

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

DUO SECURITY INC., CENTRIFY CORP.,
AND TRUSTWAVE HOLDINGS, INC.,
Petitioner,

v.

STRIKEFORCE TECHNOLOGIES, INC.,
Patent Owner.

Case IPR2017-01064
U.S. Patent No. 8,484,698

**PATENT OWNER'S PRELIMINARY RESPONSE
UNDER 37 C.F.R. § 42.107**

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Pursuant to § 42.107,¹ Patent Owner StrikeForce Technologies, Inc. (“StrikeForce”) submits this Preliminary Response to the above-captioned Petition for *Inter Partes* Review of U.S. Patent No. 8,484,698 (the “’698 patent”) (“Petition,” Pap. 2), which should be denied in its entirety for failure to show a reasonable likelihood of prevailing on any asserted ground.

I. INTRODUCTION

The ’698 patent relates to authenticating a user using a novel out-of-band security system. Ex. 1001, 1:21-26. The claimed systems utilize two different forms of user-entered information: the first is typically a user’s login information and the second is additional information used to authenticate that user for access. *Id.*, 4:36-44. This type of system implements “two-factor authentication” because the user’s identity is verified using two different forms of information. To further enhance security, in the ’698 patent, these two forms of information are communicated using different pathways (or “channels”). *Id.*, 1:21-26. Two-channel systems like these are referred to as “out-of-band” authentication systems. *Id.*, 3:14-19. The inventions claimed in the ’698 patent provide a novel solution to problems caused by the proliferation of data across the Internet and the ease of

¹ Section cites are to 35 U.S.C. or 37 C.F.R. as context indicates, and all emphasis/annotations added and internal quotations/citations omitted unless noted.

access to this data by enhancing the functionality of computer systems through improved security of different channels used for authentication and access. *Id.*, 4:52-54.

Petitioner challenges claims of the '698 patent, claiming them to be obvious in view of three- or four-reference combinations. But on its face, Petitioner fails to provide the Board with the basic evidence required to institute *inter partes* review.² For example, Petitioner relies on the conclusory assertion that a person of ordinary skill in the art ("POSITA") at the time of invention would have been motivated to combine three, or even four different, single-channel and single-factor security systems into a single, composite multi-factor, multi-channel system. Moreover,

² If the Board nonetheless institutes trial on any of the challenged claims, StrikeForce will address in detail in its § 42.120 Response the numerous substantive errors and shortcomings that underlie each of Petitioner's arguments and its purported evidence, together with expert support. In this paper, however, StrikeForce addresses some fundamental shortcomings of the Petition: in particular, Petitioner's failure to demonstrate, as to *any* of the challenged claims, a reasonable likelihood of success on any asserted ground of invalidity. Because of this clear threshold failure, the Petition should be denied and no *inter partes* review should be instituted under § 314.

Petitioner claims a POSITA would have been motivated to combine these multiple references by cherry-picking select portions of their disclosure and constructing a new system purportedly in the precise manner set forth in the challenged claims. Petitioner contends that this POSITA would have been motivated to do so, all while ignoring the disparaging statements in the prior art that suggested simple, inexpensive systems were desirable, rather than the complicated, unwieldy composite system like the one cobbled together by Petitioner. Namely, Feigen—Petitioner’s primary reference—expressly criticizes making time-consuming and expensive modifications to improve existing security systems by adding additional infrastructure and states, in contrast, that its own invention “may be implemented in a relatively simple configuration of hardware and software at relatively low cost.” Ex. 1003, 7:64-66. Ultimately, Petitioner’s obviousness arguments fail for at least four independent reasons—any one of which is sufficient to justify denying institution.

First, Petitioner fails to provide a sufficient motivation—absent hindsight—for combining three or four different references to purportedly render the claimed systems obvious. In particular, Petitioner ignores the fact that the ’698 patent claims not only recite *multifactor* authentication—requiring at least two types of information to authenticate users—but also require two separate channels—an

access channel and an authentication channel. In this way, Petitioner purportedly provides “evidence” (in the form of conclusory unsupported testimony) that a POSITA would have known and been motivated to use the asserted references to create the specific *multifactor* two-channel authentication system, as claimed, merely because the asserted references all allegedly relate to multifactor authentication. But Petitioner fails to offer any explanation why a POSITA, looking to implement a *multifactor* authentication system in light of the prior art presented in the Petition, would have been motivated to combine the references to create the specific claimed *two-channel* system of the ’698 patent.

Second, Petitioner and its expert, Dr. McDaniel, fail to properly and consistently articulate Petitioner’s proposed combinations and the references relied on to meet each limitation under each ground. For example, in arguing that the prior art allegedly renders obvious the claimed “security computer” for both asserted grounds, Petitioner relies inconsistently and without explanation on (1) the disclosures of Feigen’s “security host” alone, (2) the disclosures of Flanagan’s “programmed processor” alone, or (3) Feigen’s “security host [] as augmented by Flanagan.” In so doing, Petitioner fails to make clear *whether* and *how* it would have combined any particular references to purportedly meet the “security computer” limitation.

Third, Petitioner fails to establish that even if the complicated three- or four-reference combinations could be combined, they would, in fact, render obvious each and every limitation of the challenged claims. For example, as discussed herein, Petitioner fails to establish that the asserted combinations render obvious multiple elements from independent claims 1, 53 and 54, including (but not limited to): the claimed interception device, located in the proper channel and implementing the necessary functionalities; the step of verifying the login identification; the claimed security computer, located in a second channel and implementing the necessary functionalities; and a first software module on an Internet-connected web server; among others. As such, Petitioner fails to meet its burden of specifying where each element of the claim is found in the prior art patents relied upon. § 42.104(b)(4).

Finally, the key “evidence” on which Petitioner relies—the declaration of its proffered expert, Patrick McDaniel—is in large part not evidence at all. Instead, Dr. McDaniel’s declaration (Ex. 1101) simply parrots arguments from Petitioner almost *verbatim*, in an attempt to “expertize” Petitioner’s otherwise unsupported assertions. But because Dr. McDaniel fails to provide the facts, basis, and data that support his testimony, his conclusory assertions are not proper evidence under § 42.65(a), and certainly cannot satisfy Petitioner’s burden to move forward to trial.

To justify institution of an *inter partes* review, Petitioner's papers must make a *prima facie* showing that, as a factual and legal matter for each asserted ground, Petitioner has a reasonable likelihood of proving at least one challenged claim unpatentable. *See, e.g.*, § 42.108(c); § 314; 77 Fed. Reg. 48680, 48694 (Aug. 14, 2012). Because the Petition fails to do so for any ground, it must be denied, and no *inter partes* review should be instituted.

II. THE '698 PATENT

A. Brief Description of the '698 Patent

The '698 patent generally relates to a security system for computer networks. Ex. 1001, 1:20-21. In each of the four disclosed embodiments of the '698 patent and in each challenged claim, two different forms of user-entered information are utilized. *Id.*, 4:32-48. The first is typically a user's login information and the second is additional information used to authenticate that user. *Id.* This type of authentication system provides what is known as "two-factor authentication" because the user's identity is verified using two forms of information. But to further enhance security, the patent teaches communicating the second factor information using a different pathway (or "channel") than the channel over which the secure information is to be transmitted. Such a two-channel system provides "out-of-band" authentication. *Id.*, 6:17-23.

As the '698 patent explains, according to an aspect of the Invention, a user

first attempts to access a host computer (*e.g.*, a banking website) and transmits his or her login credentials (*e.g.*, a user name and password) through an access channel (*e.g.*, over the Internet). This request to access is intercepted and the user's credentials are verified by a security computer. *E.g.*, *id.*, 4:36-44. Once the user has been verified, the security computer establishes an "out-of-band" communication channel with the user via an authentication channel (*e.g.*, by calling the user's mobile phone). *Id.* Using that authentication channel, the user provides additional information that is used to authenticate the user. *Id.*

The use of separate channels in this way protects against a hacker, for example, who has gained access to the access channel, but not the authentication channel. Thus, through implementation of a novel, two-channel system that utilizes a different channel for authentication than for access, the '698 patent provides a more secure system than those known in the art. *See generally id.*, 3:10-4:19 (discussing inadequacies of prior art systems), 6:2-12 (distinguishing single-channel prior art systems where "[b]oth the USER ID and the voice password are sent along the same pathway and any improper accessor into this channel has the opportunity to monitor and/or enter both identifiers").

The four exemplary embodiments of the '698 patent are shown in Figs. 1A, 10, 11, and 13. In the first—referred to herein as the "Fig. 1A WAN

embodiment”—the security system is used within a wide area network (“WAN”), such as when a remote user uses the Internet to access a host computer located within an organization’s network. *Id.*, 6:30-59, 9:10-12:26.

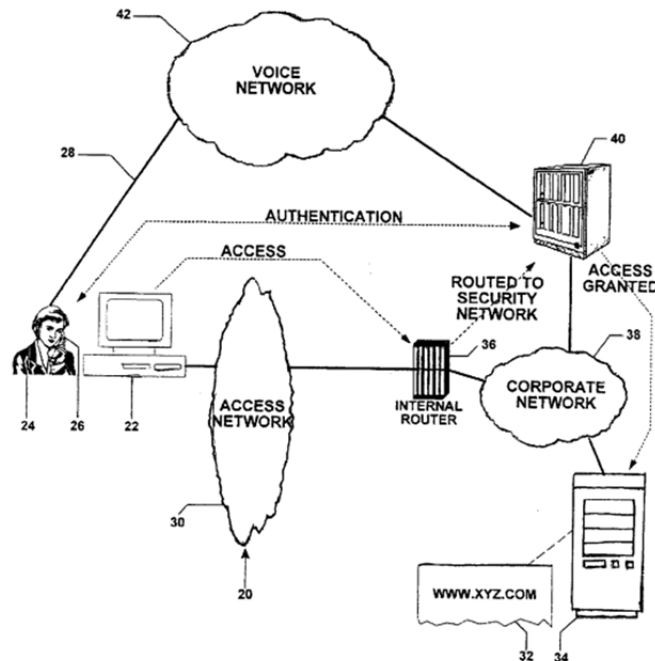


FIGURE 1A

In this embodiment, for example, user 24 attempts to access a web page 32 located at a host computer or web server 34 in a first/access channel in access network 20 using computer 22. *Id.*, Fig. 1A, 6:30-42. In response to that request, the host computer 34 requests that the user enter a user identification and password. *Id.*, 9:27-33. This information is diverted by router 36 to out-of-band security network 40 in a second/authentication channel. *Id.*, 9:33-35, 6:40-43. Security computer

40 uses the authentication channel in voice network 42 to authenticate the user. *Id.*, Fig. 1A, 6:37-49.

The second embodiment—referred to herein as the “Fig. 10 LAN embodiment”—is similar to the first embodiment, except that the invention operates within a local area network (“LAN”).

