 and Chen, but Petitioner's proposed motivation to combine is mentioned in only a single sentence of page 41.

Pages 39-40 of the Petition allege "significant overlap between Chu '684 and Chen," but this "overlap" is identical to that described above for Chu '366,

namely, being in the same field of endeavor (i.e., VoIP systems that can call the PSTN) or referencing the E.164 standard. *See supra* II(E)(6)(a). Being in the same field of endeavor alone is insufficient to support a motivation to combine references—“it is merely the jumping-off point” in an obviousness determination. *Unified Patents*, IPR2016-00789, Paper 8 at 12. Nothing on pages 39-40 provides an actual reason to combine Chu ‘684 and Chen.

Further, Petitioner’s alleged similarity is factually incorrect. As shown in section II(E)(5)(b), Chu ‘684 does not use “caller attributes” for call routing.

On pages 40-41, Petitioner alleges that the proposed modification would be “straightforward,” “natural”, based on “ordinary skill and common sense”, to yield “predictable results” without “undue experimentation” *Id.* This does not explain *why* one of ordinary skill would want to make the modification in the first place.

Petitioner does not even say *which* of Chu ‘684’s programmable components would be “programmed” and *how*. *Id.*

Furthermore, the proffered combination with Chen renders the combination inoperable (see *supra* II(E)(4)(c)).

The only sentence in the Petition proposing *why* one of ordinary skill would want to modify Chu ‘684 in view of Chen is at page 41, which states:

Upon reading the disclosure of Chu ’684, a person of ordinary skill in the art would have recognized that allowing users to place calls as if they were dialing from a standard PSTN phone would be desirable,

creating a system capable of supporting a more intuitive and user-friendly interface. *See Ex. 1006, Houh Decl.* at ¶¶ 40-44.

This is a far cry from the articulated reasoning required under *KSR Int'l Co.*

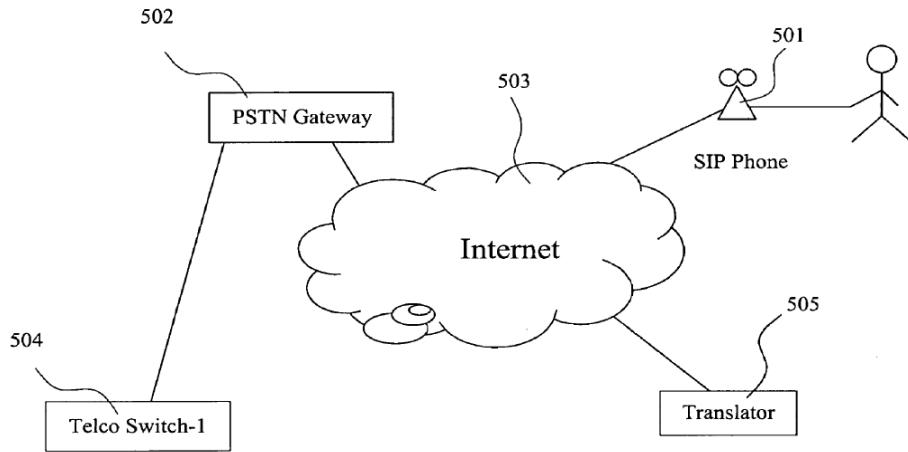
Petitioner fails to identify any *part* of Chu '684 that the skilled person would improve by a "more intuitive and user-friendly interface" and omits any mention of how Chen provides this improvement. Petitioner does not even cite Chen. Instead, Petitioner cites to the Declaration at ¶¶ 40-44. These paragraphs are the Declarant's entire argument alleging Chu '684 plus Chen render the claims obvious. That is, the Petition relies on the Declarant's entire obviousness argument, not simply further details of motivation to combine references. This wholesale reliance on the Declarant's obviousness arguments is an improper incorporation by reference of the Declaration. *See 37 C.F.R. §§ 42.6(a)(3). Apple Inc., IPR2014-00077, Paper 14 at 5 ("We decline to consider information presented in a supporting declaration, but not discussed in a petition...").*

