

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TWILIO INC.,
Petitioner,

v.

TELESIGN CORPORATION,
Patent Owner.

Case IPR2016-00450
Patent 8,462,920 B2

Before SALLY C. MEDLEY, JUSTIN T. ARBES, and
KIMBERLY McGRAW, *Administrative Patent Judges*.

McGRAW, *Administrative Patent Judge*.

DECISION
Denial of Institution of *Inter Partes* Review
37 C.F.R. § 42.108

I. INTRODUCTION

Petitioner, Twilio Inc., filed a Petition (Paper 1, “Pet.”) requesting an *inter partes* review of claims 1–10, 13, and 17–22 of U.S. Patent No. 8,462,920 B2 (Ex. 1001, “the ’920 patent”). *See* 35 U.S.C. § 311. Patent Owner, TeleSign Corp., filed a Preliminary Response (Paper 7 “Prelim. Resp.”). We have jurisdiction under 35 U.S.C. § 314(a), which provides that an *inter partes* review may not be instituted “unless . . . the information presented in the petition . . . shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.”

For the reasons that follow, we do not institute an *inter partes* review of the ’920 patent.

A. *Related Proceedings*

Petitioner identifies the co-pending petition for *inter partes* review in IPR2016-00360 (US 7,945,034 B2) as a related matter. Pet. 2. Patent Owner states Petitioner also identified the Petition in this proceeding as a related matter in the co-pending petition for *inter partes* review in IPR2016-00451 (US 8,687,038 B2, “the ’038 patent”). Prelim. Resp. 2. Patent Owner states that it does not foresee that the decision with respect to the instant Petition will affect, or be affected by, these other Petitions. *Id.*

The parties also state the ’920 patent is asserted in the following lawsuit: *TeleSign Corp. v. Twilio Inc.*, No. 2:15-cv-03240 (C.D. Cal.). *Id.*; Pet. 2.

B. The '920 Patent (Ex. 1001)

The '920 patent, entitled "Registration, Verification and Notification System," relates generally to a process for verifying the identity of an online registrant. Ex. 1001, 1:6–7, 2:7–8. The process uses registration information to notify the registrant of events that are established either by the registrant or by the business through which the registrant has registered. *Id.* at 2:8–10. The '920 patent explains that to prevent fraud or identity theft, either the business or individual may wish to be alerted to certain events. *Id.* at 1:40–42. For example, "a consumer may wish to be notified every time a withdrawal [of] more than one thousand dollars is requested from his checking account." *Id.* at 1:42–45. "A business may wish to notify a consumer when more than five transactions post to a consumer's account within twenty-four hours." *Id.* at 1:45–47. The '920 patent explains that when credit cards or account numbers are stolen, the accounts can be quickly drained of cash or credit over a short period of time. *Id.* at 1:48–50. This can be avoided by notifying the account owner of these acts or even seeking his or her authorization before permitting such transactions to occur. *Id.* at 1:50–53. The '920 patent further states that there are other instances when notification can be helpful, such as when automatic deposits occur. *Id.* at 1:54–57. Alternatively, there are instances "not financially based in which the notification could benefit both the consumer as well as the business." *Id.* at 1:57–59. "For example, the consumer may want to be alerted to new information, updated sports scores, etc." *Id.* at 1:60–61.

"Upon the occurrence of a previously established notification event, the registrant is notified by establishing a connection with the registrant, typically by contacting the registrant through a telephonic connection with

the registrant via at least one registrant telephone number provided by the registrant during the registration process.” *Id.* at 2:49–55.

C. Claims

Petitioner challenges independent claim 1 and dependent claims 2–10, 13, and 17–22, which depend directly or indirectly from claim 1. Claim 1, with brackets added, is reproduced below.