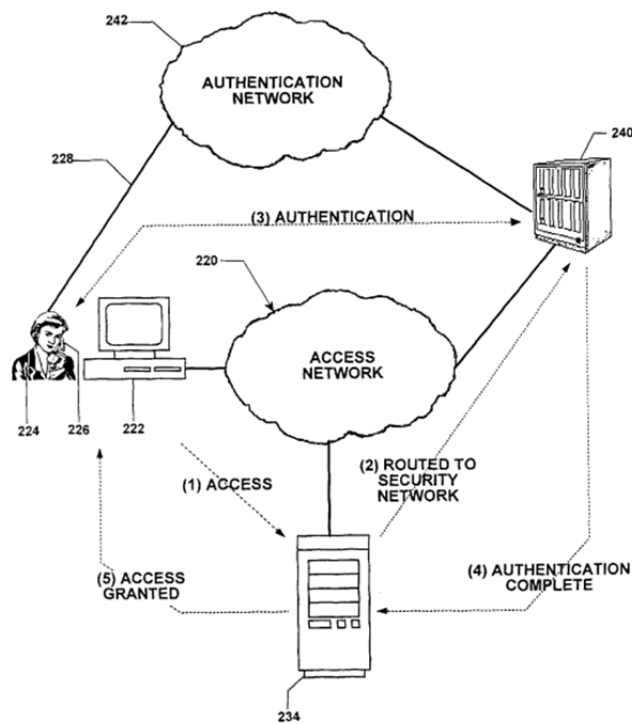


FIGURE 10

Here, for example, a user is already within an organization’s internal network, but seeks access to a secure host computer (or a restricted portion of a computer) on the same network. *Id.*, 12:27-63. In other words, this embodiment covers the situation in which the user and user’s computer are within the same internal

network as the host computer (*e.g.*, a corporate network). *Id.*, 6:23-27. “[W]hen user 224 requests access to a high security database 232 located at a host computer 234 through computer 222, the request-for-access is diverted by a router 236 internal to the corporate network 238 to an out-of-band security network 240.” *Id.*, 12:44-48. From that point, the security computer authenticates the user in the out-of-band authentication channel in a manner similar to that described for the Fig. 1A WAN embodiment. *Id.*, 12:54-58.

The third embodiment (Fig. 11) includes a cellular telephone in the authentication channel capable of receiving a biometric identifier (*e.g.*, fingerprint) from the user. *Id.*, Fig. 11, 5:49-51, 12:64-13:23.

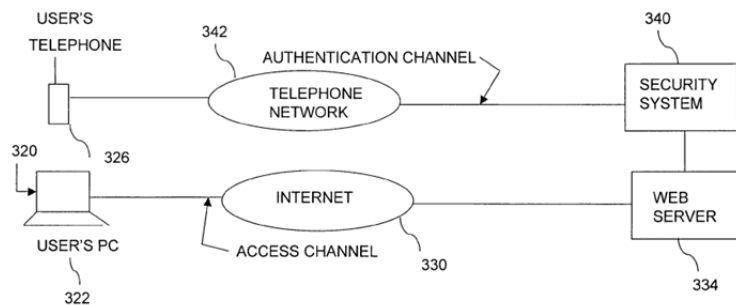


FIGURE 11

In this example, after initial verification, the user communicates over the authentication channel and is prompted to enter a password and biometric identifier. *Id.*, 13:15-19.

In the fourth embodiment (Fig. 13), out-of-band authentication is performed

using a personal digital assistant (PDA) or cellular telephone through a wireless network as the authentication channel. *Id.*, Fig. 13, 13:55-65.

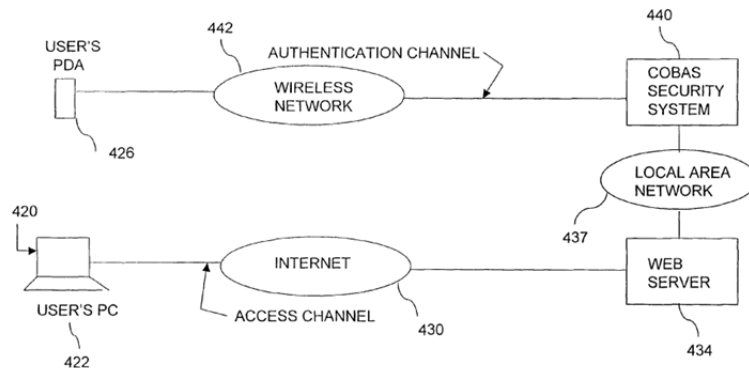


FIGURE 13

As described in the '698 patent, in this example, the security computer can thus communicate with a PDA over the wireless network in an “authentication channel” mode for out-of-band authentication and can receive the user’s ID over the Internet in an “access channel” mode. *Id.*, 14:4-20.

B. The Patent Office Has Already Considered and Rejected Arguments Similar to Those in the Petition

The '698 patent claims priority to U.S. Patent No. 7,870,599 (“’599 patent”), which itself claims priority to U.S. Appl. No. 09/655,297 (“’297 Appl.”). The '698 patent and its parent applications underwent extensive examination—with a total of 18 office actions and responses, including a PTO Appeal Brief—spanning nearly 13 years at the Patent Office. During this time, the Patent Office confirmed the patentability of the '599 patent during its initial prosecution (Ex. 1008 at 37),

re-confirmed the patentability of the '599 patent during *Ex Parte* Reexamination and allowed 7 additional claims (Ex. 1009 at 8), and confirmed the patentability of the '698 patent (Ex. 1007 at 38). In fact, in its final Office Action prior to allowance of the '698 patent, the Patent Office not only withdrew all of its § 103 rejections, but it also allowed Applicant to add 7 additional claims. Ex. 1007 at 73.

During prosecution, Applicant repeatedly addressed and distinguished multiple prior art references disclosing similar systems implementing the very same concepts that Petitioner relies upon in these proceedings.³ For example, during prosecution of the '599 patent, the Examiner repeatedly (and unsuccessfully) proposed combining U.S. Patent No. 5,153,918 ("Tuai"), which at least fails to disclose a separate "authentication channel," with other references to produce a purported two-channel system. *E.g.*, Ex. 1008 at 378. Similarly, the Examiner repeatedly rejected the claims based on U.S. Patent No. 6,012,144 ("Picket"), which also at least fails to disclose an authentication channel for authenticating a request to access a host computer, in combination with other references in an attempt to create the claimed two-channel security system. But as the extensive prosecution record establishes, none of the references alone or in combination

³ Petitioner also filed a second Petition in IPR2017-01064, challenging additional claims of the '698 patent.

discloses or renders obvious the combination of limitations recited in the issued claims of the '698 patent.

III. CLAIM CONSTRUCTION

The Board should decline to adopt the constructions set forth in the Petition. First, no construction of these terms is necessary to reach a decision at this stage, based on Petitioner's multiple failures to meet its burden. *Vivid Techs. v. Am. Sci. & Eng'g*, 200 F.3d 795, 803 (Fed. Cir. 1999) (stating that "only those terms need [to] be construed that are in controversy, and only to the extent necessary to resolve the controversy").

Second, Petitioner's proposed constructions are incorrect as a matter of law. Indeed, rather than provide any intrinsic support, analysis, or argument supporting its proposed constructions, Petitioner asks the Board to simply adopt wholesale the constructions set forth by the District of Delaware. Pet. 15-20. This ignores the Federal Circuit's instruction that the Board "is not generally bound by a prior judicial construction of a claim term" and it is obligated to "assess whether [that judicial construction] is consistent with the broadest reasonable construction of the term." *Power Integrations, Inc. v. Lee*, 797 F.3d 1318, 1326 (Fed. Cir. 2015); *see also Jack Henry & Assocs. v. DataTreasury Corp.*, CBM2014-00056, Pap. 17 at 10 ("Petitioner argues that the district court's interpretation should be adopted, but provides no persuasive analysis as to how the term is to be interpreted under the

broadest reasonable interpretation standard, which is different from the standard used by a district court. The district court's interpretation limits the subsystem to a particular subsystem.... We decline to read a particular subsystem limitation into the claim.”); *Facebook Inc. v. Software Rights Archive*, IPR2013-00478, Pap. 17 at 11 (“*Although a district court’s interpretation of the claims of an expired patent is instructive in a proceeding before the Board, we are not bound by these constructions.* Furthermore, *Petitioners have not provided any reasoning explaining why we should adopt the district court’s constructions;* in fact, it is unclear whether Petitioners even wish for us to do so, as opposed to applying the ordinary meaning of the terms. As such, for the purposes of this decision, *we decline to adopt the district court’s constructions of the four claim terms.*”).

Here, an analysis of the intrinsic evidence shows that the district court made critical legal errors in construing these terms and the Board should not adopt those district court constructions.

A. Petitioner’s Proposed Claim Constructions Improperly Exclude Embodiments Disclosed in the ’698 Patent

The district court concluded that “the relevant asserted claims [of the ’698 patent] cover only the Figure 1A embodiment where the user login identification verification and authentication are diverted to the security computer prior to contact with the host computer.” Ex. 1012 at 15. As a result of this, the court

adopted overly narrow constructions (*e.g.*, *id.*, at 52-53 (construing, for example, “[access/first] channel,” “[authentication/second] channel,” “host computer,” and “multichannel security system”)) that exclude three of the ’698’s four embodiments. In reaching its conclusion, the district court focused primarily on perceived differences between Figs. 1A and 10 and, based on these differences, erroneously concluded that Fig. 10 was an unclaimed embodiment. *Id.* at 14, 19 n.77.

Specifically, the district court stated that, in Fig. 1A, “the login identification and demand for access is diverted to the security computer” and, accordingly, there is no “initial contact and verification at the host computer.” *Id.* at 13-14. In contrast to Fig. 1A, the district court stated that, in Fig. 10, “the user is already on the host computer’s network and is attempting to access a high security database.” *Id.* The court concluded that, as a result, Fig. 10 is different than Fig. 1A because in Fig. 10 the user “is trying to ***gain access to protected data*** on the host computer ***while already on the host computer’s network.***” *Id.* at 15 (quoting StrikeForce’s brief) (emphasis in original). Thus, in the district court’s view, the user in Fig. 1A has no contact with the host computer prior to being authenticated, whereas the user in Fig. 10 has contact with the host computer and is seeking access to a more secured portion of the host computer. *Id.*

Based on these supposed differences between Figs. 1A and 10, the district court limited the claims to just the Fig. 1A WAN embodiment (and excluded the LAN embodiments) because “the asserted claims are directed to accessing the host computer itself, not ‘protected data’ [*e.g.*, secured database] on the host computer.” *Id.* at 14. In doing so, the court noted that the claims are directed to a “method for *accessing a host computer*” or a “demand for *access to a host computer*” (as opposed to a method for accessing protected data or a demand for access to protected data). *Id.* The court’s analysis is flawed for several reasons.