Even if, *arguendo*, it were permissible to incorporate all Declarant's arguments, none of these arguments elucidates Petitioner's sole "reason to combine" Chu '684 with Chen. Declarant merely copies the Petition's conclusory allegations, which do not cite to Chu '684 or Chen or provide articulated reasoning to explain why Chu '684's system is not "intuitive" or "user-friendly." Declaration ¶ 38. Contrary to 37 C.F.R. § 42.104(b), pages 40-41 of the Petition do not cite

any specific teaching in Chu ‘684 or Chen for the proffered rationale. The closest parallel in the Declaration, ¶ 43, also fails to contain a single citation to the references. Declarant testimony that does not disclose the underlying facts or data should be entitled to little or no weight. 37 C.F.R. § 42.65(a). Accordingly, the motivation asserted in the Petition and Declaration does not originate from the references, but from Petitioner’s and Declarant’s own artificial construct. Thus, under 37 C.F.R. §§ 42.65(a) & 104(b), respectively, the Petition and Declaration fail to articulate a reason why Chu ‘684 and Chen would be combined to meet the process of Claim 1.

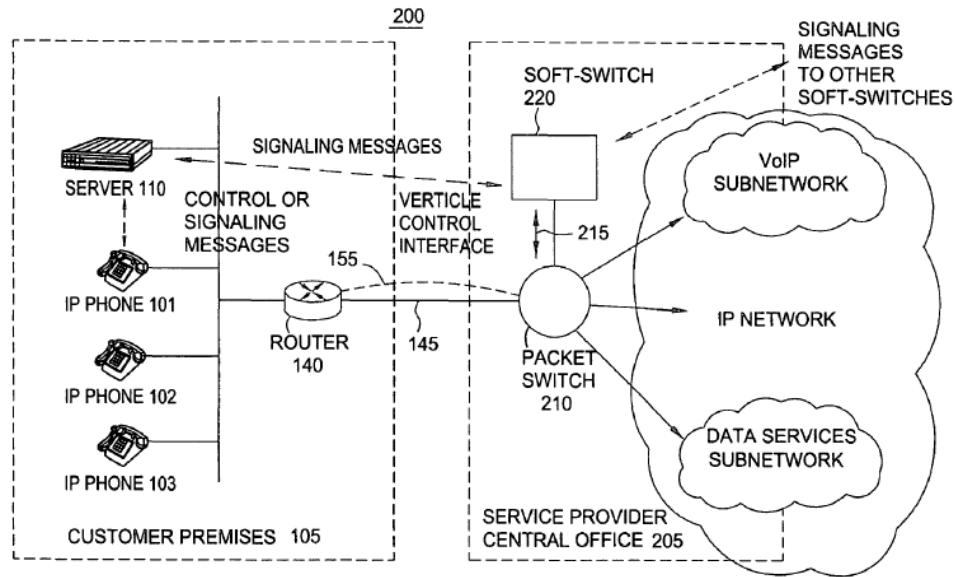
**b. Petitioner reads into Chu ‘684 a problem identified in Chen, but Chen’s problem is irrelevant to Chu ‘684**

Chen discloses that “it is usually pretty tough for international travelers to figure out how to make phone calls in a new region or country”, and discloses a “fixed dial plan” to allow “a user in any region or country [to] place phone calls in a familiar manner.” Chen at ¶¶ 0013, 0015. Chen discloses an architecture in which various equipment (phone 501, PSTN gateway 502, or translator 505) may perform a dial plan translation to communicate with a Telco switch that does not understand the user’s preferred dial plan, but only understands the dial plan of its particular region or country. *Id.* at ¶¶ 0025, 0029-0031; *see also* FIG. 5:



*Fig. 5*

Chu '684 has a different architecture than Chen. *See FIG. 2:*



*FIG. 2*

Petitioner fails to explain *why* Chen's solution is even needed in Chu '684 given the differences in the problems faced by the two systems and their different architectures. There is no need in Chu '684 to solve Chen's problem of international travel to arbitrary regions. Rather, Chu '684's user's IP phone is

configured to use a server over a LAN at a *particular* location (“customer premises” 105).

