

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAP AMERICA, INC.,
Petitioner,

v.

CYANDIA, INC.,
Patent Owner.

IPR2024-01433
U.S. Patent No. 8,751,948
Issued: June 10, 2014
Application No. 13/086,165
Filed: April 13, 2011

Title: METHODS, APPARATUS, AND SYSTEMS FOR PROVIDING AND
MONITORING SECURE INFORMATION VIA MULTIPLE AUTHORIZED
CHANNELS AND GENERATING ALERTS RELATING TO SAME

PETITION FOR
INTER PARTES REVIEW OF U.S. PATENT NO. 8,751,948

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LIST OF EXHIBITS

No.	Description
1101	U.S. Patent No. 8,751,948 (“ 948 Patent ”)
1102	File History of U.S. Patent No. 8,751,948
1103	Declaration of Christopher Schmandt, dated September __, 2024 (“ Schmandt Decl. ”)
1104	International Patent Application Publication No. WO 2009/140386 to Wetzer et al. (“ the PCT publication ”)
1105	U.S. Patent Application Publication No. 2004/0044736 to Austin-Lane et al. (“ Austin-Lane ”)
1106	U.S. Patent Application No. 12/465,331 (“ the May 2009 parent application ”)
1107	U.S. Patent No. 8,499,250 (“ the ’250 parent patent ”)
1108	U.S. Provisional Patent Application No. 61/052,765 (“ the May 2008 provisional application ”)
1109	Full Claims Listing (1-7, 10-11, 13, 18-19, 23, 29, and 35-36)
1110	U.S. Patent Application No. 13/086,165 to Wetzer et al. (“ the April 2011 CIP application ”)
1111	U.S. Patent No. 7,348,968 to Thomas Dawson (“ Dawson ”)
1112	U.S. Patent No. 7,136,045 to Rosenberg et al. (“ Rosenberg ”)
1113	Lee et al., <i>Haptic Pen: A Tactile Feedback Stylus for Touch Screens</i> , Proc. of the 17th ann. ACM symp. on User interface software & tech. (UIST ’04), 291-294 (Oct. 2004) (“ Lee ”)
1114	Hoggan et al., <i>Investigating the Effectiveness of Tactile Feedback for Mobile Touchscreens</i> , Proc. of the SIGCHI Conf. on Human Factors in Computing Sys. (CHI ’08), 1573-1582 (Apr. 2008) (“ Hoggan ”)

No.	Description
1115	Stephen Brewster and Aurora Constantin, <i>Tactile Feedback for Ambient Awareness in Mobile Interactions</i> , Proc. of the 24 th BCS Interaction Specialist Grp. Conf. (BSC '10), 412-417 (Sept. 2010) (“ Brewster ”)
1116	<i>IBM Rational Application Developer V6 Portlet Application Development and Portal Tools</i> (August 2005) (“ WebSphere-Portal ”)
1117	Ron Ben-Natan et al., <i>Mastering IBM WebSphere Portal</i> (2004) (“ Ben-Natan ”)
1118	<i>IBM WebSphere Everyplace Access V5 Handbook for Developers and Administrators Volume I: Installation and Administration</i> (May 2005) (“ WebSphere-Everyplace-1 ”)
1119	<i>IBM WebSphere Everyplace Access V5 Handbook for Developers and Administrators Volume II: Application Development</i> (March 2005) (“ WebSphere-Everyplace-2 ”)
1120	<i>IBM WebSphere Everyplace Access V5 Handbook for Developers and Administrators Volume IV: Advanced Topics</i> (March 2005) (“ WebSphere-Everyplace-4 ”)
1121	N/A
1122	U.S. Patent 7,376,907 to Santoro et al. (“ Santoro ”)
1123	<i>Microsoft Computer Dictionary</i> (5th Edition) (excerpts)
1124	U.S. Patent No. 5,548,692 (“ Cok ”)
1125	<i>Microsoft Internet Explorer ResourceKit</i> , Microsoft (1998)
1126	David Pogue, <i>iPhone The Missing Manual</i> (excerpts) (2007)
1127	David Pogue, <i>Mac OS X Leopard The Missing Manual</i> (excerpts) (2007)

No.	Description
1128	Harry Newton, <i>Newton's Telecom Dictionary</i> (20th Ed.) (excerpts) (2004)
1129	WSRP standard 1.0 specification
1130	WSRP standard 2.0 specification

MANDATORY NOTICES UNDER 37 C.F.R. § 42.8

1. Real Party-In-Interest

The real-parties-in-interest are SAP America, Inc. and SAP SE.

2. Related Matters

The '948 Patent (EX1101) has been asserted in the following litigations:

- *Cyandia, Inc. v. SAP America, Inc. et al*, Case No. 2-24-cv-00096 (E.D. Tex.), filed February 12, 2024 (the “district court case”).

3. Lead And Back-Up Counsel, And Service Information

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Petitioner consents to service via email at the above email addresses and the email address of SAP_Cyandia_IPRs@klarquist.com.

Pursuant to 37 C.F.R. § 42.10(b), concurrently filed with this Petition is a Power of Attorney executed by Petitioner and appointing the above counsel.

Petitioner authorizes Account No. 02-4550 to be charged for any fees, including those enumerated in 37 C.F.R. § 42.15.

SAP America, Inc. (“Petitioner”) respectfully requests *inter partes* review (“IPR”) of the claims currently asserted in the district court case (claims 1-7, 10, 11, 13, 18, 19, 23, 29, 35, and 36) (the “challenged claims”) of U.S. Patent No. 8,751,948 (“the ’948 patent”) (EX1101), allegedly assigned to Cyandia, Inc. (“Patent Owner”), with a security interest assigned to HPCF Litigation Finance US I LLC. For the reasons set forth below, these claims should be found unpatentable and cancelled.

I. INTRODUCTION

The ’948 patent issued from a continuation-in-part (CIP) application and claims new subject matter added in the CIP or not disclosed at all. The challenged claims, therefore, are not entitled to claim priority to the ancestor applications’ filing dates, making an earlier family member, the PCT publication (WO 2009/140386) (EX1104), section 102(b) prior art to the ’948 patent. The PCT publication discloses or suggests every element of the challenged claims except some of those for which there is no written description support in the ancestor applications. Austin-Lane (U.S. 2004/0044736) (EX1105), however, discloses these unsupported elements. Thus, the PCT publication and Austin-Lane render every challenged claim obvious.

II. GROUND FOR STANDING PER 37 C.F.R. § 42.104(a)

Petitioner certifies that the ’948 patent is available for IPR and that Petitioner is not barred or estopped from requesting an IPR challenging the patent claims on the ground identified in this petition.

III. IDENTIFICATION OF CHALLENGE

A. Statement Of The Precise Relief Requested / Statutory Ground

Petitioner requests *inter partes* review of claims 1-7, 10-11, 13, 18-19, 23, 29, and 35-36 (the “challenged claims”) of the ’948 patent, on the following statutory ground:

Ground	Reference(s)	Basis	Claims
1	The PCT publication (EX1104) and Austin-Lane (EX1105)	35 U.S.C. § 103	1-7, 10-11, 13, 18-19, 23, 29, and 35-36

B. Denial Under § 325(d) Is Improper

The prior art references relied on herein (the PCT publication and Austin-Lane) were not cited or substantively addressed on the record during prosecution, and nothing suggests that their teachings relied on herein—much less the combination of those teachings as informed by a POSITA’s knowledge and expert testimony—were considered by the Examiner. *See, e.g., Mylan Pharm. Inc., v. Regeneron Pharm., Inc.*, IPR2022-01226, Paper 22 at 27-29 (PTAB Jan. 11, 2023). Accordingly, this petition should not be denied under Section 325(d).

On September 17, 2013, prior to two rounds of substantial amendments to the claims, the Examiner of the ’948 patent application said certain claim limitations were “missing in the specification of provisional application 61/052,765. Therefore, claimed priority date 05/13/2008 has not been honored for all independent claims

and its associated dependent claims. However, claimed invention gets priority date of 05/13/2009 as claimed feature is disclosed in application 12/465,331.” EX1102, 273; *see also id.*, 272.

The Examiner made the above-quoted statement before two rounds of substantial amendments were made to the claims, including the addition of steps B), C), D), F), and G) of the issued independent claims. *See* EX1102, 337-339 (showing Examiner’s mark-up illustrating two sets of amendments to claim 1 after the above statement regarding priority date). Nothing of record indicates that the Examiner considered the priority date of those amended, and issued, claims.

Section 325(d) permits discretionary denial if “the same or substantially the same prior art or arguments previously were presented to the Office.” Here, no one argued during *ex parte* prosecution what Petitioner argues here: there are at least four aspects of the challenged claims that lack written description support in the May 2009 parent application and therefore the PCT publication is prior art. Also, there is no indication that the Examiner considered an argument that the issued claims, including the substantial amendments made after the above-quoted Examiner statement regarding priority date, are not entitled to the filing date of the May 2009 parent application. Therefore, section 325(d) by its terms does not apply here.