Importantly, the district court’s limitation of the claims to just the Fig. 1A WAN embodiment contradicts the claims themselves. Dependent claim 22 requires that the first channel of claim 1 “comprises one of a wide area network [Fig. 1A] *and* a local area network [Fig. 10].” Ex. 1001, 15:46-48. Thus, claim 1 must cover both the WAN embodiment of Fig. 1A *and* the LAN embodiment of Fig. 10. But, the district court narrowed claim 1 to such an extent that it excluded LAN embodiments and would be narrower than dependent claim 22, rendering that claim meaningless. *Alcon Research, Ltd. v. Apotex Inc.*, 687 F.3d 1362, 1367 (Fed. Cir. 2012) (“It is axiomatic that a dependent claim cannot be broader than the claim from which it depends.”).

Next, the district court’s incorrect conclusion that the user in Fig. 1A has no

contact with the host computer prior to being granted access (Ex. 1012 at 13-14), directly contradicts the specification. The specification explicitly discloses that the user of Fig. 1A has contact with the host computer *prior to* access being granted. In describing the flowchart of Figs. 9A-9E⁴, the '698 patent states:

The pathway commences at the REQUEST FOR ACCESS block 150 whereby a request to enter the host computer or web server 34 is received from the user at the remote computer 22. The user requesting access to the host computer from the remote computer is immediately prompted to login at the LOGIN SCREEN PRESENTED block 152. *While the login procedure here comprises the entry of the user identification and password and is requested by the host computer 34, such information request is optionally a function of the security computer 40.*

Ex. 1001, 9:24-35. Thus, *before* access is granted, the host computer requests that the user send login information. *See also id.*, 10:11-19 (disclosing that the host computer sends a verification message to the user *before* authentication takes place), 13:7-12, 14:7-10 (disclosing that the user in Figs. 11 and 13 has contact and,

⁴ Figs. 9A-E are described as “a flow diagram of the software program required for the security system shown in Fig. 1.” Ex. 1001, 5:43-44. The reference to Figure 1 instead of 1A is clearly a mistake. Indeed, the discussion of Figure 9 refers to components in Figure 1A – not Figure 1.

in fact, exchanges information—including login information—with the web server 334, 434 (*i.e.*, the host computer) before access is granted). Thus, the user in all four embodiments (including Fig. 1A) has contact with the host computer before access to that computer is granted.

Finally, the district court’s exclusion of Fig. 10 from the scope of the claims contradicts express statements during prosecution of the ’599 patent where the Applicant told the Patent Office that Fig. 10 was directed to “accessing a host computer” and was “illustrative” of the “two-channel authentication system according to the invention”:

Independent claim 1, for example, is directed to securely *accessing ‘a host computer’* for authentication purposes. ... *Figure 10 from the published application ... is illustrative of a two-channel authentication system according to the invention.*

Ex. 1008 at 52.⁵ Applicant again reiterated this position during reexamination of the ’599 patent. Ex. 1009 at 60-61. Thus, Applicant repeatedly made clear that both accessing a host computer (*e.g.*, as shown in the Fig. 1A WAN embodiment) and protected data on a computer (*e.g.*, as shown in the Fig. 10 LAN embodiment) are claimed aspects of the invention. Thus, the Board should not adopt the district court’s erroneous constructions.

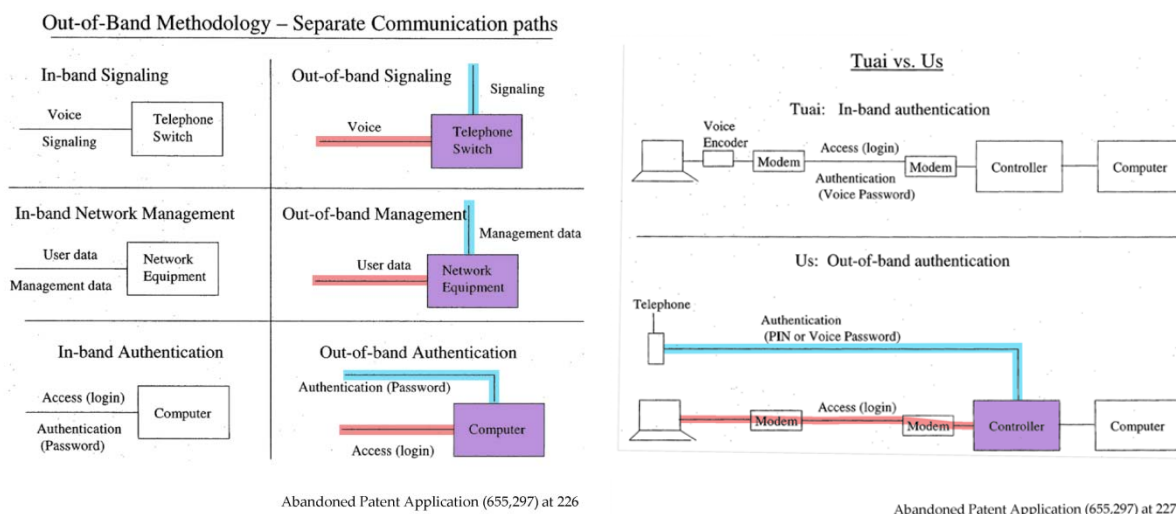
⁵ The claim at issue during prosecution mirrors claim 1 of the ’698 patent.

**B. Petitioner’s Proposed Claim Constructions Improperly Limit
“Out-of-Band” to “Separate Facilities”**

The district court further concluded that “the inventor defined an ‘out-of-band’ system as ‘one having an authentication channel that is separated from the information channel and therefore is nonintrusive as it is carried over *separate facilities* than those used for actual information transfer.’” Ex. 1012 at 16. In doing so, the court ignored the Inventor’s lexicography, which establishes that “out-of-band” authentication could also occur over separate “*frequency channels* or *time slots*”:

Likewise, an “out-of-band” operation is *defined* as one using an authentication channel that is separated from the channel carrying the information and therefore is nonintrusive as it is carried over separate facilities, *frequency channels, or time slots* than those used for actual information transfer.

See id., 3:10-19. The district court’s construction also directly contradicts the prosecution history where the Inventor expressly illustrated out-of-band channels that *share facilities* (e.g., the “telephone switch” in this example is shared by the “voice” and “signaling” channels, in purple) (Ex. 1011 at 33-34) (with red, blue, and purple annotations added for illustration):



To support its improper conclusion, the district court relied on a discussion in column 6, lines 14-27 of the '698 Patent. But if anything, this discussion in the specification relates to an aspect of out-of-band in the context of Fig. 1A. This cannot be the definition of “out-of-band” at least because immediately following it, there is a description of a second out-of-band embodiment (*i.e.*, Fig. 10 LAN embodiment) that makes no mention of separate facilities and explicitly says that the accessor and host computer are “within the same network”:

The *first* [embodiment] describes an application to a wide area network, such as the internet, wherein the person desiring access and the equipment used thereby are remote from the host computer. *In this description* and consistent with Newton’s Telecom Dictionary (19th Ed.), an “out-of-band” system is defined herein as one having an authentication channel that is separated from the information channel and therefore is nonintrusive *as it is carried over separate facilities*

than those used for actual information transfer. The *second* embodiment describes the application of the disclosed invention to a local area network wherein the person desiring access and the equipment used thereby are *within the same network* (referred to as the “corporate network”) *as the host computer.*

Ex. 1001, 6:14-27.

C. The Preamble’s Recitation of “Multichannel Security System” Is Not Limiting

A preamble limits a claim only in certain circumstances. *See Am. Med. Sys., Inc. v. Biolitec, Inc.*, 618 F.3d 1354, 1358-59 (Fed. Cir. 2010). To be limiting, the preamble must be “necessary to give life, meaning, and vitality” to the claim. *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305 (Fed. Cir. 1999). A preamble is not limiting “where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention.” *Vizio, Inc. v. Int’l Trade Comm’n*, 605 F.3d 1330, 1340 (Fed. Cir. 2010). In making this determination, a court should “review ... the entire ... patent to gain an understanding of what the inventors actually invented and intended to encompass by the claim.” *Catalina Mktg. Int’l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 808 (Fed. Cir. 2002).

The Federal Circuit has provided “guideposts” to assist courts in determining whether language in the preamble limits claim scope. *Id.* For

example, dependence on a “preamble phrase for antecedent basis may limit claim scope because it indicates a reliance on both the preamble and claim body to define the claimed invention.” *Id.* In addition, if reference to the preamble is necessary “to understand limitations or terms in the claim body, the preamble limits claim scope.” *Id.* The preamble may also be limiting if it recites additional structure or steps that the specification identifies as important. *Id.* Here, none of these applies. Rather, the body of each challenged claim defines a structurally complete invention and the preamble merely states a purpose or intended use for the invention. *Rowe v. Dror*, 112 F.3d 473, 478 (Fed. Cir. 1997) (holding that a preamble is not limiting “where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention”).

The body of the challenged claims makes clear that the claims cover a “multichannel” system. Specifically, the body of each claim recites an “access channel” (or “first channel”) and an “authentication channel” (or “second channel”)—*i.e.*, multiple channels. Thus, the reference to a “multichannel security system” in the preambles does not give “life, meaning, [or] vitality” to the claims. *See Pitney Bowes*, 182 F.3d at 1305. In other words, “the claim body describes a structurally complete invention such that deletion of the preamble phrase does not

affect the structure or steps of the claimed invention.” *Am. Med. Sys.*, 618 F.3d at 1358-59 (quoting *Catalina*, 289 F.3d at 809). At best, it “merely gives a descriptive name to the set of limitations in the body of the claim that completely set forth the invention.” *Id.* at 1359 (quoting *IMS Tech., Inc. v. Haas Automation, Inc.*, 206 F.3d 1422, 1434-35 (Fed. Cir. 2000)).

Petitioner—in misguided reliance on the district court’s construction—suggests that Applicant relied on the language of the preamble during prosecution to secure allowance of the claims. Pet. 14-15. But Petitioner—and the district court—have failed to identify any instance of Applicant relying on the *preamble* of the claims itself, as opposed to the body of the claims. Indeed, in distinguishing the prior art, Applicant relied upon the recitation of multiple channels recited in the limitations *in the body of the claims*, not the preamble. *See id.* (citing Ex. 1008 and 1009)); *see also Intirtool, Ltd. v. Texar Corp.*, 369 F.3d 1289, 1295-96 (Fed. Cir. 2004) (holding that preamble is not limiting where statements from the prosecution history could be interpreted as relating to the specific structural limitations set forth in the body of the claim). Indeed, the plain language of the claim limitations, which require that certain communications be carried over an authentication channel, rather than the access channel, already encompass the concept of “out-of-band” authentication, regardless of whether the preamble

includes the phrase “out-of-band” or “multichannel.” Thus, there is no legal basis for finding the preambles limiting and the Board should decline to rubberstamp the district court’s incorrect construction.

