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Paper 30
Entered: April 7, 2016

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SECURUS TECHNOLOGIES, INC.,
Petitioner,

v.

GLOBAL TEL*LINK CORPORATION,
Patent Owner.

Case IPR2015-00155
Patent 7,853,243 B2

Before KEVIN F. TURNER, BEVERLY M. BUNTING, and PATRICK M. BOUCHER, *Administrative Patent Judges*.

BOUCHER, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

A. Background

Securus Technologies, Inc. ("Petitioner") filed a Petition (Paper 1, "Pet.") pursuant to 35 U.S.C. §§ 311–319 to institute an *inter partes* review of claims 1–7 of U.S. Patent No. 7,853,243 B2 ("the '243 patent"). After consideration of a Preliminary Response (Paper 9) filed by Global Tel*Link Corporation ("Patent Owner"), the Board instituted trial with respect to claims 1–6 on May 1, 2015. Paper 10 ("Dec.").

During the trial, Patent Owner timely filed a Patent Owner Response (Paper 19, "PO Resp."), and Petitioner timely filed a Reply to the Patent Owner Response (Paper 23, "Reply"). An oral hearing was held on January 11, 2016. Paper 29 ("Tr.").

We have jurisdiction under 35 U.S.C. § 6(c). This Decision is a Final Written Decision under 35 U.S.C. § 318(a) as to the patentability of the claims on which we instituted trial. Based on the record before us, Petitioner has not shown, by a preponderance of the evidence, that any claim of the '243 patent is unpatentable.

B. The '243 Patent

The '243 patent was filed on December 17, 2007, and relates to "telephone communication systems in penal institutions or similar facilities." Ex. 1001, col. 1, ll. 17–19. Figure 1 of the '243 patent is reproduced below.