Further, even if the Examiner had found that the challenged claims have the required written description support in the May 2009 parent application (which is

not the case), that would have been an error material to patentability, which justifies granting Institution, *Becton, Dickinson & Co. v. B. Braun Melsungen AG*, IPR2017-01586, Paper 8 (PTAB Dec. 15, 2017) (precedential as to § III.C.5, first paragraph (17–18)). As explained in section VII.C *infra*, there are at least four reasons which alone and in combination deprive these claims from support in the May 2009 parent application. There is no evidence of record that the Examiner considered any of those four points. *Cf. Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper 6 at 10 (PTAB February 13, 2020) (precedential) (“[I]f the record of the Office’s previous consideration of the art is not well developed or silent, then a petitioner may show the Office erred by overlooking something persuasive under factors (e) and (f).”) Therefore, the Board should not deny Institution under 35 U.S.C. § 325(d). *See Lam Rsch. Corp. v. Inpria Corp.*, IPR2024-00033, Paper 13 at 16 (PTAB Apr. 24, 2024) (declining discretionary denial under section 325(d) in part because the Examiner materially erred in accepting the applicant’s asserted priority date).

C. Fintiv Denial Is Improper

The Board should not discretionarily deny institution under *Fintiv* because the district court case is still in its early stages (only infringement and invalidity contentions have been exchanged). And even though a trial date is currently set for before the 18-month final written decision (FWD) deadline, that trial date may be

postponed at least because: (1) Petitioner is filing four IPRs on three of the four asserted patents and plans to file a motion to stay in the district court, and (2) there is a pending motion and a cross-motion to transfer the case. Moreover, Petitioner prepared and filed these petitions promptly, roughly four months after having received the infringement contentions on May 15, 2024. This petition also present compelling merits, as explained in Section VIII.

IV. THE '948 PATENT AND ITS ANCESTOR APPLICATIONS

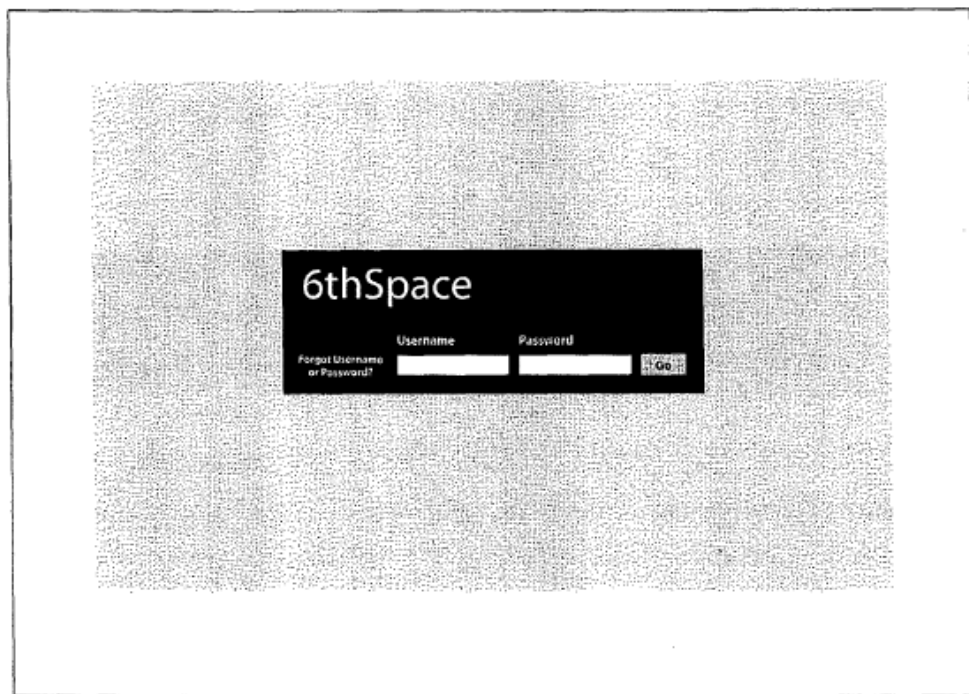
The '948 patent, issued from U.S. Patent Application No. 13/086,165 (“the April 2011 CIP application”) (EX1110), filed on April 13, 2011, which is a continuation-in-part of U.S. Patent Application No. 12/465,331 (“the May 2009 parent application”) (EX1106), filed on May 13, 2009, that issued as U.S. Patent No. 8,499,250 (“the '250 parent patent”) (EX1107), which claims priority to U.S. Provisional Patent Application No. 61/052,765 (“the May 2008 provisional application”) (EX1108) filed on May 13, 2008. The '948 application also claims priority to two provisional applications, one (U.S. Provisional Patent Application No. 61/474,942) filed on the same day as the '165 application (April 13, 2011), and the other (U.S. Provisional Patent Application No. 61/435,976) (“the January 2011 provisional application”) filed less than three months before the '165 application, on January 25, 2011.

Applicants filed their April 2011 CIP application more than a year after the contents of their ancestor applications were published by virtue of the November 2009 publication of a counterpart PCT application. Their April 2011 CIP application has a mass of new matter, including an entirely new set of drawings absent from its May 2009 non-provisional parent application and more than double the length of written description (not counting incorporated materials).

A. Specifications Of The '948 Patent And Its Family Members

The '948 patent, the May 2009 parent application, and the May 2008 provisional application describe some aspects of a channel grid framework on a computing device for accessing and interacting with content. *E.g.*, EX1101, Abstract, FIG. 1; EX1106, [0008-09], [0014], [0018], FIG. 3; EX1108, [0007], [0009-12], FIG. 1. The user's computing device initially displays a login page through which the user authenticates themselves by entering a username and password. *E.g.*, EX1101, 16:7-10; EX1108, 31. After the user signs in to their account, the computing device presents the user with a grid of tiles/icons representing channels (e.g., applications) that provide content from a variety of sources (e.g., news, stocks, etc.). *E.g.*, EX1101, 11:4-12:52, FIG. 3; EX1106, [0014], [0031], FIG. 3; EX1108, 19, 32, 56. To open a channel and access its content, a user selects (e.g., clicks on) that channel's icon/tile. *E.g.*, EX1102, [00134], [00149], [00173]; EX1108, 18.

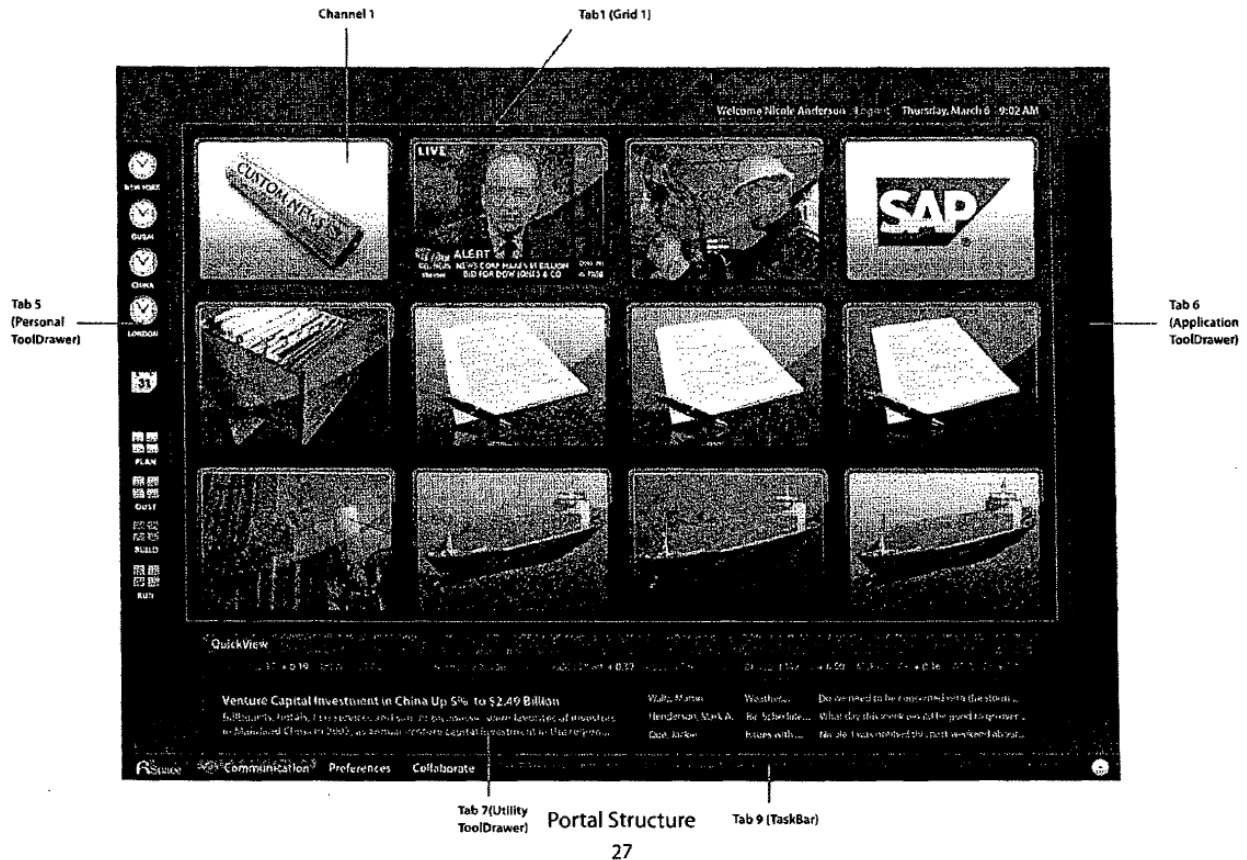
The May 2008 provisional application, for example, discloses requiring a user to sign in to their “6th Space” account with a username and password. EX1108, 23, 31.



UI_Layer_10:Authentication_login
Logo panel in center fades to login dialog

EX1108, 31.