IV. THE CONCLUSORY ASSERTIONS OF PETITIONER’S PROFFERED EXPERT FAIL TO PROVIDE EVIDENCE OF A MOTIVATION TO COMBINE THE ASSERTED REFERENCES

“[A] finding of obviousness ‘cannot be predicated on the mere identification in [the prior art] of individual components of claimed limitations.’” *Pers. Web Techs. v. Apple, Inc.*, 848 F.3d 987, 991 (Fed. Cir. 2017) (quoting *In re Kotzab*, 217 F.3d 1365, 1371 (Fed. Cir. 2000)). Rather, obviousness also requires a showing that a POSITA “would have been motivated to combine the prior art *in the way claimed by the [challenged patent] claims at issue.*” *Id.* Thus, Petitioner has the burden to show a reasonable likelihood that a POSITA would have been motivated to make this combination, without hindsight. *See DirecTV, LLC v. Qurio Holdings, Inc.*, IPR2015-02006, Pap. 6 at 14 (Apr. 4, 2016). Petitioner relies—and in many instances *exclusively relies*—on the declaration of its expert, Dr. McDaniel, to support Petitioner’s assertions that a POSITA would have been motivated to combine the asserted references in the manner claimed by the ’698 patent. But Petitioner and Dr. McDaniel make unsupported logical leaps that are based on impermissible hindsight. Accordingly, Petitioner has failed to meet its burden for each of the reasons discussed below.

A. Petitioner Fails to Sufficiently Show *Why* a POSITA Would Have Been Motivated to Combine Feigen with Flanagan and Falk

1. Petitioner fails to explain why a POSITA would have turned to multi-channel authentication to allegedly solve the problem of implementing a higher security system

It is indisputable that the claims require two separate channels—an access channel (or “first channel”) and an authentication channel (or “second channel”). *E.g.*, Ex. 1001, 14:33 (“in a first channel”), 14:37 (“in a second channel”), 18:6 (“in an access channel”), 18:13 (“in an authentication channel”). Notably, Petitioner never argues or suggests that any of the asserted references disclose a two-channel system.⁶ Thus, under Petitioner’s own view of the prior art, Petitioner contends that a POSITA would have combined three separate and unique security systems in such a manner that the newly-constructed composite system would have resulted in the two-channel system of the claims. Pet. 34-39. But Petitioner fails to explain *why* a POSITA would have been motivated to create such a system.

In arguing that a POSITA would have been motivated to combine Feigen with Flanagan and Falk, Petitioner relies on only two statements in Feigen: “Together tasks 100 and 102 form an authentication process the strength of which

⁶ See Pet. 23-26 (discussing Feigen); 26-30 (discussing Flanagan); and 30-33 (discussing Falk). Nowhere in these sections does Petitioner argue or suggest that any one of these references discloses a security system with two separate channels.

may vary in accordance with the needs of network 14,” and “[h]owever, different systems may use different authentication processes.” *See* Pet. 40 (citing Ex. 1003, 6:59-62, 6:66-67). Petitioner conclusorily suggests that this discussion of different systems, each with its own stand-alone authentication process, somehow would have suggested that a POSITA should “*combin[e] multiple authentication mechanisms in the same system.*” *Id.* Starting from this unsupported assertion,⁷ Petitioner embarks upon a series of logical leaps that it asserts somehow lead to the proposed combination:

- (i) First Petitioner argues that because combining multiple authentication mechanisms achieves a higher level of security, a POSITA would have consulted references related to multi-factor authentication, namely Flanagan and Falk. *See* Pet. 41.
- (ii) Second, Petitioner argues that, in particular, a POSITA would have combined Flanagan’s two-factor authentication with Feigen’s system to create a new *two-channel* authentication system. *See* Pet. 42-43.

⁷ As further detailed below, § IV.B, Petitioner’s arguments about the alleged obviousness of its proposed combinations rely on a fundamental belief about what was known in the state of the art at the time of invention, but Petitioner and its expert fail to provide evidence establishing this foundation.

(iii) Finally, Petitioner argues that a POSITA would have then been motivated to *further modify* the combination of Feigen and Flanagan with Falk “at least because Falk is focused on the same security processes that provide authentication and authorization of users.” *See* Pet. 43-44.

But Petitioner fails to provide evidence justifying each of these substantial assumptions.

First, assuming *arguendo* that a POSITA would have been motivated by two simple statements in Feigen to employ different higher-security protocols than those contemplated by Feigen, Petitioner still fails to explain why a POSITA would have turned to *multifactor* authentication in particular. Indeed, Petitioner only asserts that Feigen teaches “*single* factor authentication.” Pet. 40 (“Security host (26) in Feigen performs a single-factor authentication process using a one-time password....”). Thus, the Petition fails to establish why a POSITA would have been motivated to look outside Feigen itself (or to any other reference disclosing a single-factor system) for *multifactor* authentication processes.⁸

⁸ As discussed in Section § IV.C, Petitioner’s reliance on Dr. McDaniel here is unhelpful. Dr. McDaniel simply parrots back the language of the Petition without providing any underlying basis or rationale for his “opinions.” *Compare*

Second, even assuming that a POSITA would have been motivated to modify Feigen to use *multifactor* authentication, Petitioner still fails to set forth any reason why a POSITA would have been motivated to combine Feigen and Flanagan in the manner proposed to create a *multichannel* multifactor authentication system as required by the limitations of the '698 patent claims. Petitioner does not—and cannot—suggest that all multifactor authentication systems necessarily include or need multiple channels. There is no evidence in the Petition or Dr. McDaniel's declaration from which to conclude that a person allegedly motivated to enact a *multifactor* authentication system would have combined it in such a fashion to yield a *multichannel* authentication system—much less a multichannel system meeting the specific limitations of the '698 patent claims.

At best, if Feigen and Flanagan were combined to create a multifactor authentication system, the multifactor authentication would all take place in the

Pet. 41-42 *with* Ex. 1101 ¶ 97. Such conclusory testimony is entitled to little or no weight. *TRW Auto. US LLC v. Magna Elecs., Inc.*, IPR2014-00258, Pap. 18 at 10-11 (Aug. 27, 2014) (giving little to no weight to expert testimony that “did not elaborate on [Petitioner's] position because it simply repeated [Petitioner's] conclusory statements verbatim.”); § 42.65(a).

access channel. For example, Feigen indisputably discloses a single-channel system, so the “security host (26)” must necessarily reside in the access channel, which is contrary to the requirement of the claims. Ex. 1003, FIG. 1; 3:16-18 (“security host is desirably located physically and logically with inside network 14”). Similarly, Flanagan’s “programmed processor (12)” serves as both the security computer and the host computer—which means it too resides in, at least, the access channel. Ex. 1102, FIG. 1; 3:49-55 (“If the login and password information input by the user, match prestored login and password information maintained in memory by processor 12, the processor then independently attempts to establish a voice connection to user telephone 13-- which ideally is in close physical proximity to user terminal 11.”), 4:39-43 (“We will assume that the user associated with login AFC4 in FIG. 5 is at user terminal 11 in FIG. 1 and wishes to access certain restricted programs in programmed processor 12”). Petitioner’s alleged motivation to combine Feigen and Flanagan thus provides no evidence or explanation for why a POSITA would have opted to remove the “security host (26)” or the “programmed processor (12)” from the access channel and configure a new system such that these components are placed in a new (authentication) channel that is separate from the access channel as required by the ’698 patent claims.

Boehringer Ingelheim Int’l GmbH v. Biogen Inc., IPR2015-00418, Pap. 14 at 17-

18 (July 13, 2015) (denying institution for insufficient explanation of motivation to combine where Petitioner failed to explain why the cited disclosures of the references would have suggested using the specific element of one reference with the specific element of the second reference); *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1342, 1368 (Fed. Cir. 2012) (“[W]e must still be careful not to allow hindsight reconstruction of references to reach the claimed invention without any explanation as to how or why the references would be combined to produce the claimed invention.”).

Finally, even assuming a POSITA would have been motivated to combine Feigen and Flanagan to yield a new multichannel authentication system, Petitioner still fails to justify its proposed three-reference combination. In particular, Petitioner argues that a POSITA would have been motivated to *further modify* the Feigen/Flanagan combination with Falk “at least because Falk is focused on the same⁹ security processes that provide authentication and authorization of users”

⁹ Indeed, Petitioner’s contention that Flanagan and Falk disclose “the *same* security processes that provide authentication and authorization of users” (Pet. 43) raises additional questions as to why a POSITA would have been motivated to combine *both* Flanagan and Falk into Feigen. Petitioner never addresses what benefit Falk allegedly brings to the proposed combination that would not have

and “[l]ike Flanagan, Falk teaches two-factor authentication.”¹⁰ Pet. 43-44. Petitioner further describes Falk’s use of “a challenge code to be generated in an authentication center 30 [and] sent over an authentication challenge network 28 to the personal unit 20 [something the user has].” *Id.* But Petitioner’s proposed Feigen/Flanagan/Falk combination does not align with its purported motivation to incorporate Falk into the Feigen/Flanagan system. Specifically, Petitioner does not propose incorporating Falk’s second-factor authentication “challenge code” into

been present with Flanagan alone. *See Huawei Device USA, Inc. v. SPH Am., LLC*, IPR2015-00221, Pap. 13 at 16–17 (May 28, 2015) (denying institution where Petitioner’s expert testified that a POSITA could have made the proposed substitution, “without sufficiently articulating what the benefit ... would have been”).

¹⁰ To the extent Petitioner purports to base its motivation to combine references on the assertion that all three references are in the same field, this is insufficient. *TRW Auto. US LLC v. Magna Elecs., Inc.*, IPR2014-00257, Pap. 18 at 4 (Aug. 28, 2014) (“That each reference may be in the field of ‘vehicular vision’ is insufficient, in and of itself, to provide a reason with rationale underpinning as to why one of ordinary skill in the art would have sought to combine specific teachings of such references.”)

the combined Feigen/Flanagan system to yield a system with yet another authentication factor. Instead, Petitioner relies on Falk only for its alleged disclosure of transmitting an instruction to a host computer to grant or deny access. Pet. 45. Thus, Petitioner *ignores* its very basis for combining all three references and instead cherry-picks from disparate disclosures in a failed attempt to try to cobble together the claimed invention of the '698 patent. This is a classic case of improper hindsight analysis. *See Kinetic Concepts*, 688 F.3d at 1368 (“[W]e must still be careful not to allow hindsight reconstruction of references to reach the claimed invention without any explanation as to how or why the references would be combined to produce the claimed invention.”); *In re NTP, Inc.*, 654 F.3d 1279, 1299 (Fed. Cir. 2011) (“Care must be taken to avoid hindsight reconstruction by using the patent in suit as a guide through the maze of prior art references, combining the right references in the right way so as to achieve the result of the claims in suit.”).

2. Petitioner’s proposed combination is based on impermissible hindsight

Even assuming that Petitioner met its burden of demonstrating that a POSITA would have been motivated to combine Feigen with Flanagan and Falk in the manner proposed (it has not), Petitioner still fails to explain why a POSITA would have chosen the specific elements of each reference relied upon by

Petitioner. *Boehringer*, IPR2015-00418, Pap. 14 at 17-18; *see also Pers. Web Techs*, 848 F.3d at 981.