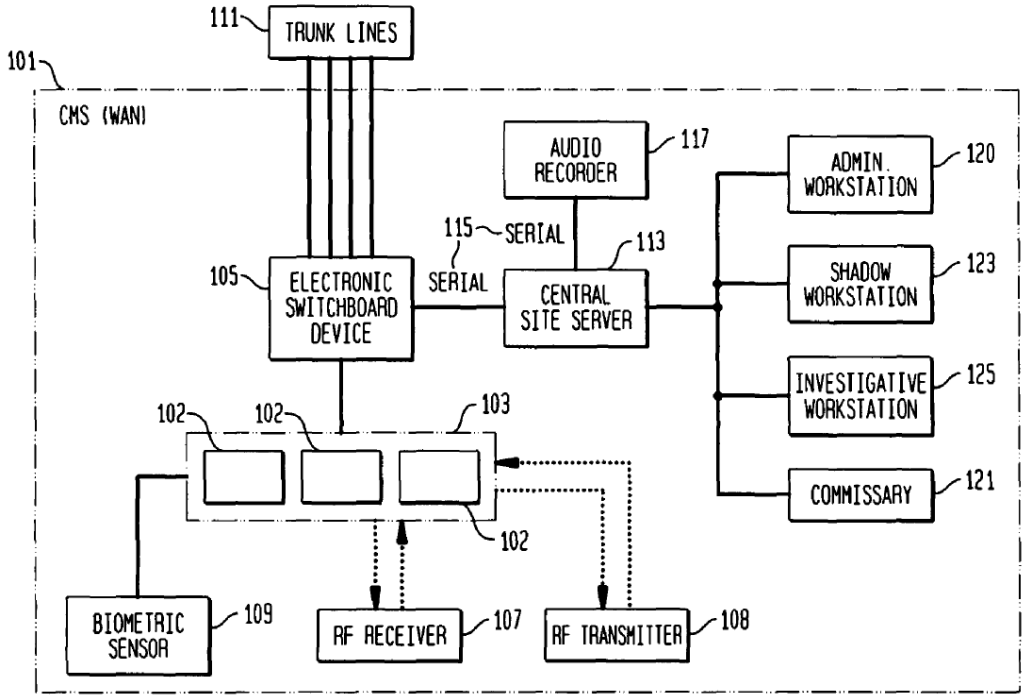

Figure 1 depicts a schematic view of a call-management system configured to operate on a wide-area network. *Id.* at col. 15, ll. 55–57. Within the system, telephone bank 103 is connected to electronic switchboard device 105, which regulates calls and connects them to trunk lines 111. *Id.* at col. 17, ll. 63–67, col. 18, ll. 24–26. Central site server 113 routes all inmate and call information, including each user's call restrictions, identification number, and biometric verification data that are used to limit access to the system. *Id.* at col. 19, ll. 10–22. Among other techniques, biometric verification may be implemented with voiceprint comparison. *Id.* at col. 12, ll. 5–14, col. 15, ll. 16–20. A call processing system "controls all routing and subsystem interaction processes required by the call management system." *Id.* at col. 22, ll. 26–28. When a user attempts to make a call, the verification information is collected from the user so that the call can be

"processed and approved" by components of the call processing system. *Id.* at col. 22, l. 58–col. 23, l. 17. If approved, the call is connected to associated network trunk lines 111 and outpulsed. *Id.* at col. 23, ll. 7–12. If not approved, a special call treatment is returned to the user to "provide information concerning why the call could not be completed and processed." *Id.* at col. 23, ll. 12–17.

During connected calls, the system monitors the called party for switch hook flashes, whose detection may indicate potential activation of three-way calling features by the called party. *Id.* at col. 24, ll. 32–39. Audio recorder 117, connected to server 113, records conversations performed under the direction of telephone call management system 101. *Id.* at col. 19, ll. 39–41. The system may also implement passive recording in which voice-recognition software is used to listen for certain key words and phrases in a conversation. *Id.* at col. 14, ll. 10–18.

C. Illustrative Claim

Claim 1, the only independent claim of the '243 patent, is illustrative of the claims at issue:

> 1. A method for restricting access to a public telephone network using a telephone call management system, said method comprising the steps of:
>
> assigning a first identification number to each of a plurality of potential callers;
>
> recording a first voice print of at least one potential caller;
>
> storing said first voice print and said first identification number in a database;

during each access attempt to said public telephone network by said potential caller:

prompting said at least one potential caller to input a second identification number;

recording a second voice print of said at least one potential caller;

matching said first and second identification numbers;

comparing said second voice print with said first voice print associated with said first identification number;

granting said at least one potential caller access to said public telephone network to attempt to place a telephone call if said second voice print matches said first voice print;

monitoring at least one conversation to detect the presence of a three-way call attempt; and

recording at least one conversation between said at least one potential caller and a third-party remotely located from said at least one potential caller if said recording is permissible; and

detecting the presence of predetermined keywords in audio of said at least one conversation.

D. Instituted Ground of Unpatentability

We instituted trial based on Petitioner's asserted ground that claims 1–6 are unpatentable under 35 U.S.C. § 103(a) over U.S. Patent No. 7,035,386 B1 (Ex. 1002, "Susen") and U.S. Patent No. 6,064,963 (Ex. 1003, "Gainsboro"). Dec. 13.

II. ANALYSIS

A. Claim Construction

The Board interprets claims of an unexpired patent using the broadest reasonable construction in light of the specification of the patent in which they appear. *See* 37 C.F.R. § 42.100(b); *In re Cuozzo Speed Techs., LLC*,

793 F.3d 1268, 1278 (Fed. Cir. 2015) ("We conclude that Congress implicitly approved the broadest reasonable interpretation standard in enacting the AIA"), *cert. granted sub nom. Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 890 (mem.) (2016).

Petitioner does not proffer an explicit construction of any term, contending that "no construction is necessary of the '243 patent claim terms," but responds in its Reply to constructions proposed by Patent Owner for "public telephone network" and "access attempt to said public telephone network." Pet. 8; Reply 4–7.

1. "public telephone network"

Patent Owner contends that "public telephone network," as recited in the phrase "access attempt to said public telephone network," should be construed interchangeably with the term "public switched telephone network" as "a network of telephone communication links and switches, not associated with any particular person or facility, that carries telephone signals of the general public." PO Resp. 10–13. Petitioner responds that the term "is well understood" without explicit construction and that Patent Owner's proposed construction "unnecessarily and improperly limits the meaning" of the term. Reply 5.