1. A verification and notification process, comprising:

[a] receiving information responsive to at least part of a registration form that is presented to the registrant on a web-site, the received information including at least one registrant electronic contact;

[b] verifying a received registrant electronic contact, wherein verifying the received registrant electronic contact includes:

establishing a first telephonic connection with the registrant using the received registrant electronic contact;

communicating a first communicated verification code to the registrant through the first telephonic connection; and

receiving a first submitted verification code after it is entered by the registrant via the web-site and verifying the received registrant electronic contact if the first submitted verification code is the same as the first communicated verification code;

[c] establishing a notification event associated with the registrant;

[d] identifying an occurrence of the established notification event; and

[e] after identifying the occurrence of the established notification event, re-verifying the registrant electronic contact, wherein re-verifying includes:

establishing a second telephonic connection with the registrant using the verified registrant electronic contact;

communicating a second communicated verification code to the registrant through the second telephonic connection;

receiving a second submitted verification code that is entered by the registrant via the web-site; and

re-verifying the registrant electronic contact if the second submitted verification code is the same as the second communicated verification code.

D. Asserted Grounds of Unpatentability

Petitioner argues that the challenged claims are unpatentable based upon the following grounds:

| Reference(s) | Basis | Challenged Claim(s) |
|-----------------------------------|--------------|----------------------------|
| Bennett ¹ | § 103 | 1-10, 13, 17-22 |
| Bennett and Thoursie ² | § 103 | 1-10, 13, 17-22 |
| Bennett and Rolfe ³ | § 103 | 4, 5 |
| Bennett, Thoursie, and Rolfe | § 103 | 4, 5 |
| Bennett and Woodhill ⁴ | § 103 | 13 |

¹ U.S. Patent No. 8,781,975 B2, filed May 23, 2005, issued July 15, 2014 (Ex. 1005, “Bennett”).

² U.S. Patent No. 8,302,175 B2, filed April 20, 2005, issued Oct. 30, 2012 (Ex. 1008, “Thoursie”).

³ U.S. Patent Application No. 2003/0221125, published Nov. 27, 2003 (Ex. 1006, “Rolfe”).

⁴ U.S. Patent No. 6,934,858 B2, filed Dec. 13, 2000, issued Aug. 23, 2005 (Ex. 1010, “Woodhill”).

| | | |
|---------------------------------|-------|----|
| Bennett, Thoursie, and Woodhill | § 103 | 13 |
|---------------------------------|-------|----|

II. ANALYSIS

A. Claim Construction

In an *inter partes* review proceeding, claim terms in an unexpired patent are given their broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b); *Cuozzo Speed Techs., LLC v. Lee*, __ U.S. __, 2016 WL 3369425, at *10–14 (U.S. June 20, 2016). Consistent with the broadest reasonable construction, absent any special definitions, claim terms are presumed to have their ordinary and customary meaning, as understood by a person of ordinary skill in the art, in the context of the entire patent disclosure. *See In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). Any special definitions for claim terms must be set forth with reasonable clarity, deliberateness, and precision. *See In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994).

The Board, however, may not “construe claims during IPR so broadly that its constructions are unreasonable under general claim construction principles. . . . [T]he protocol of giving claims their broadest reasonable interpretation . . . does not include giving claims a legally incorrect interpretation.” *Microsoft Corp. v. Proxyconn, Inc.*, 789 F.3d 1292, 1298 (Fed. Cir. 2015) (citation omitted). Rather, “claims should always be read in light of the specification and teachings in the underlying patent,” and “[t]he PTO should also consult the patent’s prosecution history in proceedings in which the patent has been brought back to the agency for a second review.” *Id.* at 1298.

In the analysis that follows, we consider the parties' proposed claim constructions to the extent necessary to determine the sufficiency of the asserted grounds of unpatentability. *See Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (only those terms which are in controversy need to be construed and only to the extent necessary to resolve the controversy).

“notification event”

The term “notification event” is recited in elements [c], [d], and [e] of independent claim 1. Specifically, claim 1 recites “establishing a notification event,” “identifying an occurrence of the established notification event,” and, “after identifying the occurrence of the established notification event, re-verifying the registrant electronic contact.”