In fact, nowhere does Petitioner explain why it cherry-picked the specific elements identified in its Petition to meet the claims of the '698 patent. Nor does Petitioner explain why a POSITA would have combined the references in the asserted manner. For example, as discussed in § IV.A.1, Feigen indisputably discloses a single-channel system, so the “security host (26)” must reside in the access channel. Ex. 1003, FIG. 1; 3:16-18. Petitioner fails to explain why a POSITA would have been motivated to remove Feigen’s security host from the access channel. Similarly, Petitioner does not identify any disclosure in Feigen that would motivate a POSITA to use Flanagan’s biometric authentication mechanism, as opposed to simply using Falk’s disclosure of transmitted data being entered into a telephone keypad. Indeed, the only “evidence” that Petitioner points to for why a POSITA would want to enact the claimed multichannel system is the '698 patent itself and the conclusory testimony of its expert who parrots the Petition *verbatim*:

The '698 Patent describes a problem that was well-known in the field at the time of the alleged invention in September 2000—namely, the design of a multichannel security system for granting access to a host computer. Ex. 1001 at Abstract. Ex. 1101 at ¶ 94.

Pet. 40. In fact, the Petition and Dr. McDaniel's declaration fail to identify *any* other prior art reference attempting to solve the problem of designing a multichannel security system for granting access to a host computer. *Id.*; Ex. 1101

¶ 94. Rather, Petitioner used the claims of the '698 patent as a roadmap to combine references and, in doing so, has failed to heed the Supreme Court's and the Federal Circuit's repeated warnings against relying on hindsight to reconstruct the claimed system of the '698 patent. *See, e.g., Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 36 (1966) (warning against "the temptation to read into the prior art the teachings of the invention in issue"); *Grain Processing Corp. v. Am. Maize-Products*, 840 F.2d 902, 907 (Fed. Cir. 1988) ("Care must be taken to avoid hindsight reconstruction by using the patent in suit as a guide through the maze of prior art references, combining the right references in the right way so as to achieve the result of the claims in suit.").

3. Petitioner ignores Feigen's statements that teach away from Petitioner's combination

Petitioner ignores express disclosures in Feigen criticizing (and, in fact, teaching away from) the types of combinations asserted in the Petition. Petitioner concedes that Feigen discloses only a single-factor authentication process. Pet. 40. While Feigen acknowledges that "different systems may use different authentication processes" (Ex. 1003, 6:66-67), Feigen also stresses the importance

of considering the expense, time, and practicality of any modification prior to incorporating it into an existing system. Ex. 1003, 2:1-12. Feigen states:

Unfortunately, these conventional security improvements suffer from a limited applicability. An existing infrastructure of server and client applications currently exist. These server and client applications for the most part do not accommodate communication through a proxy or encrypted communications. Consequently, the conventional security improvement techniques cannot be used with the existing infrastructure without significant infrastructure modifications. ***Such modifications to an entire infrastructure of server and client applications would be such an expensive and time consuming undertaking that such modifications are not practical.***

Id. Consistent with this, Feigen further states that “[t]he present invention may be implemented in a relatively simple configuration of hardware and software at relatively low cost.” *Id.*, 7:64-37. Thus, Feigen is concerned with a simple system that minimizes costs and changes to existing infrastructure and tells a POSITA that more complicated systems—even ones using “conventional security improvements”—should be avoided in favor of Feigen’s preferred embodiments. Feigen’s comments criticizing overly complicated systems undercut Petitioner’s obviousness arguments. *See DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1327 (Fed. Cir. 2009) (a reference ***teaches away*** from a particular

combination when it “criticize[s], discredit[s], or otherwise discourage[s]’ investigation into the invention claimed”).

In contrast to Feigen’s express teachings, Petitioner’s proposed three-reference combination indisputably requires substantial modifications to Feigen’s existing system. For example, Petitioner proposes modifying Feigen’s system to incorporate, at least, Flanagan’s Voice Apparatus 14 and Telephone Central Office Switch 15 (*see* Pet. 35 and 47), as well as Flanagan’s biometric analyzer and associated hardware/software. *See, e.g.*, Pet. 39, 54-56. In addition, Petitioner’s proposed three-reference combination requires incorporating Falk’s “authentication center (30)” and “service node (26).” Pet. 39.

Petitioner fails to even acknowledge this tension between what Feigen desires (simplicity, minimal cost, minimal changes to infrastructure) and the modification that its proposed combination would undoubtedly require (complexity, additional cost, substantial modifications), let alone explain why, in view of this tension, a POSITA would have extensively modified Feigen’s system as Petitioner proposes. Ex. 1003, 2:1-12. Further, Petitioner’s failure to address this teaching from Feigen leaves the Board with no evidence as to why a POSITA would have any reason to modify Feigen to incorporate elements from both Flanagan and Falk if such a system would result in a more expensive, impractical system. This is

especially true here where the very “conventional” improvements rejected by Feigen include adding new communication paths between a remote user and the local application servers. *Id.*

Dr. McDaniel’s declaration also is unhelpful here. Ex. 1101 ¶¶ 96-108. Dr. McDaniel does not address the disclosures in Feigen which are inconsistent with the proposed modifications or offer any reasons why a POSITA would have ignored this teaching and combined Feigen with Flanagan and Falk to create a system requiring the very changes in infrastructure and communication that Feigen criticizes as expensive, time consuming and not practical. Ex. 1003, 2:1-12.

Because Petitioner and Dr. McDaniel fail to address this inconsistent disclosure—or explain why a POSITA would have ignored an express teaching that is inconsistent with, and teaches away from, the alleged motivation to combine—Petitioner has failed to meet its burden.

B. Petitioner’s Obviousness Arguments Rely Primarily on Its Expert’s Conclusory Testimony about the State of the Art

Petitioner’s arguments about the alleged obviousness of its proposed combinations rely on a fundamental belief about what was known in the state of the art at the time of invention. In particular, Petitioner repeatedly relies on the concepts of implementing security systems using (1) something the user knows; (2) something the user has; and (3) something the user is. *See, e.g.,* Pet. 41, 42,

44,¹¹ 60. Petitioner’s sole basis for claiming these concepts were “well known in the art before September 5, 2000” is the testimony of Dr. McDaniel. *E.g.* Pet. 41. But Dr. McDaniel’s testimony is not entitled to any weight at least because the cited portions of his declaration fail to provide any *evidentiary* support or explanation for his conclusory statements about what was purportedly well known in the art. § 42.65(a) (“Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight.”).

For example, in setting forth its “Background of the State of the Relevant Art in 2000,” Petitioner cites to paragraphs 48-53 of Dr. McDaniel’s declaration. Pet. 21-23 (purporting to establish the concepts of “something the user [has]/[knows]/[is]” as well known in the art). But, remarkably, Dr. McDaniel sets forth multiple paragraphs purporting to lay out the state of the art in 2000 *without once citing to a single document or reference* or otherwise indicating the basis for his beliefs. In fact, nowhere in these paragraphs does Dr. McDaniel provide *any* underlying facts or data supporting those beliefs. Ex. 1101 ¶¶ 48-53. Conclusory testimony such as this is entitled to little to no weight. § 42.65(a).

¹¹ In fact, Petitioner goes as far as inserting, via brackets, the concepts of “something the user has” and “something the user knows” into the quoted language from Falk. Pet. 44 (quoting Ex. 1005).

Further, Petitioner bases its argument that a POSITA “would also understand that higher security can be achieved by combining multiple authentication mechanisms in the same system” on a concept that it refers to as “defense in depth.” Pet. 41. Indeed, Petitioner claims that “defense in depth ... is a guiding principle of secure system design.” Pet. 41 (citing Ex. 1101 ¶ 97). But, once again, Dr. McDaniel fails to provide *any* evidentiary basis for his testimony concerning “defense in depth”—let alone his assertion that this is “a guiding principle of secure system design.” Ex. 1101 ¶ 97. In fact, Dr. McDaniel’s declaration does nothing more than parrot the language of the petition verbatim and therefore should be ignored. *TRW Auto. US LLC v. Magna Elecs., Inc.*, IPR2014-00258, Pap. 18 at 10-11 (Aug. 27, 2014) (Dec. for Rehearing) (giving little to no weight to expert testimony that “did not elaborate on [Petitioner’s] position because it simply repeated [Petitioner’s] conclusory statements *verbatim*”); § 42.65(a).

Petitioner’s extensive reliance on Dr. McDaniel’s insufficient testimony is fatal to Petitioner’s arguments. For example, Petitioner relies on this “defense in depth” concept to argue that a POSITA would have been motivated to combine multiple authentication mechanisms into a single system. *See* Pet. 41. Without this concept—offered without evidentiary support—Petitioner presents no evidence that a POSITA looking to implement higher security would have been

motivated to combine multiple authentication mechanisms in the same system, as Petitioner claims.¹²

Similarly, Petitioner argues that “one of ordinary skill in the art would have been motivated to combine Feigen and Flanagan to achieve Feigen’s suggestion of stronger security by security host 26 [because the] combination would only require known techniques of implementing Flanagan’s ‘something the user has’ and ‘something the user is’ approach as additional step to Feigen’s ‘something the user knows’ password authentication.” Pet. 42; *see also* Pet. 44, 60 (Petitioner relying repeatedly on “something the user knows” and/or “something the user has”). But should the Board discount the unsupported testimony of Dr. McDaniel that these concepts were well known in the art—as it should—then Petitioner has provided no evidentiary basis for combining these multiple references.

In short, the Board should deny institution as to all grounds because Petitioner fails to set forth a reasonable basis—supported by evidence—that a POSITA would have been motivated to combine multiple references, as suggested

¹² Moreover, as discussed above in § IV.A.1, even were the Board to credit Dr. McDaniel’s “defense in depth” concept, at most this provides a basis to create a *multifactor* authentication system, but fails to provide a motivation to create the claimed two-channel system of the ’698 patent.

in the Petition. Instead, Petitioner relies repeatedly on the testimony of its expert, who offers his “opinions” without providing the underlying facts and evidence supporting his conclusions. This is insufficient to meet Petitioner’s burden. § 42.65(a).