We agree with Petitioner that no express construction is necessary. Patent Owner's expert testified at his deposition that a person of ordinary skill would understand what is meant by "public telephone network" and that the '243 patent does not apply any definition of the term outside of its normally understood definition. Ex. 1009, 110:5–111:9.

2. "during each access attempt to said public telephone network by said potential caller"

Independent claim 1 recites that certain steps of the method be performed "during each access attempt to said public telephone network by said potential caller." Patent Owner proposes that "access attempt to said public telephone network" be construed as "the period of time after the at least one potential caller has initiated a calling procedure, and before the at least one potential caller has been connected to the public telephone network." PO Resp. 14–16. Petitioner responds that the term "cannot be defined by a duration of time," "is easily understood by a person of ordinary skill in the art," and requires no express construction. Reply 6–7.

We agree with Petitioner that "access attempt to said public telephone network" is not appropriately construed as a "period of time." Nevertheless, disagreement between the parties over the scope of the fuller phrase, "during each access attempt to said public telephone network by said potential caller," requires resolution—specifically, which of the steps that follow recitation of the "during" phrase must be performed "during each access attempt." A grammatically rigid reading of the claim, which includes two colons and two instances of the word "and," suggests an illogical construction in which the scope of "during each access attempt" includes the "prompting," first "recording," "matching," "comparing," "granting," "monitoring," and second "recording" limitations. The parties agree that such a construction is inappropriate, and we find it inconsistent with the Specification of the '243 patent because at least the "monitoring" and second

"recording" limitations logically require a connection established within the public telephone network before they can be performed. *See* PO Resp. 15–16; Reply 19–20; Tr. 39:18–40:3 (Patent Owner acknowledging "sloppy draftsmanship").

Petitioner contends that, because "during each access attempt . . . " is followed by a colon without further punctuation or indentation, "[t]he broadest reasonable interpretation of the claims would apply this limitation to only the first step following the colon: 'prompting.'" Reply 19. Patent Owner contends instead that the "granting" limitation provides a logical conclusion to the "access attempt" so that each of the "prompting," first "recording," "matching," "comparing," and "granting" limitations are within the scope of "during each access attempt." PO Resp. 15–16; *see* Tr. 38:7–20 (confirming Patent Owner's position that the "granting" limitation is within scope). Patent Owner supports its position with testimony by Leonard J. Forys, Ph. D., who testifies as follows:

> Simply put, it is my opinion that an "access attempt" is defined by a starting point (*e.g.*, the beginning of the attempt) and the point at which the "attempt" either succeeds or fails. In this case, because the claim recites an "access attempt **to said public telephone network**", the "attempt" will succeed or fail (and thus conclude) when the caller is granted access to, or ultimately denied access from, the public telephone network. The period in between these two events comprises some calling procedure in which the caller may be asked to provide certain information, dial the outgoing number, authenticate himself/herself, etc. The above construction is thus supported by this common sense approach.

Ex. 2004 ¶ 47. We credit this testimony, and afford it greater weight on this point than the testimony of Petitioner's witness, Robert Akl, Ph. D., who declined at his deposition to provide meaningful details explaining how he arrived at his opinion that the scope of the recited "during each access attempt . . . " is more limited. *See* Ex. 2003, 46:24–48:22. We also agree with Patent Owner that a construction that affords greater scope to "during each access attempt" is consistent with the Specification of the '243 patent. *See* PO Resp. 14–15.

Accordingly, we construe the scope of "during each access attempt to said public telephone network by said potential caller" as encompassing the "prompting," first "recording," "matching," "comparing," and "granting" steps.

B. Susen and Gainsboro

Susen "relates to a method for verifying access authorization for voice telephony in a fixed network line or mobile telephone line as well as a communications network having such access authorization verification." Ex. 1002, col. 1, ll. 9–12. Figure 3A of Susen is reproduced below.