After the sign-in process, the computing device displays a “channel grid” on a user’s device(s) that is “made up of 12 application/icons called ‘Channels.’” EX1108, 18. These channels can be “an icon to launch an application,” “a standalone visual alert device,” “a dynamic window that provides access to specific data from an enterprise application,” and/or “a real-time streaming media player.” *Id.*



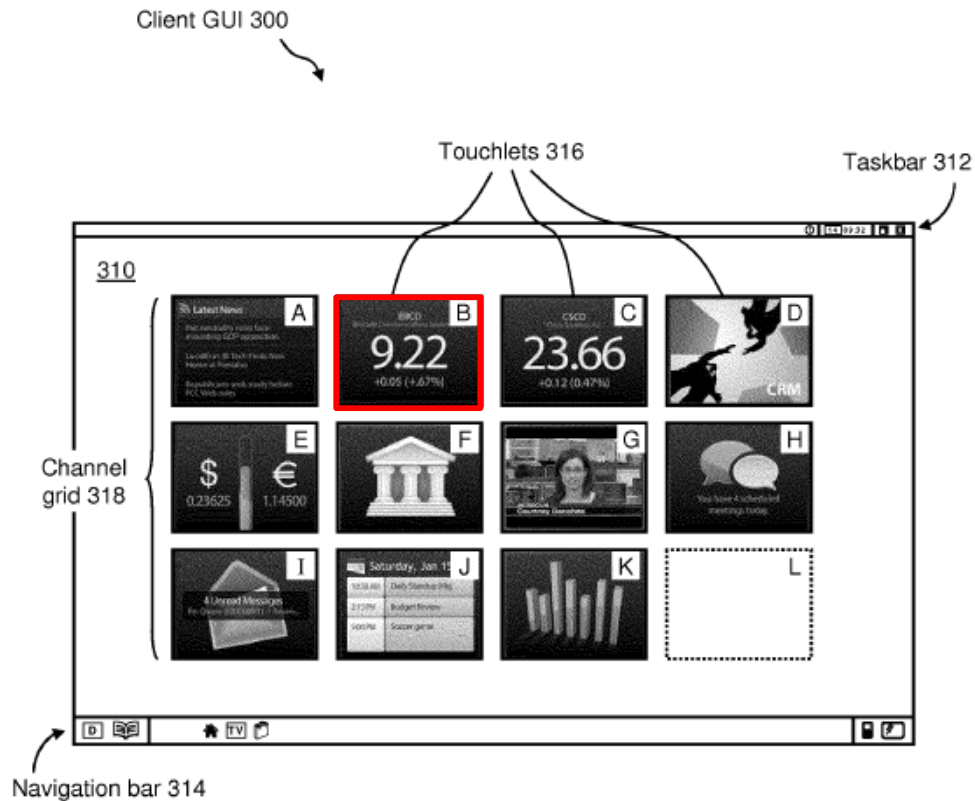
Id., 56.

The '765 provisional also discloses that a user can set up alerts (*id.*, [0010]) and that both the channels and the alerts can be “take[n] with” / “follow” the user “no matter what device they use” (i.e., from “device to device”) (*id.*, 18, 21, 25, 43). Users are “notified via [a] configurable combination of SMS, Email, HTML, [and] JavaFX (Channels).” *Id.*, 25. The '765 provisional describes the alerts as “visual alerts” and discloses that these visual alerts “must be authenticated.” *Id.*, 18, 25.

The May 2009 parent application describes the alerts similarly, albeit in only two paragraphs of text, stating that “a user or developer may define threshold

conditions” and “[i]f an established condition is met,” the system “confirm[s] the subscriber of the event,” and “provide[s] [an] alert in the channel.” EX1106, [0039]; *see also id.*, [0023]. The May 2009 parent application adds that the alert also can be an “auditory alert” and that the system “determine[s] the active devices of the subscriber,” though the May 2009 parent application does not describe if or how the determination of the active devices of the subscriber impacts how the alert is delivered or provided to the user. EX1106, [0039].

The April 2011 CIP application adds an entirely new set of drawings and over 100 paragraphs of text, including new subject matter related to the alerts, such as specific alert conditions, additional types of alerts, and explanation of how the system determines the notification method for the alert. As one example of a specific alert condition, the April 2011 CIP application describes how a user can set up a stock price alert. EX1110, [00156-59], FIGS. 14-17. The user, for example, “sets up an alert to occur when the share price is ‘less than’ \$9.23.” EX1110, [0158]. The system monitors the stock price, and if it drops below \$9.23, the “‘Stock Watch’ touchlet 316B may display an alert state to the user” by “chang[ing] the color of the border of the ‘Stock Watch’ touchlet 316B to red.” *Id.*, [0159].



Id., FIG. 17 (red annotations added showing touchlet 316B in alert state).

The April 2011 CIP application also adds that the alert also can be a tactile alert (in addition to the visual and auditory alerts disclosed in the May 2009 parent application). EX1110, [0093].

The April 2011 CIP application also explains that a notification manager determines the best notification method based on user preferences and session information indicating whether, and on which device(s), the user has an active session. *Id.*, [0041], [0092], [00130-33], [00145-48], [00168]. “[I]f the best method of delivering the alert is unsuccessful and/or not available, the next best delivery

method is attempted.” *Id.*, [0041]. For example, if the user “has an active session on his/her laptop computer ... it is determined that the best alert notification method is via the laptop computer,” “the alert is transmitted to the laptop computer,” and the “channel ... displays the alert to the user” within the channel application. *Id.*, [00131-33], [00146-148]. If, however, the user is offline, the user is notified based on their offline notification preferences, for example, via “a txt message, [a] call [to] the user’s landline, [a] call [to] a friend of the user, and the like.” *Id.*, [00130], [00145].

B. The ’948 Patent’s Claims

The independent claims of the ’948 patent encompass at least some of the new matter added in the April 2011 CIP application, as well as subject matter not expressly disclosed in any of the as-filed applications. Some claim elements are not described at all in the ancestor applications, such as steps “F)” and “G)” in the independent claims. Other claim elements encompass a scope broader than that described in the ancestor application, such as providing tactile alerts and other tactile information (disclosed only in the CIP application). Section VII *infra* describes four claim elements lacking written description support in the ancestor applications.

[1.1]	1. An apparatus to provide secure user-centric information on at least one user platform operated by a user, and to evaluate at least some of the secure user-centric information , the apparatus comprising:
[1.2]	at least one communication interface facilitating wired and/or wireless communications with the at least one user platform via one or more transmission media;
[1.3]	at least one memory storing processor-executable instructions; and
[1.4]	at least one processor communicatively coupled to the at least one communication interface and the at least one memory, retrieving processor-executable [sic] instructions from the at least one memory, and executing the processor-executable instructions to provide and evaluate at least some of the secure user-centric information by:
[1.5]	A) implementing a channel grid framework including a matrix of a plurality of authorized channels through which the user receives and/or interacts with, via the at least one user platform, respective portions of the secure user-centric information based at least in part on information access rights and/or security protocols respectively associated with the plurality of authorized channels, the plurality of authorized channels including at least a first channel through which the user receives and/or interacts with first channel information constituting a first portion of the secure user-centric information ;
[1.6]	B) establishing a user profile to identify user preferences, platform identities, and service support instructions that determine how the secure user-centric information behaves on the at least one user platform;
[1.7]	C) receiving configuration data indicating one or more user preferences regarding alerts transmitted via the first channel based on the user profile;
[1.8]	D) receiving session data indicating a current state of at least one external device of the user;
[1.9]	E) monitoring at least the first channel information so as to determine one or more events, conditions, logical workflows, discrete information values or signal data, based on at least one threshold condition or parameter relating to the first channel information and determined based on the user preferences indicated by the configuration data; and if the one or more events, conditions, logical workflows, discrete information values or signal data is/are determined in E);
[1.10]	F) determining a notification method by which to provide at least one alert on the at least one external device based on the current

	state of the at least one external device indicated by the session data;
[1.11]	G) generating notification data according to the determined notification method, wherein the notification data is configured to cause the at least one external device to provide the at least one alert on the at least one external device; and
[1.12]	H) controlling the at least one communication interface to transmit the notification data to the at least one external device via the first channel without being requested by the user,
[1.13]	wherein the transmission of the notification data to the at least one external device is based at least in part on information access rights and/or security protocols respectively associated with the corresponding plurality of authorized channels, the user, and the at least one user platform.

EX1109 includes a complete listing of the challenged claims.

**C. Relevant Prosecution History Of
The '948 Patent And Its Family Members**

The '948 application was filed with 36 original claims on April 13, 2011. EX1102, 75-84¹. In the first Office action dated September 17, 2013, the Examiner rejected the claims under Section 102 and 103 over Flynt (U.S. 2007/0082707) and other references and found that the claims were not entitled to claim priority to the May 2008 provisional application. EX1102, 272-287. On December 17, 2013, Applicant then amended the claims by adding elements [1.7] (receiving configuration data), [1.8] (receiving session data), [1.10] (determining a notification method based on the session data) and [1.11] (generating notification data according

¹ EX1102 citations are to page numbering added by Petitioner.

to the determined notification method). *Id.*, 304-315. Applicant also amended element [1.12] to refer back to the at least one external device recited in newly added element [1.8] so that the alert is transmitted to “***the*** at least one external device” for which session data is received, not “at least one external device” (no “the”). *Id.*, 305 (emphasis added). Applicant argued that support for these amendments can be found in paragraphs 41, 62, 92, 95, 96, 112, 113, 130, 145, 155, and 160 of the as-filed CIP specification. *Id.*, 316.