C. Petitioner Relies on Expert Testimony that Merely Parrots the Petition Without Providing Further Elaboration

As noted above, Petitioner relies repeatedly—and in many instances *exclusively*—on the declaration of its expert, Dr. McDaniel, to support Petitioner’s assertions that a POSITA would understand the cited art to disclose certain claim limitations. But Dr. McDaniel’s declaration, rather than providing necessary supporting evidence and his own expert analysis, consists largely of Petitioner’s arguments parroted almost verbatim. Thus, this testimony should be given no evidentiary weight. *See, e.g., Kinetic Techs., Inc. v. Skyworks Solutions, Inc.*, IPR2014-00529, Pap. 8 at 15-16 (Sept. 23, 2014) (“Merely repeating an argument from the Petition in the declaration of a proposed expert does not give that argument enhanced probative value.”) (*citing In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)); *Wowza Media, LLC v. Adobe Sys. Inc.*, IPR2013-00054, Pap. 12 at 15 (Apr. 8, 2013); *see also TRW Auto.*, IPR2014-00258, Pap. 18 at 10-11. Tellingly, this copying frequently arises when Dr. McDaniel’s declaration is cited as purported support of the Petitioner’s assertions about what a POSITA would

understand—the very subject for which one would most expect a Petitioner to provide specific testimony supported by detailed expert analysis and a rational underpinning of evidence. Instead, Dr. McDaniel’s testimony simply parrots Petitioner’s arguments and has no independent evidentiary value. *See, e.g., Kinetic Techs.*, IPR2014-00529, Pap. 8 at 15-16; *Wowza Media*, IPR2013-00054, Pap. 12 at 15; *TRW Auto.*, IPR2014-00258, Pap. 18 at 10-11.

For example, Dr. McDaniel parrots the Petition in “opining” on how a POSITA would have understood Feigen, without providing any basis for his “opinion” as to what a POSITA would understand. *Compare* Pet. 41 *with* Ex. 1101 ¶ 97 (with exact or similar language shown in red and citation omitted)¹³:

Petition	Declaration of Dr. McDaniel, Ex. 1101 ¶97
A skilled artisan would understand that Feigen teaches higher security environments warrant the use of additional or alternative authentication technologies in security host (26). A skilled artisan would also understand	One of ordinary skill in the art would understand that Feigen teaches higher security environments warrant the use of additional or alternative authentication technologies when implementing an authentication mechanism by security

¹³ There are numerous other examples in the Petition. *Compare* Pet. 40 *with* Ex. 1101 ¶ 89; Pet. 40 *with* Ex. 1101 ¶ 98; Pet. 41 *with* Ex. 1101 ¶ 100; Pet. 42 *with* Ex. 1101 ¶ 102; Pet. 43-44 *with* Ex. 1101 ¶ 106; Pet. 63 *with* Ex. 1101 ¶ 195.

that higher security can be achieved by combining multiple authentication mechanisms in the same system to achieve a higher level of security—this principle is known in the art as “defense in depth,” which is a guiding principle of secure system design.	host (26). A skilled artisan would have understood that higher security can be achieved by combining multiple authentication mechanisms in the same system to achieve a higher level of security—this principle is known in the art as “defense in depth,” which is a guiding principle of secure system design.
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The declaration thus fails to explain in Dr. McDaniel’s own reasoned opinion (*i.e.*, fails to provide and support Dr. McDaniel’s own testimony as an expert) why a POSITA would have had these understandings. Accordingly, it should be given no weight. *See InfoBionic, Inc. v. Braemer Mfg., LLC*, IPR2015-01704, Pap. 11 at 6 (Feb. 16, 2016) (denying institution where Board did “not find the testimony of Petitioner’s expert to be persuasive or helpful as it repeats the Petitioner’s arguments and offers little or no elaboration as to how one of ordinary skill in the art would understand the [disputed] term”); *see also* § 42.65(a) (“Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight.”).

The fact that these statements were simply copied from one document to the other is demonstrated by numerous instances where the same typographical errors

appearing in the Petition also appear in Dr. McDaniel's declaration. *Compare* Pet. 50 with Ex. 1101 ¶ 131 (both missing period within "FIG 5"). Petitioner's related IPR filings for the '698 patent provide further evidence of Petitioner relying on a copied declaration; in that Proceeding, the same typographical errors again appear numerous times in both the Petition and the corresponding paragraphs in Dr. McDaniel's declaration. *See* IPR2017-01041 (Prelim. Resp.), at 44 (July 18, 2017).

In sum, as the Board has repeatedly found, Petitioner's attempt here to "expertize" its Petition arguments by having them repeated by a witness purporting to give expert testimony cannot satisfy its evidentiary burden, or justify proceeding to trial. *See, e.g., Free-Flow Packaging Int'l, Inc. v. Automated Packaging Sys., Inc.*, IPR2016-00447, Pap. 7 at 10 (June 22, 2016) (denying institution where the petitioner's expert did "nothing more than parrot the language of the Petition word for word"); *InfoBionic*, IPR2015-01704, Pap. 11 at 6; *Kinetic Techs., Inc.*, IPR2014-00529, Pap. 8 at 16, 19; *TRW Auto.*, IPR2014-00258, Pap. 18 at 10-11; *Wowza Media*, IPR2013-00054, Pap. 12 at 15.

V. THERE IS NO REASONABLE LIKELIHOOD PETITIONER WOULD PREVAIL ON ITS CONTENTION THAT THE PROPOSED THREE-REFERENCE COMBINATION OF FEIGEN IN VIEW OF FLANAGAN AND FALK RENDERS THE CHALLENGED CLAIMS OBVIOUS UNDER GROUND 1

As discussed above, Petitioner's challenge rests on the unsupportable premise that a POSITA would have taken the single-channel system of Feigen and

combined it with disparate portions of two other different security systems to create the two-channel authentication system of the '698 patent claims. Pet. 34. But, assuming *arguendo* that the required motivation exists, as demonstrated below, Petitioner still fails in its burden for at least two reasons.

First, Petitioner fails to articulate clearly how the system of Feigen would be combined with Flanagan and Falk to meet the requirements of each claim limitation. Instead, Petitioner cites disparate evidence from one or more of the asserted prior art references and fails to articulate clearly how these disclosures purportedly piece together to render obvious the claimed limitations. *See InfoBionic Inc. v. Braemer Mfg., LLC*, IPR2015-01705, Pap. 11 at 12 (denying institution where Petitioner “has not articulated clearly Petitioner’s proposed combination” including “*how* Petitioner proposes modifying [the prior art]”).

Second, Petitioner fails to demonstrate that the proposed combination meets every limitation of the challenged claims. For example, Petitioner fails to explain how the proposed combination discloses “receiving at an interception device in a first channel a login identification demand to access a host computer also in the first channel.” *Infra* § V.B.1.

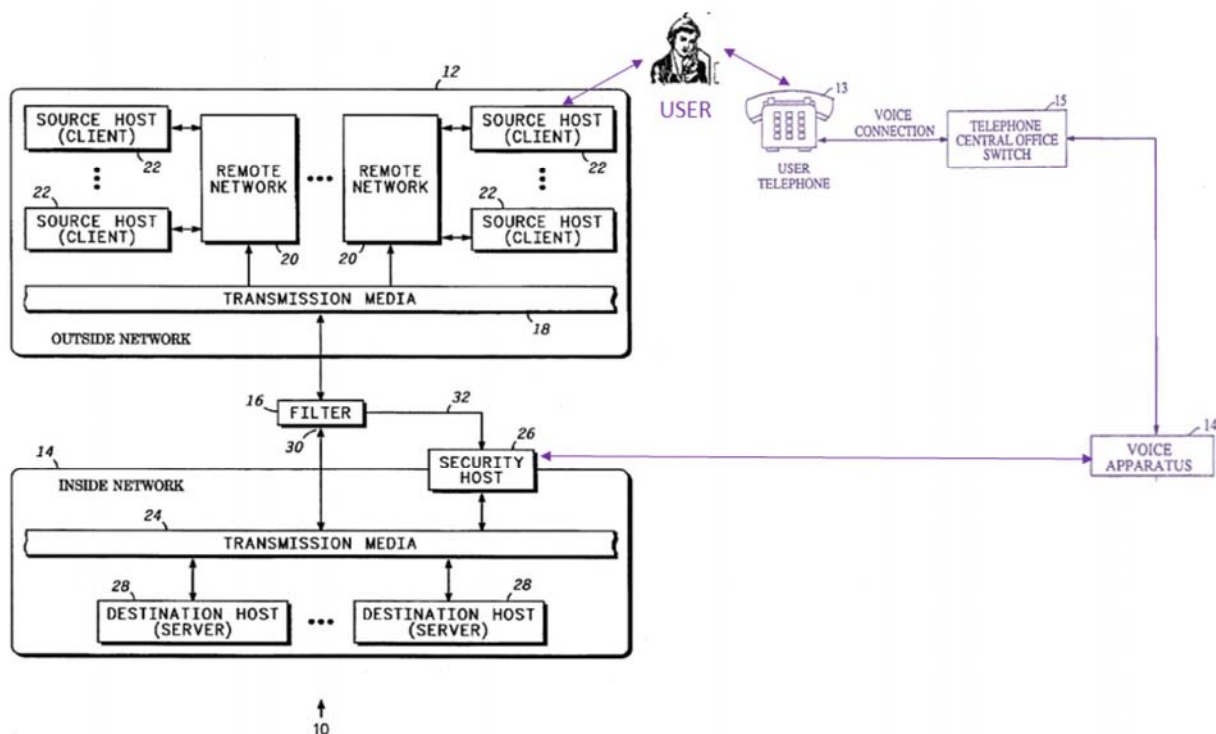
A. Petitioner Fails to Articulate Clearly the Proposed Combination

Petitioner fails to articulate clearly the specific proposed combination it relies upon to allegedly render obvious the elements of the '698 patent claims.

Instead, Petitioner presents a “composite figure that has been generated by Petitioner for illustrative purposes” and suggests—incorrectly—that this figure somehow demonstrates the obviousness of the claims. Pet. 34-35. In fact, even a cursory examination of Petitioner’s composite figure and Petitioner’s subsequent generalized explanations demonstrates that Petitioner has not clearly set forth how the prior art would have been combined, as required.

In particular, Petitioner fails to show what particular portions of Feigen’s security host are combined (and how they would be combined) with portions of Flanagan’s programmed processor to render obvious the claimed “security computer.” For example, in combining the systems of Feigen and Flanagan, Petitioner **removes** Flanagan’s “Programmed Processor 30” (as well as the User Terminal 11 and the Data Connection over one of the Private Line, the Local/Wide Area Network, or the Public Switched Network) and simply pastes the remaining pieces into Feigen’s system:

Ground 1 (Feigen and Flanagan shown)
Composite Generated by Petitioner



Pet. 35 (illustrating the composite figure without Flanagan’s “Programmed Processor 12”); *see also* Ex. 1101 ¶ 91. In so arguing, Petitioner—and its expert—suggest that a POSITA would have combined Feigen and Flanagan by adding Flanagan’s “User Telephone,” “Telephone Central Office Switch,” and “Voice Apparatus” to the otherwise unmodified system of Feigen. But in describing the operation of this hypothetical combined system, Petitioner—and its expert—rely repeatedly on the operation of the very component that was **removed** and is, therefore, **not** part of Petitioner’s combined system—Flanagan’s “programmed

processor (12).” *See* Pet. 28-29 (“programmed processor (12) outputs a prompt...”; “to generate the prompt, programmed processor (12) controls voice apparatus (14)...”; “programmed processor (12) receives the biometric signal...”; “programmed processor (12) compares the biometric signal”; “programmed processor (12) includes a biometric analyzer (not shown)...”); Ex. 1101 ¶ 93 (presenting an identical chart as is in the Petition). Petitioner’s unsubstantiated substitution does not withstand scrutiny.