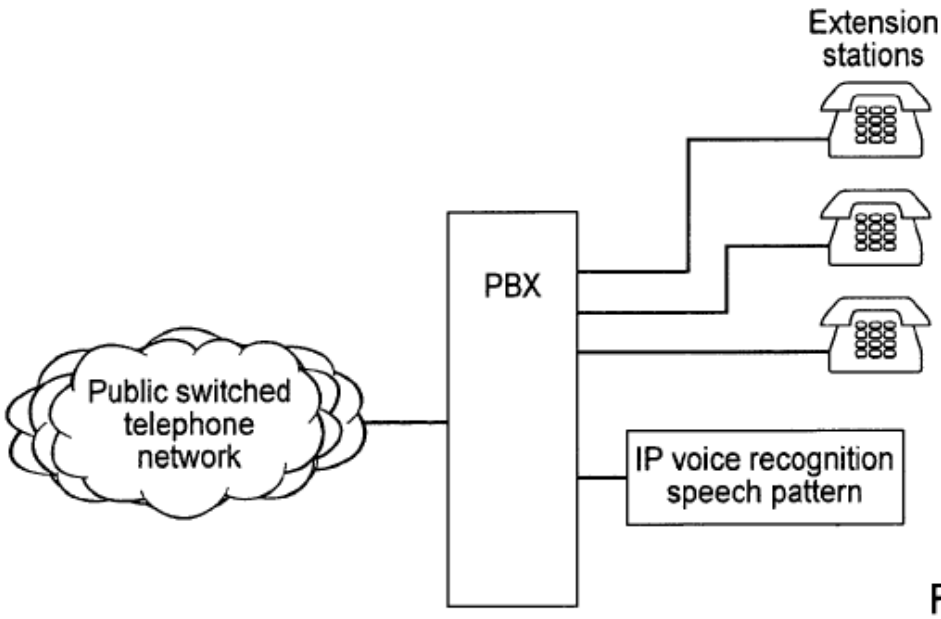

FIG. 3a

Figure 3A illustrates a private branch exchange connected to a public switched telephone network. *Id.* at col. 8, ll. 57–59. The private branch exchange has a plurality of extension stations, with user access authorization to the individual extension stations monitored with an "intelligent peripheral" assigned to the private branch exchange. *Id.* at col. 8, l. 59–col. 9, l. 2. The intelligent peripheral has a voice-recognition unit capable of analyzing recorded voice signals and comparing them with previously stored reference data records. *Id.* at col. 9, ll. 2–4.

Susen discloses a "procedural authentication" system that requires voice recognition and authentication of a user before a connection is established. *Id.* at col. 9, ll. 18–38. In addition, the authentication procedure may require that a user be asked for a password or personal identification number that is compared with an identifier stored in memory, in addition to speech patterns being compared with stored patterns using frequency spectra or speech dynamics. *Id.* at col. 10, ll. 10–14. Susen explains that, when

recognizing continuous speech, the system preferably concentrates on essential characteristics of the language, including consideration of key words in the entry procedure. *Id.* at col. 10, ll. 43–49.

Petitioner contends that all limitations of independent claim 1 are disclosed by this procedure, except for the "monitoring" and "recording at least one conversation" steps. Pet. 13–22, 25. For those steps, Petitioner cites Gainsboro, which "relates to a system for providing automatic speech recognition integrated with a telephone control system and telephone recording system." Ex. 1003, col. 1, ll. 6–8. Gainsboro discloses that a prison phone system "must be able to detect the called party's flashing the hook switch in order to prevent the called party from activating three way (i.e., conference) calling, dialing another number and then connecting the prisoner to an unauthorized phone number." *Id.* at col. 3, ll. 26–29.

1. Access Attempt to Said Public Telephone Network

As Patent Owner contends, Petitioner's reliance on its position that the scope of the "during each access attempt . . . " limitation is limited to the "prompting" step results in Petitioner failing to demonstrate that other limitations properly within that scope—namely, the "prompting," first "recording," "matching," "comparing," and "granting" steps—are disclosed

by Susen.[1] PO Resp. 37. In its Reply, Petitioner responds that, nevertheless, "explicit embodiments of Susen . . . require both voice authentication (i.e. recording a second voice print) and PIN authorization (i.e. prompting for a second identification number) to occur during each access attempt before the connection is completed." Reply 21. Petitioner directs our attention to the following disclosure in Susen of "[o]ne possible structure for the authentication procedure":

> For this purpose, the telephone channel is routed to an input of the [intelligent peripheral]. At this point, subscriber A is asked by the software of an intelligent voice response system to state his name or his identifier. After that, he is asked for his password or his personal identification number PIN. The data is compared with the identifier stored in memory, and the speech pattern is compared with the stored patterns either using frequency spectra or speech dynamics. . . . After authentication in the [intelligent peripheral], the customer is directed to a menu that requests that he enter the desired telephone numbers.