The Examiner then issued a notice of allowance on January 30, 2014, which included an Examiner’s amendment to the independent claims, adding step B) (establishing a user profile) and language in step H) about the notification data being transmitted (1) without being requested by the user and (2) based on access rights and/or security protocols respectively associated with the corresponding plurality of authorized channels, the user, and the at least one user platform. *Id.*, 332-350.

V. LEVEL OF SKILL IN THE ART, AND STATE OF THE ART

A. Person Of Ordinary Skill In The Art

A person of ordinary skill in the art for purposes of the ’948 patent in April 2011 (“POSITA”) would have had a bachelor’s degree in electrical engineering, computer science, or equivalent, with two or more years of experience developing and implementing graphical user interfaces for controlling server-based applications, including handling asynchronous notifications generated by those

applications and web services, such as portal systems, or an equivalent amount of relevant work or research experience. A POSITA would have been familiar with common approaches for presenting information on a graphical user interface, including various layouts for presenting multiple elements, such as icons, widgets, windows, etc. *E.g.*, EX1116, 2-4; EX1118, 34, 390; EX1122, 7:31-43, Fig. 1; EX1124, 1:15-19, 3:35-40, FIG. 1; EX1125, xxx, 183; EX1126, 5; EX1127, 22. EX1103, ¶36.

Further, a POSITA would have been familiar with communication protocols and markup languages commonly used for transmitting information (including notification data) between a server and a user's device(s), such as HTTP, SMS, SMTP, HTML, XML, and RFC822 email headers. Similarly, a POSITA would have understood and/or used Java technologies, XML applications, and Web publishing, along with protocols and techniques for managing and interfacing to remote web objects, such as Web Services for Remote Portlets (WSRP). EX1116, xix, 12, 899; EX1105, [0004-5], [0031], [0033], [0048]; EX1128, 402, 702, 760, 933-934; EX1129 (WSRP 1.0); EX1130 (WSRP 2.0). EX1103, ¶37.

POSITAs commonly used SSO and/or other authentication processes to verify the identity of the user and their device, to protect the user's privacy. EX1116, 5, 11, 15-16, 630, 638-639, 899-900; EX1117, 15, 365-401; EX1118, 5-6; EX1119, 182-183; EX1120, 327-360; EX1123, 42-43, 299, 310, 483, 495, 580; EX1128, 752.

POSITAs would have understood how to implement a server with an authentication directory (e.g., LDAP) including a plurality of user, device, and application accounts. *Id.* A POSITA also would have been familiar with techniques to manage users' sessions, for example, to track the lifetime of a given sign-on. EX1116, 134-139, 285; EX1117, 18-19, 164, 228, 233-234, 264, 480-482; EX1118, 28-29, 381-384; EX1105, [0035]. It also was common practice to encrypt communications between a server and a user's device(s) to prevent unauthorized entities from gaining access to the information, thus protecting the user's privacy. EX1116, 11, 630, 899-900; EX1117, 5-6, 380-383; EX1118, 315-337; EX1123, 495; EX1128, 777. A POSITA also would have been familiar with protocols commonly used to authenticate users (e.g., single sign-on or SSO) and encrypt communications (e.g., SSL). *Id.* EX1103, ¶38.

VI. CLAIM CONSTRUCTION

Unless otherwise noted, Petitioner applies the plain and ordinary meaning of all claim terms below. 83 Fed. Reg. 51340; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-1313 (Fed. Cir. 2005) (*en banc*). Petitioner does not, however, waive any argument in any litigation that claim terms in the '948 patent are indefinite or otherwise invalid nor does Petitioner waive its right to raise additional issues of claim construction in any litigation.

A. Proposed Constructions

Petitioner proposes the following construction, which is important to the Board's determination of the claims' effective filing date, as explained below.

“provide [an] alert” (EX1101, 31:65, 32:4, 36:34-35, 36:41, 38:1-2, 38:8) should be construed at least in part as: *“present a tactile, auditory, or visual notification.”*

“information” (throughout the '948 claims) should be construed at least in part as: *“tactile, auditory, or visual information.”*

The April 2011 CIP application added a substantial amount of new matter not found in the May 2009 parent application, some of which expanded “the invention” to encompass conveying information to users by tactile means (e.g., vibrations) not just visual or auditory means as had been disclosed in the May 2009 parent application: *“The invention is not limited to presenting information to users 116 in a visual fashion only. Other ways (not shown) of conveying information to users 116 may be, for example, audible indicators (i.e., sound) and/or tactile indicators (e.g., vibration).”* EX1101, 9:39-43 (emphases added). The April 2011 CIP application extended this expansion specifically to conveying alert information: “Example of types of alerts that may be generated by eventing and alerting subsystem 452 may include, but are not limited to, visual alerts, auditory alerts, *tactile alerts*, email messages, SMS text messages, activation of at least one channel of a plurality of

channels, and notifications to a law enforcement agency.” *Id.*, 15:14-19 (emphasis added). Therefore, the plain meaning of “provide [an] alert” in the challenged claims, as well as “information,” in view of this new disclosure the CIP application links to “the invention,” is that it encompasses presenting tactile as well as auditory and visual notifications and information. EX1103, ¶¶41-42.

This construction defines the meaning and scope of these claim terms by specifying something they *include within their scope*. This is a proper and common form of claim construction, construing a claim term in part by specifying example(s) of what it encompasses within its scope. *See, e.g., ULF Bamberg v. Dalvey*, 815 F.3d 793, 797 (Fed. Cir. 2016) (affirming the Board’s construction that “‘white layer’ *includes within its scope* a white layer that melts at temperatures both above and below 220°C”) (emphasis added); *Paice LLC v. Ford Motor Co.*, 881 F.3d 894, 902-03 (Fed. Cir. 2018) (affirming Board’s construction that “‘abnormal and transient conditions’ *include* starting and stopping the engine”) (emphasis added). This form of claim construction is particularly important when, as here, the claims encompass a scope of invention broader than that described in an ancestor patent application. *See PowerOasis, Inc. v. T-Mobile USA, Inc.*, 522 F.3d 1299, 1302-06 (Fed. Cir. 2008) (holding “the claim term ‘customer interface’ encompasses an interface that is located on the customer’s laptop,” in view of the CIP application’s disclosure, which scope lacked written description support in the parent application); *AK Steel*

Corp. v. Sollac & Ugine, 344 F.3d 1234, 1242-44 (Fed. Cir. 2003) (first construing claims to “encompass aluminum with up to about 10% silicon” and then finding that application failed to enable the claims with that claim scope).

**VII. THE CHALLENGED CLAIMS ARE NOT ENTITLED TO
CLAIM PRIORITY TO THE MAY 2009 ANCESTOR APPLICATION**

Patent Owner cannot show entitlement to the filing date of the May 2009 ancestor application because that application does not provide § 112 written description support for the challenged CIP claims, as required by § 120 (pre-AIA). *See also PowerOasis*, 522 F.3d, 1306.

**A. Patent Owner Has The Burden Of
Production, For Each Claim, To Show That The Claim
Has Section 112(a) Support In The May 2009 Parent Application**

“What is claimed by the patent application must be the same as what is disclosed in the specification; otherwise the patent should not issue.” *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 736 (2002). This is the Patent Act’s full-scope written description requirement. 35 U.S.C. § 112(a) (AIA) (“The [patent’s] specification shall contain a written description of the invention....”). A patent’s disclosure “must ‘clearly allow persons of ordinary skill in the art to recognize that [the inventor] invented what is claimed,’” such that “the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” *Ariad*

Pharms., Inc. v. Eli Lilly & Co., 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc) (quoting *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563 (Fed. Cir. 1991)).

The written description requirement ““ensure[s] that the scope of the right to exclude, as set forth in the claims, does not overreach the scope of the inventor’s contribution to the field of art as described in the patent specification.”” *Univ. of Rochester v. G.D. Searle & Co.*, 358 F.3d 916, 920 (Fed. Cir. 2004) (quoting *Reiffin v. Microsoft Corp.*, 214 F.3d 1342, 1345 (Fed. Cir. 2000)).

The requirements for showing this required written description are demanding. The application’s disclosure of the claimed subject matter must be: (1) express or necessarily present, *Tronzo v. Biomet, Inc.*, 156 F.3d 1154, 1159 (Fed. Cir. 1998) (citing *Cont’l Can Co. USA v. Monsanto Co.*, 948 F.2d 1264, 1268 (Fed. Cir. 1991)); (2) complete, *Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997); (3) unambiguous, *Hyatt v. Boone*, 146 F.3d 1348, 1352-55 (Fed. Cir. 1998); (4) specific, *Purdue Pharma L.P. v. Faulding Inc.*, 230 F.3d 1320, 1326-28 (Fed. Cir. 2000); and (5) as broad as the claim, *Gentry Gallery, Inc. v. Berkline Corp.*, 134 F.3d 1473, 1478-80 (Fed. Cir. 1998).

This fifth requirement means that the application must describe the “full scope” of the claim. *Cf. Atl. Rsch. Mktg. Sys., Inc. v. Troy*, 659 F.3d 1345, 1355 (Fed. Cir. 2011) (claims invalid because they “exceed in scope the subject matter that [applicant] chose to disclose to the public in the written description.”); *Synthes USA*,

LLC v. Spinal Kinetics, Inc., 734 F.3d 1332, 1341-45 (Fed. Cir. 2013) (affirming jury verdict of invalidity for lack of written description support where claim construed to cover “openings” in an implant, but specification disclosed only peripheral grooves, not slots or channels).