Petitioner, relying upon the testimony of its declarant, Michael Shamos, Ph.D., asserts that the broadest reasonable interpretation of “notification event” is “an event that results in the registrant being contacted either for re-verification or for notification that the event occurred.” Pet. 9 (citing Ex. 1002 ¶¶ 23–29). Patent Owner responds that Petitioner’s claim interpretation reads “notification” out of the “notification event” claim terms and is divorced from and inconsistent with the Specification of the ’920 patent. *See* Prelim. Resp. 5. Patent Owner contends “notification event” as recited in claim 1 should be construed as “an event that results in the registrant being notified that the event occurred.” *Id.* at 11.

We agree with Patent Owner. Although claim terms must be given their broadest reasonable interpretation, the interpretation must still be reasonable. *Microsoft*, 789 F.3d at 1298. “A construction that is

‘unreasonably broad’ and which does not ‘reasonably reflect the plain language and disclosure’ will not pass muster.” *Id.* (citation omitted). Here, the claim recites establishing a “notification event,” not merely an “event,” and identifying an “occurrence” of the “established notification event.” If, as Petitioner urges, a “notification event” does not require notification that the event occurred, then the word “notification” would be superfluous. *See Merck & Co., Inc. v. Teva Pharmaceuticals USA, Inc.*, 395 F.3d 1364, 1372 (Fed. Cir. 2005 (rejecting a proposed claim construction that would render claim terms superfluous); *Elekta Instrument S.A. v. O.U.R. Sci. Int’l, Inc.*, 214 F.3d 1302, 1307 (Fed. Cir. 2000) (construing claim to avoid rendering the 30 degree claim limitation superfluous); *Gen. Am. Transp. Corp. v. Cryo-Trans, Inc.*, 93 F.3d 766, 770 (Fed. Cir. 1996) (rejecting the district court’s claim construction because it rendered superfluous the claim requirement for openings adjacent to the end walls). The term “notification” in “notification event” has meaning and, given how the term is used in claim 1, we agree with Patent Owner that it requires a “notification event” to be an event that results in the registrant being notified that the event occurred. *See, e.g.*, claim 1 (reciting establishing the “notification event” and “identifying” the “occurrence” of the “notification event”); Ex. 1001, Abstract (“Notification events are established, and the registrant is notified of the occurrence of a previously established notification event . . .”), 2:49–55 (“Upon the occurrence of a previously established notification event, the registrant is notified . . .”).

Petitioner argues that the Specification of the ’920 patent uses the term “notification event” broadly. Pet. 9. For example, Petitioner argues that, according to the Specification, “[n]otification events can be

implemented in ‘a wide variety of scenarios’ including ATM transactions, credit card transactions, or as parental controls.” *Id.* at 9–10 (citing Ex. 1001, 10:55–11:56, claims 19–22). Petitioner cites to other disclosures in the ’920 patent, arguing that those disclosures show that “[a] notification event may be any transaction,” “notification events may occur when a user requests to access or alter her account,” “a notification event may occur ‘every time a withdrawal [of] more than one thousand dollars is requested from his checking account, or is charged to his credit card,’” and “[n]otification events may comprise a news event, or even status of credit reports.” *Id.* at 10 (citing Ex. 1001, 1:39–45, 2:46–48, 10:56–63, 11:11–20, 14:23–34, claims 20–22). Petitioner also cites to statements made during prosecution of the ’920 patent that allegedly support construing “notification event” as an event that “may result in either re-verification or notification.” *Id.* Specifically, Petitioner states that during prosecution, Patent Owner “argued, ‘an established notification event may include receiving a request to access an account associated with the registrant from a device that is not associated with the account.” *Id.* (citing Ex. 1013, 81). Thus, Petitioner concludes, a notification event does not necessarily result in notifying the registrant of the occurrence. *Id.* (citing Ex. 1002 ¶¶ 27–29).