Petitioner invents a non-existent defect in Chu ‘684’s system as the basis to combine the references. This cannot fulfill the requirements to provide rational underpinning of a motivation to combine. *See KSR Int’l Co.*, 550 U.S. at 418.

c. **The proposed reason to combine Chu ‘684 and Chen would not lead to the modifications asserted by Petitioner**

Even accepting on its face Petitioner’s proposed reason to combine Chu ‘684 and Chen, this proposed reason would not lead to the combination of references asserted in the Petition. Petitioner’s claim chart provides the only specificity of how Petitioner proposes to combine Chu ‘684 and Chen. The claim chart states that the reformatting step of Chen would be performed *before* the classifying step of Chu ‘684’s server 110. Petition at 44 (“Once the callee identifier is reformatted, Chu ’684 determines...”). But the Petition fails to explain why the dialed digits would not be reformatted at the server *after* the classification step, or be reformatted at the soft-switch 220, at the PSTN gateway 1302, or even in further downstream telco equipment. Only reference to the ‘815 Patent and its claims would lead a skilled person to select the specific arrangement recited in Claim 1. But using Claim 1 as the blueprint for combining references constitutes impermissible hindsight. *In re McLaughlin*, 443 F.2d at 1395.

Petitioner also fails to explain why one of ordinary skill in the art would *add* reformatting or why the skilled artisan would even want to *use* reformatting to solve the alleged problems in Chu ‘684.

d. **Petitioner’s misreading of Chu ‘684 obscures why it would be undesirable to combine Chu ‘684 and Chen**

Petitioner’s misreading of Chu ‘684 has led Petitioner to overlook that *caller*-specific dial plans would be undesirable in the enterprise product of Chu ‘684, as they would: (1) increase administrative complexity of the corporate phone system; (2) allow inconsistent dialing rules across the enterprise; (3) increase technical support demands; and (4) create confusion for shared phones such as in conference rooms.

Once Chu ‘684’s teachings of an enterprise dial plan are understood, Petitioner’s obviousness argument is implausible, as the skilled person would not modify Chu ‘684’s *enterprise* “dial plan” in a manner that would lose technical, administrative, and usability benefits of Chu ‘684’s enterprise-friendly design.

Thus, the Petition should be denied with respect to all Challenged Claims.

### **III. CONCLUSION**

The Petition fails to establish a reasonable likelihood that Claims 1, 7, 27, 28, 34, 54, 72, 73, 74, 92, 93 and 111 of the ’815 Patent are unpatentable. Therefore, the Board should not institute trial in this proceeding.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: September 19, 2016

By: /Kerry Taylor/

---

Kerry Taylor, Reg. No. 43,947  
John M. Carson, Reg. No. 34,303  
Customer No. 20,995  
Attorneys for Patent Owner  
Voip-Pal.com, Inc.  
(858) 707-4000

**CERTIFICATE OF COMPLIANCE**

This document complies with the type-volume limitation of 37 C.F.R. § 42.24(a)(1)(i). This Preliminary Response contains 13,957 words, excluding the parts of the document exempted by 37 C.F.R. § 42.24(a)(1).

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: September 19, 2016      By: /Kerry Taylor/  
Kerry Taylor, Reg. No. 43,947  
John M. Carson, Reg. No. 34,303  
Customer No. 20,995  
Attorneys for Patent Owner  
Voip-Pal.com, Inc.  
(858) 707-4000

**CERTIFICATE OF SERVICE**

I hereby certify that true and correct copy of PATENT OWNER'S PRELIMINARY RESPONSE TO PETITION FOR INTER PARTES REVIEW and EXHIBIT 2001 is being served on September 19, 2016, via FedEx Priority Overnight pursuant to 37 C.F.R. § 42.6(e) and as a courtesy via electronic mail, for Petitioners as addressed below:

Adam P. Seitz  
Eric A. Buresh  
ERISE IPA, P.A.  
6201 College Blvd., Suite 300  
Overland Park, KS 66211  
Telephone: (913) 777-5600  
[Adam.seitz@eriseip.com](mailto:Adam.seitz@eriseip.com)  
[eric.buresh@eriseip.com](mailto:eric.buresh@eriseip.com)

Paul R. Hart  
ERISE IPA, P.A.  
5600 Greenwood Plaza Blvd., Suite 200  
Greenwood Village, CO 80111  
Telephone: (913) 777-5600  
[Paul.Hart@EriseIP.com](mailto:Paul.Hart@EriseIP.com)

Dated: September 19, 2016

/Kerry Taylor/  
Kerry Taylor, Reg. No. 43,947  
John M. Carson, Reg. No. 34,303  
Attorneys for Patent Owner  
Voip-Pal.com, Inc.

2424178