Ex. 1002, col. 10, ll. 5–20.

Petitioner's argument is unpersuasive because the cited portion of Susen describes a procedure that occurs distinct from—and, therefore, not "during"—an "access attempt to said public telephone network." As the

[1] The fact that Susen may explicitly disclose embodiments that include access attempts to the public telephone network in which not all of the steps are performed, as Patent Owner contends, is irrelevant. *See* PO Resp. 38–39. In considering the invalidity of claims, it is not necessary for every embodiment disclosed in a prior-art reference to meet the claim limitations. *See Hewlett-Packard Co. v. Mustek Sys., Inc.*, 340 F.3d 1314, 1326 (Fed. Cir. 2003) ("[A] prior art product that sometimes, but not always, embodies a claimed method nonetheless teaches that aspect of the invention.").

reproduction of Figure 3A of Susen above makes clear, the private branch exchange is intermediary between the public telephone network and the intelligent peripheral described as performing authentication:

> FIG. **3**A shows a private branch exchange (PBX), which is connected to a public switched telephone network. The private branch exchange (PBX) has a plurality of extension stations, of which three are shown here. The access authorization of the users of the individual extension stations is to be monitored according to the present invention. For this purpose, an IP (intelligent peripheral) is assigned to the private branch exchange (PBX), the IP being capable of accessing the telephone line via which signals are transmitted from one extension station to an additional line outside the private branch exchange, and of recording and storing the signals entered by the extension station user. In addition, the [intelligent peripheral] has a voice recognition unit that that is capable of analyzing the recorded voice signal and comparing it with previously stored reference data records.

Id. at col. 8, l. 57–col. 9, l. 4. Although Petitioner identifies disclosure of voice authentication and PIN verification, such steps occur as described by Susen "during the conversation in progress" or prior to an "access attempt to said public telephone network." *See id.* at col. 9, l. 67–col. 10, l. 1, col. 10, ll. 5–17.[2]

[2] At the oral hearing, Petitioner identified additional disclosure in Susen that it contends "requires authentication of the user before the call is connected." Tr. 25:10–14. Specifically, Petitioner identified the following:

Accordingly, we conclude that Petitioner has not demonstrated, by a preponderance of the evidence, that all steps within the scope of the "during each access attempt . . . " limitation are disclosed by Susen as performed during an "access attempt to said public telephone network."

2. Combination of Susen and Gainsboro

In the Institution Decision, we noted that "Petitioner offers only minimal reasoning" to support its contention that one of ordinary skill in the

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> As an alternative to voice recognition during the connection, the speaker can be assigned to a billing account before the connection is established as part of an authentication procedure that the speaker must undergo. In this case, the telephone user is requested to provide a voice sample, and *the connection is only established once the voice sample has been identified and the speaker is identified as authorized*.

Ex. 1002, col. 3, ll. 13–19 (emphasis added). Petitioner did not present an argument with respect to this portion of Susen before the oral hearing, and we accordingly do not afford it weight. *See Patent Trial Practice Guide*, 77 Fed. Reg. 48,756, 48,768 (Aug. 14, 2012); *see also CBS Interactive Inc. v. Helferich Patent Licensing, LLC*, Case IPR2013-00033, slip op. (PTAB Oct. 23, 2013) (Paper 118). Nevertheless, we observe that, within the structure described by Susen, the mere disclosure that certain steps occur before a connection is established within the public telephone network does not establish that those steps are performed "during an access attempt to said public telephone network." A distinction between an access attempt to the public telephone network and a connection made within the public telephone network is logically required by claim 1 itself, which recites "granting said at least one potential caller access to said public telephone network *to attempt to place a telephone call* if said second voice print matches said first voice print" (emphasis added).

art[3] would combine the teachings of Susen and Gainsboro. Dec. 10. After considering the parties' positions as developed during the trial, we conclude that Petitioner's reasoning is insufficient to support its contention.