We are not persuaded that these statements support a construction of “notification event” as an event that may result in *either* re-verification or notification of the occurrence of the event, as none of the statements indicate that a registrant would only be contacted for re-verification after occurrence of the event (without notification that the event had occurred). Rather, each of the statements merely describe a type of event without indicating what activity will occur after the event. For example, the cited statement from the

prosecution history indicates that one type of event is receiving an access request from a non-associated device, but says nothing about what results after the event occurs (e.g., re-verification or notification that the event occurred). *See* Ex. 1013, 81.

Petitioner also relies on the testimony of Dr. Shamos, who quotes the Specification as allegedly stating: “If a previously established notification event occurs, then the system will notify and/or verify the user.” Ex. 1002 ¶ 28 (citing Ex. 1001, 9:3–4). This is incorrect. The cited portion of the Specification does not recite a “notification event.” Rather, the cited portion discusses “a previously established event,” not “a previously established notification event.” Ex. 1001, 9:3–4.

Dr. Shamos also cites the Specification’s teaching that if a user logs into his account or attempts to make a transaction or modify account information, “the user may be notified or even required to become telephone verified.” Ex. 1002 ¶ 28 (citing Ex. 1001, 8:59–62). Dr. Shamos contends the Specification’s “use of the word ‘or’ indicates that the occurrence of the particular ‘notification event’ is not necessarily communicated to the registrant.” *Id.* We disagree. The cited sentence states that the “user may be notified or even required” to become telephone verified. Ex. 1001, 8:59–62. Thus, “or” is not used by itself, and, regardless, the cited sentence does not use the term “notification event” that is used in claim 1.

A construction of “notification event” as “an event that results in the registrant being notified that the event occurred” is consistent with the Specification of the ’920 patent. *See, e.g.*, Ex. 1001, Abstract (“Notification events are established, and the registrant is notified of the occurrence of a previously established notification event . . .”), 1:10–13 (“The present

invention also relates to a process for notifying registrants of predetermined events using information obtained during the registration process.”), 1:42–44 (“For example, a consumer may wish to be notified every time a withdrawal [of] more than one thousand dollars is requested”), 2:49–51 (“Upon the occurrence of a previously established notification event, the registrant is notified”),

For the above reasons, we construe a “notification event” as “an event that results in the registrant being notified that the event occurred.”⁵ For purposes of this Decision, no express construction of any additional claim term is necessary.

B. Priority Date

The ’920 patent issued from U.S. Patent Application No. 11/538,989, filed on October 5, 2006, which was filed as a continuation-in-part application of U.S. Patent Application No. 11/034,421 (“the parent ’421 application), filed on January 11, 2005. Petitioner argues that the ’920 patent is not entitled to a filing date earlier than October 5, 2006 because the earlier filed parent ’421 application lacks sufficient written description for the claims of the ’920 patent.⁶ Pet. 8–9.

⁵ In a concurrently issued decision denying institution of an *inter partes* review in Case IPR2016-00451, we interpret “notification event” in the claims of the ’038 patent in a similar manner, the only difference being that the claims of the ’920 patent refer to a “registrant,” whereas the claims of the ’038 patent refer to a “user.”

⁶ Petitioner states Bennett has a filing date after January 11, 2005, but before October 5, 2006. Pet. 10–11.

Because we deny institution of *inter partes* review for the reasons explained below, we need not and do not reach the issue of whether the challenged claims of the '920 patent are entitled to a priority date earlier than October 5, 2006. For purposes of this Decision, we assume, without deciding, that Bennett is available as prior art.

C. Obviousness of Claims 1–10, 13, and 17–22 over Bennett, or over Bennett and Thoursie

Petitioner contends claim 1 is unpatentable under 35 U.S.C. § 103(a) as obvious over Bennett or alternatively over the combination of Bennett and Thoursie. Pet. 3, 16–42. To support its contention that claim 1 is unpatentable, Petitioner provides explanations as to how Bennett or Bennett and Thoursie allegedly teach the limitations of claim 1. *Id.* Petitioner also relies upon the testimony of Dr. Shamos. Ex. 1002.