Similarly, Petitioner changes its invalidity theory between the general discussion of the combination and the specific discussion of the claim limitations. For example, in its general discussion Petitioner relies on *either* Feigen’s security host (26) *or* Flanagan’s programmed processor (12) as providing the claimed functionality of the claimed security computer. *See, e.g.*, Pet. 37 (arguing that “security computer (40) verifies the login identification of user (24)” of the ’698 patent is met by “security host (26) verifies a password from the user of source host (24)”), *id.* (arguing that “security computer (40) outputs a prompt...” is met by “**Flanagan:** ... “programmed processor (12) outputs a prompt...”)). But when Petitioner addresses the specific claim limitations, Petitioner purports to rely on Feigen’s “security host (26), as augmented by Flanagan” and “security host (26)

combined with Flanagan.” Pet. 47, 48, 49, 50.¹⁴ Moreover, Petitioner relies on the “augmented” (or “combined”) system without explaining *how* the security host of Feigen is allegedly augmented by, or combined with, Flanagan.

As a result, the Board and StrikeForce are left to speculate as to what Petitioner’s proposed combination actually includes. For example, does Petitioner suggest modifying all or some of Feigen’s system? Or, if only some, which parts? Does Petitioner propose *removing* Flanagan’s programmed processor (12) as illustrated in its composite figure? Or does Petitioner propose somehow *including* Flanagan’s programmed processor (12) in Feigen’s system? If so, how?

Because Petitioner fails to articulate clearly how the proposed combination should be effected, the Board should deny the Petition. *See InfoBionic*, IPR2015-01705, Pap. 11 at 11 (denying institution where Petitioner “does not articulate adequately to what extent and how Petitioner proposes [first prior art’s] method would be incorporated into [second prior art’s] system,” leaving the Board to “speculate as to how Petitioner’s combination of references’ teachings would

¹⁴ Nor does Petitioner ever explain the distinction between Feigen’s “security host (26) *combined with* Flanagan” and Feigen’s “security host (26) *augmented by* Flanagan.” *Compare* Pet. 49 (discussing limitation 1e) *with* Pet. 50 (discussing limitation 1h).

render obvious” the challenged claims); *Liberty Mutual Ins. Co. v. Progressive Cas. Ins. Co.*, CBM2012-00003 Pap. 8 at 14 (Oct. 25, 2012) (“we address only the basis, rationale, and reasoning put forth by the Petitioner and resolve all vagueness and ambiguity in Petitioner’s arguments against the Petitioner”).

B. Petitioner Fails to Show that the Proposed Combination of Feigen, Flanagan, and Falk Discloses Every Limitation of the Challenged Claims under Ground 1

Petitioner fails to specify where each element of the claims is found in the prior art. § 42.104(b)(3) (“The petition must specify where each element of the claim is found in the prior art patents or printed publications relied upon...”). Specifically, the Petition does not explain how the combined system of Feigen with Flanagan and Falk meets the requirements of each claim limitation. Instead, for each of the limitations below, Petitioner cites disparate evidence from one or more references and conclusorily asserts that the limitations are obvious. But Petitioner fails to address all aspects of the claimed limitations and fails to explain how such a composite system might operate to allegedly render obvious the claims. *See, e.g., Pers. Web Techs.*, 848 F.3d at 994 (remanding Board decision that “nowhere clearly explained, or cited evidence showing, *how* the combination of the two references was supposed to work”); *Liberty Mutual*, CBM2012-00003, Pap. 8 at 14 (“[W]e address only the basis, rationale, and reasoning put forth by the Petitioner and resolve all vagueness and ambiguity in Petitioner’s arguments against the

Petitioner. ... It would be unfair to expect the Patent Owner to conjure up arguments against its own patent and just as inappropriate for the Board to take the side of the Petitioner to salvage an inadequately expressed ground proposing an alternative rationale.”); *InfoBionic*, IPR2015-01705, Pap. 11 at 10-11 (denying institution where “Petitioner does not explain how Petitioner’s proposal results in the respective features of the claimed invention” and where “Petitioner, at most, has identified where certain features of the claimed invention are disclosed in the prior art [but] we are left to speculate as to how Petitioner’s combination of the references teachings would render obvious” the challenged claims).

“In an *inter partes* review, the burden of persuasion is on the petitioner to prove ‘unpatentability by a preponderance of the evidence,’ 35 U.S.C. § 316(e) and that burden never shifts to the patentee.” *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378-79 (Fed. Cir. 2015). Petitioner’s failure to demonstrate that the combined system allegedly renders obvious each claimed limitation is fatal to its challenge. “[I]f the fact trier of the issue is left uncertain, the party with the burden loses.” *Id.*

1. Petitioner fails to establish that the proposed combination would have disclosed or rendered obvious all the limitations of Claim 1

- (a) Petitioner fails to show that the proposed combination would have disclosed or rendered obvious “receiving at an interception device in a first channel a login

identification demand to access a host computer also in the first channel” (claim 1[b])

Claim 1 requires the step of “receiving at an interception device in a first channel a login identification demand to access a host computer also in the first channel.” Petitioner’s arguments with respect to this limitation fail for at least three reasons.

First, Petitioner fails to provide evidence for the entirety of the claim element, focusing instead on only a portion of it. In particular, Petitioner fails to identify any evidence of a “first channel” in the proposed combination as required by the claims. Pet. 47. Notably, Petitioner does *not* assert that this limitation is met by the combination of Feigen and Flanagan, but instead suggests that Feigen alone (and Flanagan alone) would disclose various portions of the limitation. *Compare* Pet. 47 (“Feigen’s filter (16) is an interception device...”) *with* Pet. 50 (“Security host (26), as augmented by Flanagan...”). This is insufficient. Petitioner is required to identify the claimed “first channel” *within* the proposed combination. But no such evidence is presented. This failure is fatal under the Board’s Rules. § 42.104(b)(4) (“The Petition *must specify* where each element of the claim is found in the prior art patents or printed publications relied upon.”); *see Liberty Mutual*, CBM2012-00003, Pap. 8 at 14.

Second, Petitioner fails to articulate clearly which reference, Feigen or

Flanagan, it relies on to show the claimed “login identification.” Pet. 47-48. When discussing the proposed combination outside the context of this claim limitation, Petitioner relies solely on Feigen’s user identification to show a login demand and identification. Pet. 36-37 (citing only Feigen). However, when discussing this specific claim limitation, Petitioner points to both Feigen’s user identification and Flanagan’s “typical user login procedure, such as a normal password procedure, as well as separate voice verification.” Pet. 47–48 (citing Feigen and Flanagan). It thus remains ambiguous whether Petitioner relies on Feigen, Flanagan, or some combination of the two in support of its contention that this limitation would be obvious,¹⁵ leaving the Board and StrikeForce to again speculate as to what Petitioner is contending. This is improper. *See Liberty Mutual*, CBM2012-00003 Pap. 8 at 14.

- (b) Petitioner fails to articulate clearly what portions of the prior art it relies on and how these portions are combined to show “verifying the login identification” (claim 1[c])

Claim 1 requires the step of “verifying the login identification.” Petitioner appears to rely on Feigen’s “[s]ecurity host (26) ... when combined with Flanagan”

¹⁵ To the extent Petitioner relies on Flanagan for the claimed login identification, it still is ambiguous whether Petitioner is pointing to Flanagan’s “normal password procedure” or Flanagan’s “separate voice verification.”

to perform this claimed verification but fails to articulate clearly what portions of the two systems are combined to meet this limitation. Pet. 48. In particular, Petitioner initially points both to Feigen’s task 102 which “authenticates the user” but also argues that the proposed combination would use Flanagan’s “voice verification process over telephone network (15).” Pet. 48–49. Thus, it is unclear whether Petitioner is relying on Feigen or Flanagan for the claimed “verifying” operation, and if both, how the two references are combined. This is improper. *See InfoBionic*, IPR2015-01705, Pap. 11 at 11.

- (c) Petitioner fails to show that the proposed combination would have disclosed or rendered obvious “receiving at a security computer in a second channel the demand for access and the login identification” (claim 1[d])

Claim 1 requires “receiving at a security computer in a second channel the demand for access and the login identification.” Petitioner’s arguments here fail for at least two reasons.

First, Petitioner fails to articulate clearly what is the alleged “security computer” of the combined Feigen-Flanagan-Falk system. For example, Petitioner here first states that “Feigen combined with Flanagan teaches a security computer (Feigen’s security host 26),” which “receives the connection request (demand for access) and login identification from filter (16).” Pet. 49. But Petitioner then states that “Flanagan’ (*sic*) programmed processor that controls user access

receives the demand for access and login identification.” *Id.* Again, the Board is left to speculate what the proposed combination actually entails. For example, does it involve (i) entirely replacing Feigen’s security host with Flanagan’s programmed processor; (ii) replacing only a portion of Feigen’s security host with a portion (or all) of Flanagan’s programmed processor; or (iii) maintaining the entirety of Feigen’s security host and incorporating some unspecified portion of Flanagan’s programmed processor? The Petition offers no clarity in this regard and again improperly leaves it to the Board to speculate what combination Petitioner has proposed, let alone whether it would have been obvious. *See InfoBionic*, IPR2015-01705, Pap. 11 at 11.

Second, Petitioner does not contend that any of the three asserted prior art references discloses a security computer in a “second channel” that is separate from a first channel in which the host computer resides. Indeed, Petitioner does not identify any prior art reference allegedly disclosing a security computer in a channel separate from the one containing the host computer. *E.g.*, Pet. 23-26 (discussing Feigen); 26-30 (discussing Flanagan); and 30-33 (discussing Falk). Instead, Petitioner relies on the combination of Feigen and Flanagan and argues without explanation that this hypothetical system would somehow disclose a security computer in a “second channel” as claimed. Pet. 48-49. But although

Petitioner claims that security host (26) “is a security computer located in a second authentication channel and isolated from the host computer (destination host 28),” Petitioner again fails to articulate what it considers to be the “second channel” of the claimed system. *Id.* Moreover, taken together with Petitioner’s failure to address the claimed “first channel,” the Board and Petitioner are left to guess as to what Petitioner contends constitutes an access channel (or first channel) that is separate from an authentication channel (or second channel). Petitioner has thus failed to meet its burden. *See, e.g., Liberty Mutual*, CBM2012-00003, Pap. 8 at 14.