A Federal Circuit decision on a mechanical-assembly patent illustrates this demanding statutory mandate for full-scope written description support of a patent claim. In *D Three Enters., LLC v. SunModo Corporation*, 890 F.3d 1042, 1048-1050 (Fed. Cir. 2018), the Federal Circuit affirmed summary judgment that two sets of patent claims related to solar panel roof mounting assemblies were unsupported by the limited disclosure of an ancestor patent application.

The first set of patent claims required no washer. The ancestor application disclosed a washerless assembly but only with a particular type of attachment bracket. The Court held that this limited, single-embodiment disclosure did not support the broader scope of the claims, which encompassed a washerless assembly with attachment brackets not limited to the disclosed bracket. *Id.*, 1050-51.

The second set of claims required a washer but without specifying its location relative to the flashing. The ancestor application disclosed embodiments with a washer but in these embodiments the washer was consistently above the flashing. The Court held that this limited disclosure did not support claims not requiring that the washer be above the flashing. *Id.*, 1052.

It is not enough that the claims would have been obvious in view of the ancestor application's disclosure. *Lockwood*, 107 F.3d, 1571-72; *Rivera v. Int'l Trade Comm'n*, 857 F.3d 1315, 1322 (Fed. Cir. 2017).

B. Patent Owner Has The Burden Of Production, For Each Claim, To Show That The Claim Has Section 112(a) Support In The May 2009 Parent Application

“It is elementary patent law that a patent application is entitled to the benefit of the filing date of an earlier filed application only if the disclosure of the earlier application provides support for the claims of the later application, as required by 35 U.S.C. § 112.” *PowerOasis*, 522 F.3d, 1306 (quoting *In re Chu*, 66 F.3d 292, 297 (Fed. Cir. 1995)).

While Petitioner has the burden of persuasion to show obviousness, to antedate the PCT publication reference, Patent Owner has the burden of production to show, claim-by-claim, that the claim has section 112(a) support in the May 13, 2009, ancestor application. More specifically, once Petitioner argues a reference published more than a year before the filing date of the challenged patent renders the claims unpatentable, “[t]he burden of production on the issue of priority then shifts to Patent Owner to show that [the reference] is not prior art.” *Samsung Electronics Co. v. Netlist, Inc.*, IPR2022-00615, Paper 96 at 24-25 (PTAB Apr. 17, 2024) (holding that “Patent Owner does not satisfy its burden of production” on the effective-filing-date issue); see also *Tech. Licensing Corp. v. Videotek, Inc.*, 545

F.3d 1316, 1329 (Fed. Cir. 2008); *D Three Enters., LLC v. SunModo Corp.*, 890 F.3d 1042, 1049 (Fed. Cir. 2018); *In re Katz Interactive Call Processing Pat. Litig.*, 639 F.3d 1303, 1322 (Fed. Cir. 2011).

This burden-shifting law applies in Patent Office proceedings. See *Natural Alternatives Int'l, Inc. v. Iancu*, 904 F.3d 1375, 1380 (Fed. Cir. 2018) (“[C]laims in a patent or patent application are not entitled to priority under § 120 at least until the patent owner *proves* entitlement to the PTO, the Board, or a federal court.” (citing *PowerOasis*, 522 F.3d, 1305-06); *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1379-80 (Fed. Cir. 2015) (*inter partes* review); *In re NTP, Inc.*, 654 F.3d 1268, 1276 (Fed. Cir. 2011) (reexamination proceeding); *Amazon.com, Inc. v. Personalized Media Commc'ns, LLC*, IPR2014-01527, Paper No. 44 (PTAB Aug. 31, 2016) (*inter partes* review).

Following this burden-shifting law, the Board has repeatedly ruled that a patent owner failed to show that claims had section 112 support in an ancestor application, resulting in those claims being unpatentable in view of intervening prior art. See, e.g., *MaxLite, Inc. v. Jiaxing Super Lighting Elec. Appliance Co. Ltd.*, IPR2020-00208, Paper 14 at 6-8 (PTAB Jun. 1, 2021) (patent owner failed its burden of production to show that each claim element was supported by foreign ancestor application); *Aquestive Therapeutics, Inc. v. Neurelis, Inc.*, IPR2019-00451, Paper 14 at 5-6 (PTAB Sept. 27, 2019) (patent owner failed to “demonstrat[e] that every

patent application along the priority chain conveys with reasonable clarity to those skilled in the art that the inventors were in possession of each limitation of each of the challenged claims, as well as the claimed invention as a whole”); *United Servs. Auto. Ass’n v. Asghari-Kamrani*, CBM2016-00063, Paper 42 at 34-54 (PTAB Aug. 15, 2017) (patent owner failed to show that alleged priority application supported full scope of claims and thus failed to antedate anticipatory prior art); *Inguran LLC v. Premium Genetics (UK) Ltd.*, PGR2015-00017, Paper 22 at 31-34 (PTAB Dec. 20, 2016) (patent owner failed to satisfy its burden of production to show that ancestor application provided written description support for each element of the challenged claim); *Butamax™ Advanced Biofuels LLC, v. Gevo, Inc.*, IPR2013-00539, Paper 33 at 10-25 (PTAB Mar. 3, 2015) (challenged claims to a genus not supported by species disclosed in ancestor provisional applications).

**C. The May 2009 Parent Application Does Not
 Provide § 112 Written Description Support For Any Claim**

This Petition shows why the May 2009 parent application does not provide Section 112 written description support for the challenged claims, whether or not Patent Owner is able to satisfy its initial burden of production (which it cannot).

For each challenged claim, the May 2009 parent application failed to support the claim and individual elements of the claim, as noted below. This is so whether or not the Board considers the content supposedly incorporated by reference from a

provisional application that Patent Owner cannot show qualifies as a “U.S. patent or U.S. patent application publication” under 37 C.F.R. 1.57(d).

First, as noted *supra* at Section IV.C, part of the new matter added by the April 2011 CIP application was to expand the “invention” to encompass conveying “information” to users by tactile means (e.g., vibrations) not just visual or auditory means. EX1110, [0057]. This expanded, new-matter disclosure in the April 2011 CIP application expressly extended to conveying alert information: “Example of types of alerts that may be generated by eventing and alerting subsystem 452 may include, but are not limited to, visual alerts, auditory alerts, tactile alerts, email messages, SMS text messages, activation of at least one channel of a plurality of channels, and notifications to a law enforcement agency.” *Id.*, [0093]. Therefore, as explained *supra* at Section VI.A, the correct interpretation of “provide [an] alert” in the challenged claims (EX1101, 31:65, 32:4, 36:34-35, 36:41, 38:1-2, 38:8), in view of this new disclosure in the CIP specification tied to the “invention,” is that it encompasses presenting tactile as well as auditory and visual notifications. Similarly, for the same reason, the claims’ “secure, user-centric information” encompasses tactile information. See EX1101, 9:39-43.

The May 2009 parent application, however, was limited to visual and auditory information and alerts. See EX1106, [0022], [0039], [0041]. It did not disclose tactile information and alerts and therefore, under the governing precedents, does not

support the full scope of the claims or any of the claim elements referring to providing an “alert” or providing, evaluating, receiving, or interacting with “secure user-centric information.” Nothing in the May 2009 parent application clearly shows that the applicants possessed providing alerts through vibrations or providing, evaluating, receiving, or interacting with information encoded as vibrations. *Cf. Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1333-34 (Fed. Cir. 2008) (“[T]he issue is whether a person skilled in the art would understand from the earlier application alone, without consulting the new matter in the [CIP], that the inventor had possession of the claim[] ... when the [ancestor] application was filed”).

This fact scenario is similar to *PowerOasis*. There, the original, parent application disclosed placing a user/customer interface only on a vending machine. 522 F.3d at 1307. A later CIP application added substantial new matter including embodiments where the user interface was on a customer’s laptop. *Id.* The asserted claims recited a “customer interface.” *Id.*, 1302. In view of the CIP disclosure, the district court ruled that “the claim term ‘customer interface’ encompasses an interface that is located on the customer’s laptop.” *Id.* The district court held that the claims, so construed, were not entitled to the parent application’s filing date, and consequently they were invalid for anticipation. *Id.*, 1311. The Federal Circuit affirmed, “agree[ing] with the district court that the Original Application did not contain support for a ‘customer interface’ located on the customer’s laptop.” *Id.*,

1309. Here, similarly, the CIP's disclosure broadened the meaning of claim terms in a manner not supported by the parent application, broadening them to encompass tactile information and alerts which was not described in the parent application.

Christopher Schmandt, an expert in, *inter alia*, human-computer interaction, explains what the skilled artisan would understand from the May 2009 and CIP applications, respectively, as to the sensory modalities of the user information and the alerts, including that the earlier application did not convey use of tactile information and alerts but the later application added that. See EX1103, ¶¶43-55 (citing EXS1111-1115).