Both asserted grounds of unpatentability rely upon Bennett as teaching the “notification event” of independent claim 1. *See* Pet. 22–42. Thus, a dispositive issue is whether Petitioner has shown sufficiently that Bennett teaches this limitation.

Bennett, entitled “System and Method of Fraud Reduction,” is directed to systems that authenticate a user using a “two-factor authentication” process. *See* Ex. 1005, Abstract, 2:47–3:16, Figs. 2, 3. For example, Bennett teaches that during the authentication process, the user provides “channel” information, such as a telephone number. *See id.* at 2:58–66, 14:46–56. The system establishes a telephone connection (the second channel) with the phone number and sends a code to the user; the user then enters the code into the website (the first channel) to complete the

transaction. *Id.* at 2:53–3:16, 15:8–50. Bennett teaches that the user may be required to go through the authentication process for certain transactions, such as when the user is accessing the system from a different device than what was used in the past (*id.* at 18:4–53) or for “each and every transaction” (*id.* at 11:44–45). Examples of transactions that may require authentication include opening or logging into an account. *Id.* at 12:64–13:23. Bennett teaches decision making module 115 having decision engine 108 that decides whether a particular transaction requires the two channel authentication process. *See id.*, Fig. 2, 11:33–13:23, 16:3–13.

Petitioner argues that Bennett teaches “notification events,” as recited in claim 1, because Bennett teaches events that can result in the re-verification of the user. *See, e.g.*, Pet. 22 (“Bennett teaches that all attempts to access an account by the registrant are subjected to re-verification”), 24 (“Bennett expressly teaches establishing rules to determine whether to require subsequent two-factor authentication based on the user logging in from a different device than she had used in the past”), 25 (stating “any rule in Bennett’s decision engine corresponds to the claimed notification event” because the engine decides “whether a return user must be re-verified through two-factor authentication”).

Petitioner also argues that if Bennett does not expressly teach configuring the rules in Bennett’s decision making module to correspond to the claimed notification event associated with a registrant, it would have been obvious to modify Bennett to do so “because the purpose of Bennett’s decision engine is to determine whether to require a subsequent two-factor authentication for a particular user during a particular transaction.” *Id.* at 26 (citing Ex. 1005, 11:58–61, 12:33–41, 14:9–36; Ex. 1002 ¶¶ 122–126).

Notably, Petitioner does not argue that Bennett teaches notifying the user that the notification event occurred. Rather, Petitioner asserts, in accordance with its proposed interpretation of “notification event” as allowing for re-verification *or* notification that the event occurred, that the notification event in Bennett is an event that results in the subsequent two-factor authentication (reverification) of the user.

As stated above, we construe a “notification event” as an event that results in the registrant being notified that the event occurred. Petitioner has not provided evidence or argument that Bennett teaches a notification event that would result in the registrant being notified that the event occurred. *See* Prelim. Resp. 28. Accordingly, we determine Petitioner has not shown sufficiently that Bennett teaches all of the limitations of independent claim 1. As such, we are not persuaded that Petitioner has established a reasonable likelihood that Petitioner would prevail in its challenges to claim 1 or to claims 2–10, 13, and 17–22, which depend from claim 1.

D. Remaining Grounds

Petitioner’s remaining grounds challenge claims 4, 5, and 13, which depend from claim 1. *See* Pet. 45–48, 53–54. For the reasons explained above regarding claim 1, we are not persuaded that Petitioner has established a reasonable likelihood of prevailing with respect to these grounds as well.

III. CONCLUSION

For the foregoing reasons, we determine that the information presented in the Petition does not show that there is a reasonable likelihood that Petitioner would prevail at trial with respect to at least one claim of the

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'920 patent based on any ground presented in the Petition. On this record, we deny the Petition for *inter partes* review of claims 1–10, 13, and 17–22 of U.S. Patent No. 8,462,920 B2.

ORDER

Accordingly, it is

ORDERED that the Petition for *inter partes* review of U.S. Patent No. 8,462,920 B2 is *denied* as to all challenged claims, and no trial is instituted.

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