2. Petitioner fails to establish that the proposed combination would have rendered obvious the construed structure for “a biometric analyzer” (claims 10 and 11)

Petitioner contends that claim 10 (and its dependents) include a means-plus-function limitation subject to § 112, ¶ 6. Pet. 19. Accordingly, the Petitioner must identify “the specific portions of the specification that describe the structure, material, or acts corresponding to each claimed function.” § 42.104(b)(3). Petitioner also “must specify where each element of the claim is found in the prior art patents or printed publications relied upon.” § 42.104(b)(4); *see also Fresenius USA, Inc. v. Baxter Int’l, Inc.*, 582 F.3d 1288, 1299 (Fed. Cir. 2009) (“[A] challenger who seeks to demonstrate that a means-plus-function limitation was present in the prior art must prove that the corresponding structure—or an equivalent—was present in the prior art.”). Although Petitioner purports to

identify some structures in the prior art that it believes perform the claimed function, Petitioner fails to demonstrate that all of the structure it requires to perform the claimed function is, in fact, present in the prior art.

According to Petitioner, the function of the claimed “biometric analyzer” is “analyzing a monitored parameter of the accessor.” Pet. 19. Petitioner proposes that the corresponding structure is the following algorithm: “monitoring the particular parameter of the individual person; including (sic) the parameter to a mathematical representation or algorithm therefore (sic); retrieving a previously stored sample (biometric data), (sic) thereof from a database and comparing the stored sample with the input of the accessor.” *Id.* Petitioner purports to demonstrate that the required structure is found in Flanagan but fails for two reasons.

First, Petitioner fails to identify what in Flanagan it contends corresponds to the construed phrase “parameter to a mathematical representation or algorithm therefore.” Petitioner simply ignores this portion of its construction and therefore fails in its burden under § 42.105(b)(4).

Second, Petitioner fails to identify the appropriate corresponding structure in Flanagan for performing the step of “retrieving a previously stored sample (biometric data), (sic) thereof from a database.” On its face, in the case of voice

authentication, the corresponding structure requires retrieving a previously stored sample of the user's voice signal from a database. But instead of identifying any such corresponding structure in the prior art, Petitioner points to evidence of Flanagan retrieving the *computer's* stored voice prompt (and not the user's voice prompt) from a database. Pet. 55 (citing Ex. 1102, 6:24-38). Petitioner then skips to evidence of Flanagan comparing the user's spoken phrase with "the user's stored reference speech." *Id.* (citing Ex. 1102, 4:20-29). Notably, Petitioner again skips the portion of the disclosure where the "previously stored sample (biometric data)" is retrieved from a database and fails to point to any express disclosure of that biometric signal being disclosed.¹⁶

In particular, the first cited portion of Flanagan (Ex. 1102, 6:24-38) merely discloses that the processor retrieves information from table 63 for prompting the user: "After the tone, please speak the following number in sequence." *Id.*, 6:24-

¹⁶ Petitioner's expert is no more helpful on this limitation as he merely parrots the Petition *verbatim* without offering *any* explanation or commentary on the disclosures in Flanagan. Compare Pet. 54-56 with Ex. 1101 ¶¶ 142-143; See, e.g., *Kinetic Techs., Inc.*, IPR2014-00529, Pap. 8 at 15-16 ("Merely repeating an argument from the Petition in the declaration of a proposed expert does not give that argument enhanced probative value.").

27. Voice response unit 22 converts that prompt to speech. *Id.*, 6:27-29. The information representing each of the four digits of a given passcode is also retrieved from table 63 and then also converted to speech. *Id.*, 6:29-33. The user is then presented with the prompt (which was all retrieved from the database). *Id.*, 6:33-36. The user then speaks the passcode. *Id.*, 6:36-38. This first cited portion says nothing about retrieving the *user's* stored biometric voice sample.

Similarly, the second cited portion discusses a comparison of the user's spoken phrase with either "stored reference speech" or "stored reference patterns" but does not expressly disclose retrieving any of the user's biometric samples from a database. *Id.*, 4:20-29. Petitioner fails to address this deficiency and instead improperly leaves it to the Board to fill in the blanks in Petitioner's analysis and Flanagan's disclosure.¹⁷ See, e.g., *Liberty Mutual Ins. Co.*, Pap. 8 at 14 ("we address only the basis, rationale, and reasoning put forth by the Petition and resolve all vagueness and ambiguity in Petitioner's arguments against the Petitioner. ... It would be unfair to expect the Patent Owner to conjure up

¹⁷ For example, it is unclear from the Petition—and Dr. McDaniel's *verbatim* parroting of the Petition—whether Petitioner purports to rely on an argument that the retrieving step is (i) inherent in Flanagan's disclosure, (ii) implicit in the cited portions of Flanagan, or (iii) obvious to a POSITA based on Flanagan's disclosure.

arguments against its own patent and just as inappropriate for the Board to take the side of the Petitioner to salvage an inadequately expressed ground proposing an alternative rationale.”) Petitioner thus fails to meet burden under § 42.105(b)(4). *See also Fresenius*, 582 F.3d at 1299.

3. Petitioner fails to show that the proposed combination would have rendered obvious the limitations of claim 53.

Rather than present evidence and argument for each limitation in claim 53, Petitioner simply refers back to what it considers corresponding limitations from claim 1. Pet. 60-61. Accordingly, Petitioner’s challenge to claim 53 fails for at least all the same reasons its challenge to claim 1 fails.

Petitioner, moreover, effectively instructs the Board—for every limitation of claim 53—to search through the record and identify the relevant evidence itself. And, citing Ex. 1101 at ¶¶ 157-176, Petitioner attempts to circumvent the rules and incorporates by reference evidence and arguments about claim 53 that are presented *only* in Dr. McDaniel’s declaration and nowhere within the Petition. *See* Pet. 61-62. This is improper. § 42.6(a)(3); *Cisco Sys. Inc. v. C-Cation Techs., LLC*, IPR2014-00454, Pap. 12 at 9 (Aug. 29, 2014) (“Further, the Petition includes citations to the Declaration to support conclusory statements for which the Petition does not otherwise provide an argument or explanation....This practice of citing the Declaration to support conclusory statements that are not otherwise supported

in the Petition also amounts to incorporation by reference.”); 10 (“A brief must make all arguments accessible to the judges, rather than ask them to play archeologist with the record’ Accordingly, we do not consider arguments not made in the Petition.”).

4. Petitioner fails to show that the proposed combination would have disclosed or rendered obvious the construed structure for “a component for receiving the transmitted data and comparing said transmitted data to predetermined data” (claim 54[e])

Petitioner contends that claim 54 includes a means-plus-function limitation subject to § 112, ¶ 6. Pet. 18. Accordingly, Petitioner must identify “the specific portions of the specification that describe the structure, material, or acts corresponding to each claimed function.” § 42.104(b)(3). Petitioner also “must specify where each element of the claim is found in the prior art patents or printed publications relied upon.” § 42.104(b)(4); *see also Fresenius USA, Inc. v. Baxter Int’l, Inc.*, 582 F.3d 1288, 1299 (Fed. Cir. 2009) (“[A] challenger who seeks to demonstrate that a means-plus-function limitation was present in the prior art must prove that the corresponding structure—or an equivalent—was present in the prior art.”). Although Petitioner purports to identify corresponding structure in the prior art, Petitioner fails to demonstrate that the entire claimed structure it relies upon is, in fact, present in the prior art.

According to Petitioner, the proper function for “a component for receiving

the transmitted data and comparing said transmitted data to predetermined data” is “receiving the transmitted data and comparing said transmitted data to predetermined data.” Pet. 19. Petitioner proposes that the corresponding structure is “Ex. 1001 at FIG. 9C, steps 186-196, 10:46-65 and/or ‘698 patent, FIGs. 9C-9D, steps 200-208, 11:24-55.” *Id.* Notably, this structure includes step 186 of FIG. 9C (“Prompt played by speech module to user”). Petitioner expressly acknowledges that this structure includes the “prompt played by speech module to user,” but fails to identify any such prompt or its equivalent in the prior art. *See* Pet. 62-64. Thus, Petitioner fails to meet burden under § 42.105(b)(4). *See also Fresenius*, 582 F.3d at 1299.

VI. CONSTITUTIONALITY OF *INTER PARTES* REVIEW

The Federal Circuit has held IPRs are constitutional. *MCM Portfolio v. Hewlett-Packard Co.*, 812 F.3d 1284, 1288-92 (Fed. Cir. 2015), cert. denied, 137 S. Ct. 292. In light of the Supreme Court’s grant of certiorari as to this issue in *Oil States Energy Services, LLC v. Greene’s Energy Group, LLC*, 2017 WL 2507340 (U.S. June 12, 2017), and to the extent Federal Circuit precedent is overturned, StrikeForce reserves its right to raise these constitutional issues.

VII. CONCLUSION

Because the Petition fails to show that there is a reasonable likelihood that Petitioner will prevail in proving *any* challenged claim unpatentable, the Petition

should be denied, and, pursuant to § 314, no *inter partes* review should be instituted.

Dated: July 18, 2017

Respectfully submitted,

By /s/ Steven Pepe

Name: Steven Pepe

ROPES & GRAY LLP

CERTIFICATE OF WORD COUNT

The undersigned certifies that the foregoing PATENT OWNER's PRELIMINARY RESPONSE UNDER 37 C.F.R. § 42.107 complies with the type-volume limitation in 37 C.F.R. § 42.24(c)(1). According to the word-processing system's word count, the brief contains 13,179 words, excluding the parts of the brief exempted by 37 C.F.R § 42.24(c).

Dated: July 18, 2017

Respectfully submitted,

By /s/ Josef B. Schenker
Name: Josef B. Schenker
ROPES & GRAY LLP

CERTIFICATE OF SERVICE

The undersigned hereby certifies that this PATENT OWNER'S PRELIMINARY RESPONSE UNDER 37 C.F.R. § 42.107 was served by filing this document through the Patent Trial and Appeal Board End to End (PTAB E2E) as well as providing a courtesy copy via e-mail to the following attorneys of record for the Petitioner listed below:

Lead Counsel:	John D. Garretson (Reg. No. 39,681) Shook, Hardy & Bacon L.L.P. 2555 Grand Blvd. Kansas City, MO 64108 T: 816-559-2539 F: 816-421-5547 jgarretson@shb.com <i>Counsel for Duo Security, Inc.</i>
Back-up Counsel:	Amy M. Foust (Reg. No. 57,782) Shook, Hardy & Bacon L.L.P. Citigroup Center 201 S. Biscayne Blvd., Suite 3200 Miami, Florida 33131 T: 305-960-6925 F: 305-358-7470 afoust@shb.com <i>Counsel for Duo Security, Inc.</i> Brian A. Jones (Reg. No. 68,770) McDermott Will & Emery 227 W. Monroe Street Chicago, IL 60606 T: 312-984-7694 F: 312-984-7700 bajones@mwe.com <i>Counsel for Trustwave Holdings, Inc.</i>

	Darren M. Franklin (Reg. No. 51,701) Sheppard, Mullin, Richter & Hampton LLP 333 South Hope Street Forty-Third Floor Los Angeles, CA 90071 T: 213-617-5498 F: 213-620-1398 DFranklin@sheppardmullin.com <i>Counsel for Centrifify Corporation</i>
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Dated: July 18, 2017

Respectfully submitted,

By: /Lily Jiang/
Name: Lily Jiang

ROPES & GRAY LLP