Second, the May 2009 parent application does not support any claim in part because it does not support this claim limitation (added by amendment late in the prosecution): “F) determining a notification method by which to provide at least one alert on the at least one external device based on the current state of the at least one external device indicated by the session data.” The April 2011 CIP application added arguable support for aspects of this claim limitation with discussions of the functions and operation of a “notification manager” to “determine the best alert notification method.” EX1110, [0090-93], [0130-132], [0145-147], [0160]. The May 2009 parent application lacked this disclosure. It does not mention “notification manager” or “notification method.” The May 2009 parent application does not describe how to determine a notification method or how to use “session data” in the manner

required by this claim limitation. At most, the May 2009 parent application discloses determining the user's active devices (EX1106, [0039]) but it does not explain if or how this determination impacts which notification method is selected to deliver the alert.

When Applicant amended the claims in December 2013, adding this and several other claim elements, Applicant cited as support ten paragraphs in the April 2011 CIP application. *See* EX1102, 316. None of those ten paragraphs is in the May 2009 parent application. Those ten new-matter paragraphs cited by Applicant refer to, among other terms, “best method,” “best notification method,” “state information,” “notification manager,” “configuration server,” “session manager,” and “notification preferences” (*see* EX1110, [0041], [0062], [0092], [0095-96], [0112-113], [0130], [0145], [0155], [0160]) none of which is found in the May 2009 parent application.

Third, the May 2009 parent application does not support any claim in part because it does not support this claim limitation (also added by amendment late in the prosecution): “G) generating notification data according to the determined notification method.” (EX1101, 32:1-2, 36:38-39, 38:5-6.) As noted, the May 2009 parent application does not mention “notification method” or contain any of the CIP's disclosure regarding a “notification manager” determining a “notification method.” Nor does it mention “notification data.” The May 2009 parent application

does not support generating notification data after determining a notification method nor that a determination of a notification method affects the notification data that is generated. The May 2009 parent application's primary description of alerts is in paragraph [0039]. *See also* EX1106, [0023], [0029-33], [0035], [0054]. Neither this paragraph nor any other part of the application describes this claim limitation.

Fourth, the May 2009 parent application does not support any claim because it does not support providing the claimed alert to multiple external devices as required in steps F), G), and H) of each of the independent claims.

Among other things, steps F), G), and H) require an alert to be provided to “the at least one external device.” *See, e.g.*, EX1101, 31:65-67 and 32:3-11. The only possible antecedent for “the at least one external device” is the “at least one external device of the user” in step D). *Id.*, 31:52-53. Step D), which is included in each of the independent claims, requires the step of “receiving session data indicating a current state of at least one external device of the user[,]” which indicates that the scope of each of the independent claims includes one *or more* external devices. *Id.*, 31:52-53, 36:22-23, 37:9-10. As the only possible antecedent for “the at least one external device” in steps F), G), and H) is the “at least one external device of the user” in step D), then, the determination step of step F), the generation step of step G), and the controlling step of step H) must require that the alert be provided to each

external device for which session data is received. This includes any external devices for which the received session data indicates that the device is not currently in use.

None of these elements is supported by the disclosure in the May 2009 parent application. The May 2009 parent application's primary description of alerts is in paragraph [0039]. *See also* EX1106, [0023], [0029-33], [0035], [0054]. It does not describe providing an alert on each of plural external devices for which session data is received. For example, if session data is received from two external devices indicating that one is being used by the user and one is not, the May 2009 parent application does not describe sending an alert to both devices, as is required by each independent claim. Because the May 2009 parent application does not disclose the subject matter claimed in steps F), G), and H), none of the challenged claims are entitled to its filing date.

Individually and in combination these differences between the May 2009 parent application and the claims bars these claims from antedating the PCT Publication.

VIII. GROUND 1: THE CHALLENGED CLAIMS ARE OBVIOUS OVER THE PCT PUBLICATION IN VIEW OF AUSTIN-LANE

As explained below, the challenged claims are obvious over the PCT publication in view of Austin-Lane. The PCT publication discloses or suggests every element of the challenged claims except some of those for which there is no written

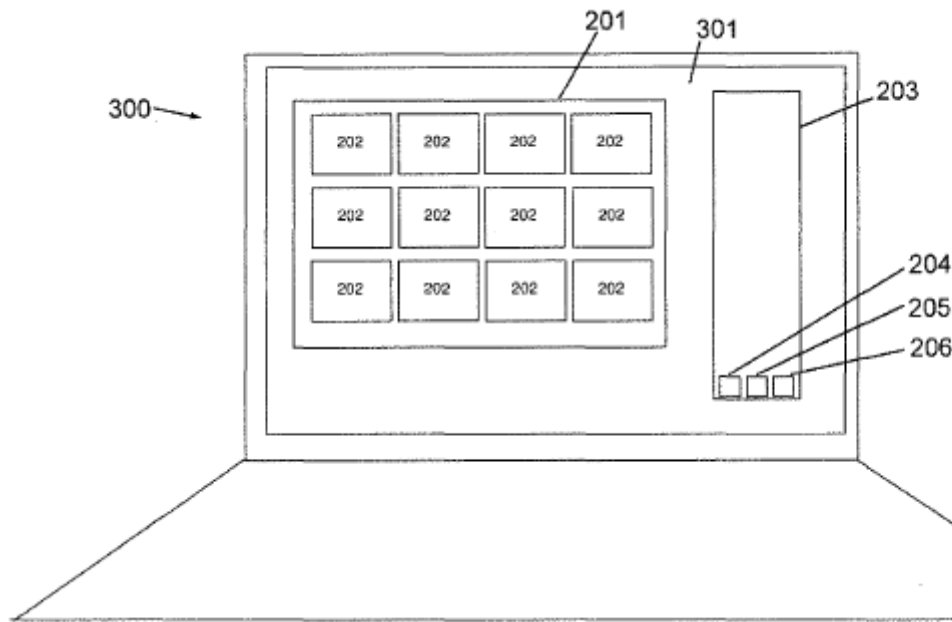
description support in the ancestor applications, namely: (1) determining a notification method by which to provide at least one alert on the at least one external device based on the current state of the at least one external device indicated by the session data, and (2) generating notification data (data configured to cause the at least one external device to provide the at least one alert) according to the determined notification method. Austin-Lane, however, discloses or suggests these unsupported claim elements and explains their benefits. *E.g.*, EX1105, [0006-9], [0019], [0021], [0023-24], [0027], [0029], [0031], [0035], [0039], [0041], [0045-46] [0055], [0079]. Sending the alert to the device the user is currently using (as indicated by session data) ensures the user receives the alert promptly and generating the notification data such that it conforms to the requirements/specifications of the determined notification method ensures that the user actually/successfully receives the alert. *E.g., id.*, [0031], [0039], [0041], [0045-46], [0079]. Thus, as explained in greater detail below, a POSITA would have been motivated with a reasonable expectation of success to start with the PCT publication design and incorporate Austin-Lane's teachings to determine a notification method based on session data and generate notification data according to the determined notification method to ensure successful and prompt delivery of the alert to the user. EX1103, ¶71.

**A. The PCT Publication (EX1104) And Its Incorporated
Provisional Application, The '765 Provisional (EX1108)**

Even if the '948 patent were entitled to the filing date of the January 2011 provisional (which Petitioner does not acquiesce is appropriate), the PCT publication is still prior art under at least pre-AIA Section 102(b) because it published November 19, 2009, more than one year before the filing date of the January 2011 provisional application.

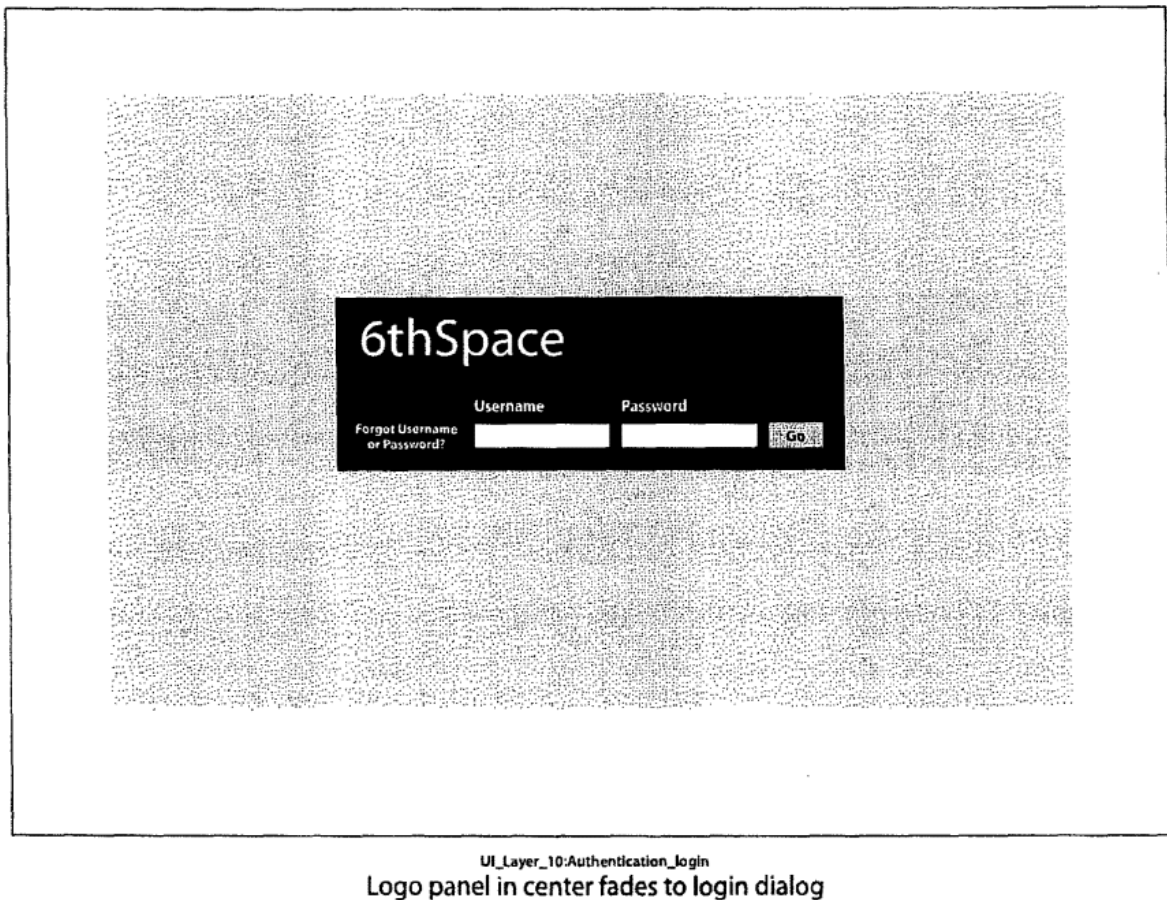
The PCT publication is analogous art to the '948 patent because it is from the same field of endeavor: providing secure user-centric information to a user. EX1101, Title, Abstract, 2:4-13, 31:17-32:15 (claim 1); EX1103, ¶56; EX1104, Title, Abstract, [0002], [0008], claim 9.