The key to supporting a conclusion of unpatentability under 35 U.S.C. § 103(a) is the clear articulation of reasons why the claimed invention would have been obvious. The Supreme Court has clarified the requirements that must be met to establish a *prima facie* case of obviousness, emphasizing that the "analysis should be made explicit." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007). Although the reasoning may draw from numerous intrinsic and extrinsic sources, conclusions of obviousness "cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *Id.* (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

[3] We accept Petitioner's identification of a person of ordinary skill in the art as someone who "would have had at least a Bachelor's Degree in Electrical Engineering, Computer Engineering, or the equivalent and two or more years of industry experience in a relevant field, or the academic equivalent thereof." Pet. 7 (citing Ex. 1005 ¶ 48). Because the claims do not recite a prison environment, we do not adopt Patent Owner's additional requirement that such an individual have "one to three years of relevant work experience with wireline communication systems for penal institutions." *See* PO Resp. 7 (citing Ex. 2004 ¶¶ 36–38). Accordingly, we disagree with Patent Owner that Petitioner's expert, Dr. Akl, is unqualified to testify, and we do not, as a general matter, discount Dr. Akl's testimony. *See id.* at 47–58.

In addressing the combination of Susen with Gainsboro, Petitioner provides the following statements without further analysis regarding a rationale for combining the references:

1. "The combination of Susen and Gainsboro teach[es] every element of claim 1 of the '243 patent. Gainsboro is distinguishable from Susen in that it expressly discloses monitoring a call to detect a three-way call attempt and detecting keywords in the call. Both prior art patents are in the same field of telecommunications monitoring and control." Pet. 12.

2. "Both Gainsboro and the '243 patent are in the same field and drawn to systems for managing institutional calls. Thus, a person of ordinary skill in the art would be motivated to combine Susen with Gainsboro to include monitoring said telephone call for a hook flash indicative of three-way calling." *Id.* at 23 (citing Ex. 1005 ¶ 75).

3. "Both Gainsboro and the '243 patent are in the same field and drawn to systems for managing institutional calls." *Id.* at 32.

Petitioner supports its statements with testimony by Dr. Akl, but that testimony repeats the statements made in the Petition with only minimal surface changes. *See* Ex. 1005 ¶¶ 60, 75, 94.[4] As Patent Owner contends, these statements are also made within the context of a broad characterization of the art, namely "managing institutional calls." *See* PO Resp. 21–22. The cursory assertion that the prior-art references are drawn from the same

[4] With respect to the third statement, addressing claim 6, Dr. Akl provides the additional conclusory assertion that "One skilled in the art would understand that combining these references would be obvious and beneficial in that it would enhance the security of the system." Ex. 1005 ¶ 94.

broadly characterized field provides insufficient analysis concerning why and how a person of ordinary skill in the art would have modified or combined the prior art in the manner asserted, and inadequately articulates "reasoning with some rational underpinning to support the legal conclusion of obviousness." *See KSR*, 550 U.S. at 418 ("[I]t can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine elements in the way the claimed new invention does.").

Furthermore, Petitioner's perfunctory analysis is effectively rebutted by Dr. Forys, who testifies that "Susen and Gainsboro are directed to unrelated concepts" and "directed to very different architectures that are not easily combined." Ex. 2004 ¶¶ 53, 56. We credit the testimony of Dr. Forys more strongly than that of Dr. Akl because Dr. Forys provides explicit reasoning to support his opinion that Susen and Gainsboro are concerned with different implementation settings, rely on different architecture structures, have technical incompatibilities, and are drawn from different fields. *See id.* ¶¶ 52–61; 37 C.F.R. § 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.").

Accordingly, we conclude that Petitioner has not demonstrated, by a preponderance of the evidence, that one of ordinary skill in the art would have combined the disclosures of Susen and Gainsboro in the manner proposed.

III. ORDER

It is

ORDERED that, based on a preponderance of the evidence, claims 1–6 of U.S. Patent No. 7,853,243 B2 have not been shown to be unpatentable; and

FURTHER ORDERED that, because this is a Final Written Decision, parties to this proceeding seeking judicial review of our decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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