The PCT publication is substantively identical to the May 2009 parent application, containing the same drawings and specification. *Compare* EX1104 with EX1106, 1-48. It also incorporates by reference the May 2008 provisional application (EX1108). EX1104, [0001]. Like the May 2009 parent application, the PCT publication describes systems and methods for providing a “channel grid framework” on a user’s device(s). *E.g.*, EX1104, Abstract, [0009], [0014], FIG. 3.



EX1104, FIG. 3 (showing computer display device 300 displaying channel grid framework 201 comprising a 3x4 grid of channels 202); *see also id.*, [0022], [0031].
EX1103, ¶57.

Before “the channel grid framework 201 may be established for the user,” the user must be authenticated, such as by logging in with their username and password. EX1104, [0051]; *see also id.*, Abstract, [0009], [0050], [0035], [0054], [0061], claim 1; EX1108, [0009], 23, 31.



EX1108, 31. EX1103, ¶58.

After the user is authenticated, the “user may access specific channels 202 and interact with them based on the user’s profile.” EX1104, [0032]. For example, “the user may take action by touching, clicking, or otherwise interacting with the channel.” *Id.*, [0024]. The user profile “may identify user preferences, platform identities, and service support instructions as to how the user wishes information to behave on the selected platform.” *Id.*, [0034]. EX1103, ¶59.

“Information may be delivered to a user based on the user’s identity as established by the system when the user’s session is established. Because the user is

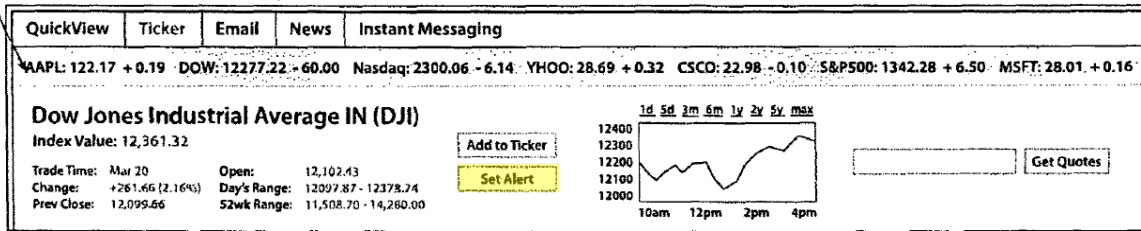
known and authenticated, preferences and rights to certain information types can be defined and managed for the user.” EX1104, [0021]. “Based on the access rights assigned to an individual and the underlying actions enabled through the channel's design, immediate response to an event or a complex logic chain that formed the event may occur.” *Id.*, [0024]. These “access [rights] and security protocols may be identified for each condition and action to be performed by the user.” *Id.*, [0036]; *see also id.*, [0022] (“Each channel may be configured to perform complex functions both in how the information is synthesized and delivered as well as what the user may do with it (as may be driven by the identify [sic] and authorization granted to the user).”). EX1103, ¶60.

The channels provide “[i]nformation relevant to the user,” such as “financial services information ... email, address book information, instant messaging information, ... text, graphics, pictures, video,” etc. *Id.*, [0022]. The channels also provide “visual or auditory alert[s].” *Id.*, [0039]. EX1103, ¶61.

Users also can set up alerts, including establishing specific events/conditions that trigger an alert. EX1104, [0023], [0039] (A user can “define threshold conditions with definitive values assigned to events, conditions, logical workflows, discrete information values or signal data.”). EX1103, ¶62.

For example, a user can set up an alert for a stock. EX1108, 45.

Stock Ticker: Ticker will be live, constantly updating and displaying stocks based on user-defined preferences.



EX1108, 45 (yellow annotations added). EX1103, ¶63.

“If an established condition is met, the channel alert server 211 may notify the identity management server 208 to confirm the subscriber of the event, determine the active devices of the subscriber, and then pass through the web services gateway 207 and the channel grid framework 201 to provide a visual or auditory alert in the channel 202.” EX1104, [0039]. “The alert can appear as defined on other platforms such as a mobile device, a television (set top box), a Blu-ray player, or other devices.” EX1104, [0039]; *see also id.*, claim 9 (alert on “first and second [computing device] platforms”). The alert also can be sent “via configurable combination of SMS, Email, HTML, JavaFX (Channels).” EX1108, 25; *see also id.*, 23. EX1103, ¶64.

Like any other information provided by the channels, the alerts “must be authenticated” and can be “set ... to follow” a user “from device to device.” EX1108, 25, 43; *see also* EX1104, [0035-36] (describing how a user must be authenticated

and information (e.g., an alert) must be authorized before it is provided to the user), [0050-51]. EX1103, ¶65.

Several back-end software modules (e.g., a channel alert server, an identity management server, a channel server) are responsible for performing most or all of the above-described functionality including, for example, authenticating the user, establishing and storing the user's profile including the user's preferences (e.g., alert triggers), ensuring the user is authorized to access requested content, and providing the content (including alerts) to the user's device(s). EX1104, [0031-32], [0035-36], [0039-40], [0050-62]. These back-end software modules "can be conveniently implemented using one or more general purpose computer systems" (EX1104, [0068]) including "server computers" (*id.*, [0065]) comprising "one or more memories" (*id.*, [0067]) and "one or more computer processors (*id.*, Abstract, [0009], claim 1)."

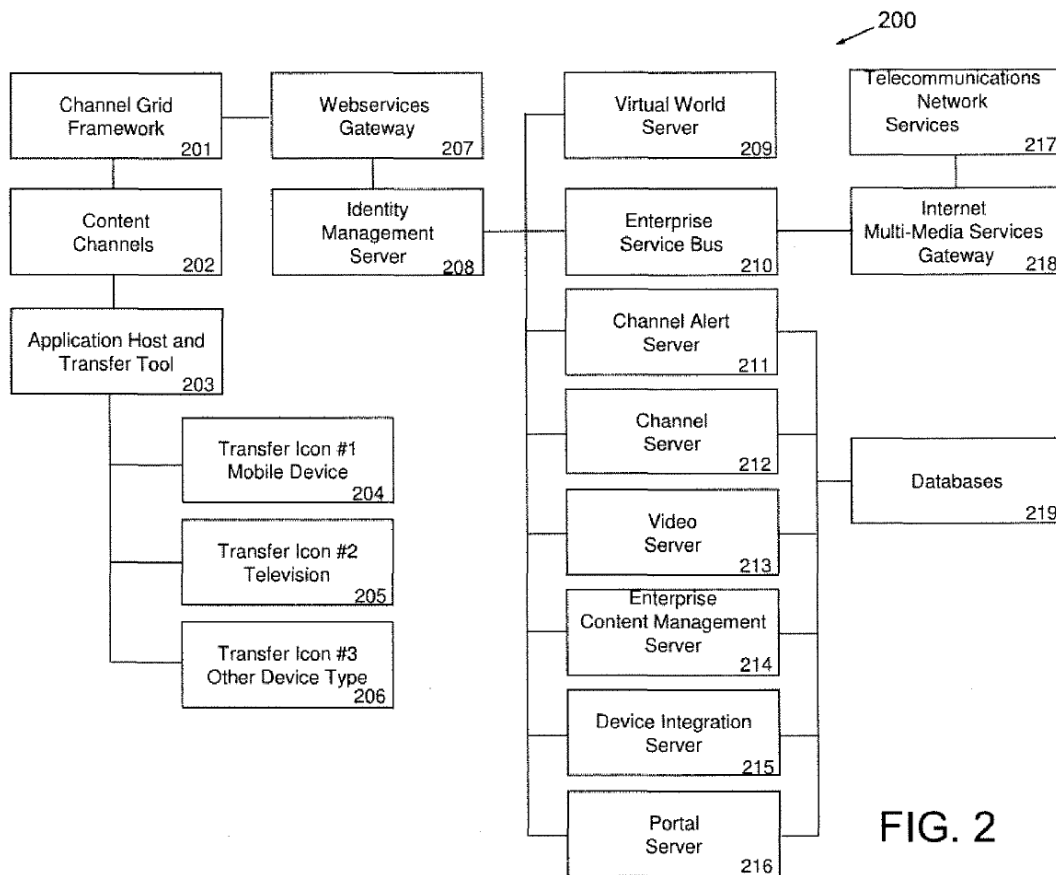


FIG. 2

EX1104, FIG. 2. EX1103, ¶66.

B. Austin-Lane (EX1105)

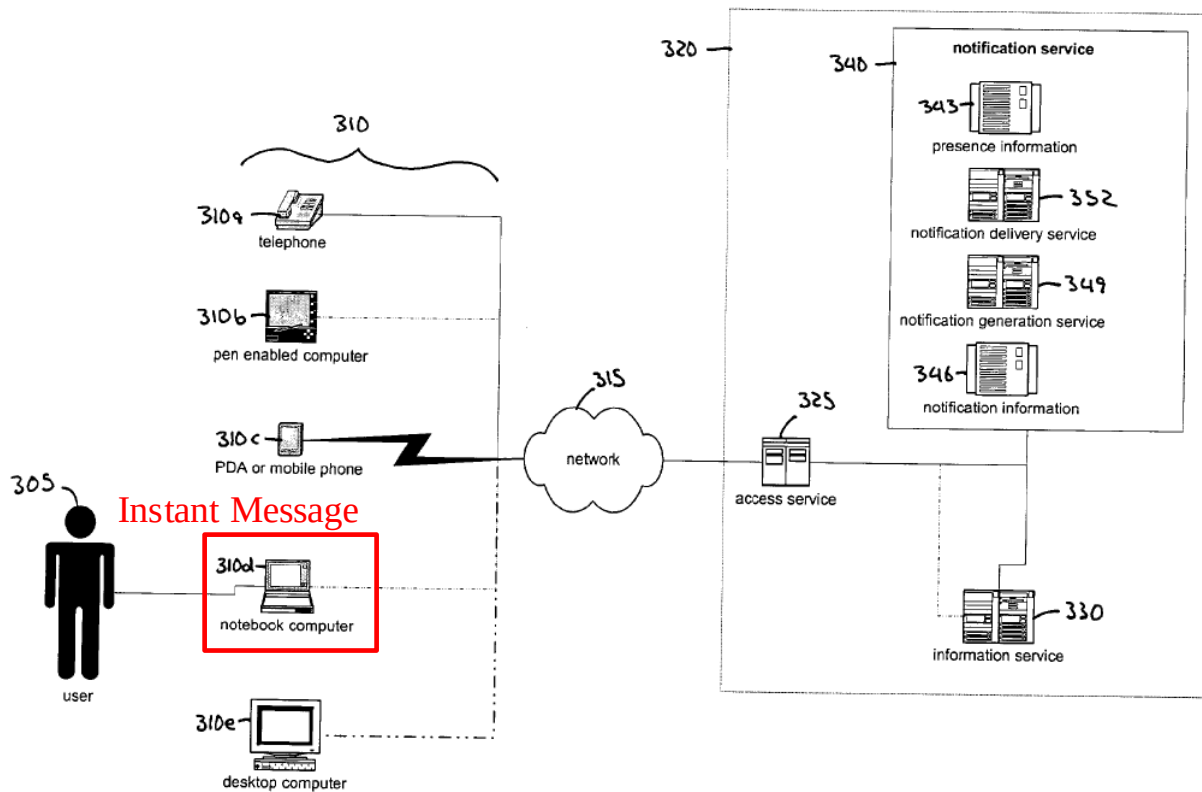
Austin-Lane is prior art under section 102(b) at least because it published in 2004, many years before the earliest possible effective filing date of the '948 patent. EX1105, Cover.

Austin-Lane is analogous art to the '948 patent because it is from the same field of endeavor: providing secure user-centric information to a user. EX1101, Abstract (“Display of and access to secure user-centric information”), 1:66-4:15;

EX1105, Title, Abstract, [0002] (“This disclosure generally relates to systems and methods of delivering information”), [0019], claim 1. EX1103, ¶67.

Not only does Austin-Lane describe permitting a user to set up an alert—just like the ’948 patent—it also describes setting up one of the same types of alerts, a stock alert. EX1105, [0036-40], [0057-58]. For example, the user can elect “to receive the stock alert when a specified stock exceeds a 52-week high.” EX1105, [0040]. EX1103, ¶68.

Austin-Lane also describes determining how to notify the user based at least in part on the user’s presence information (e.g., whether and on which device(s) the user is online) to ensure the user receives the alert “without significant delay” (e.g., [0019], [0023]). EX1105, [0006-9], [0019], [0021], [0023-24], [0027], [0029], [0035], [0039], [0046], [0055]. For example, if “the presence information [] indicate[s] that the user 305 presently is online using notebook computer 310*d* ... and that the user 305 has an active IM connection ... the notification delivery service 352 may provide the notification to the user 305 using an instant message to the notebook computer 310*d*.” EX1105, [0046].



EX1105, FIG. 3 (red annotations added). EX1103, ¶69.

Austin-Lane describes how the presence information is received from an information service (e.g., EX1105, [0035]) and how the alert is generated and formatted according to the determined notification method. EX1105, [0031], [0039], [0041], [0045-46], [0079]. The “notification generation service [] generates notifications based on the ... notification delivery service [] that delivers the notifications to the user [] using one or more of the delivery mechanisms.” EX1105, [0041]. These delivery mechanisms “format the notification using a standard protocol, such as, ... (SGML), ... (XML), ... (HTML), ... (DOM) ...” (EX1105,

[0031]) and deliver the alert using a networking protocol, such as “SMS,” “WAP,” “TCP,” “IP,” (EX1105, [0048]), etc. EX1103, ¶70.

C. Combining The PCT Publication And Austin-Lane Teachings

A POSITA would have been motivated with a reasonable expectation of success to combine the PCT publication’s disclosed system with Austin-Lane’s teachings to (1) determine a notification method for the alert based on the user’s presence information and (2) generate the notification based on the determined notification method. EX1103, ¶72.

As taught by Austin-Lane, selecting a notification method that sends the alert to a device (e.g., notebook computer) and, optionally, an application (e.g., instant messaging) on that device that the user is currently using ensures the user receives the alert “without significant delay.” *E.g.*, EX1105, [0046]; *see also id.*, [0006-9], [0019], [0021], [0023-24], [0027], [0029], [0035], [0039], [0055]. Thus, a POSITA would have been motivated to modify the PCT publication system to select the notification method based on the user’s online presence to ensure the user receives the alert promptly. EX1103, ¶73.

Austin-Lane also teaches what a POSITA would have generally understood: after selecting a particular notification method, the notification data (i.e., the data transmitted to the user’s device that is responsible for causing the alert to be displayed on the user’s device) must be generated and formatted according to the

selected notification method so that it is suitable for the selected notification method (i.e., so that it is properly sent to, received by, and processed by the user's device(s)), and so that it is properly provided to the user on the user's device(s). EX1105, [0031], [0039], [0041], [0045-46], [0079]. For example, a POSITA would have understood and/or at least found it obvious that the content and/or format of the notification data for a visual alert is different than for an audible alert, and that even for visual alerts, the notification data is different for text (e.g., instant message) than graphics (e.g., flashing icon). Thus, when incorporating into the PCT publication system Austin-Lane's teaching to determine a notification method, a POSITA also would have been motivated to incorporate Austin-Lane's concomitant teachings to generate notification data according to the determined notification method to ensure the alert is successfully and properly provided on the user's device(s). EX1103, ¶74.

A POSITA would have reasonably expected to succeed in incorporating Austin-Lane's teachings in the PCT publication's system at least because it requires only minor software changes that were well within the skill of a POSITA. The PCT publication's system already includes a channel alert server that determines the active devices of the user and delivers an alert to the user's device(s). EX1104, [0023], [0039], claim 9; EX1108, 23, 25, 45. Moreover, the PCT publication and Austin-Lane disclose setting the same type of alerts (stock alerts) and disclose providing the alert in the same way (visually). EX1104, [0039]; EX1105, [0036-40],

[0057-58]; EX1108, 45. Thus, given how much the PCT publication already discloses about its alerts (and how similar and complementary its teachings are to Austin-Lane's) modifying the PCT publication's system to include Austin-Lane's teachings to determine a notification method and generate a notification according to the determined notification method requires only minor software changes that a POSITA would have reasonably expected to succeed in achieving. EX1103, ¶75.

1. Claim 1

a) Element [1.1]

[1.1]² An apparatus to provide secure user-centric information on at least one user platform operated by a user, and to evaluate at least some of the secure user-centric information, the apparatus comprising:

The PCT publication+Austin-Lane combination teaches this element at least because the PCT publication discloses or suggests it. The PCT publication discloses or suggests an apparatus (e.g., “servers or networks of servers” that include various software modules, including a channel alert server, an identity management server, a channel server, etc.) (EX1104, [0027]; *see also id.*, [0002], [0031-32], [0035-36], [0039-40], [0050-62], [0065], [0068]) to provide secure (*see, e.g., id.*, [0036]) user-centric information (“information relevant to the user” such as “streaming video,

² Reference numbers in the format of [claim#.element#] are added throughout for ease of reference.

audio, voice-over-IP communication, environmental monitoring information, financial services information ... email, address book information, instant messaging information ... pictures, video,” etc.) (*id.*, [0022]) on at least one user platform operated by a user platform (“platform”) (*id.*, *passim*) / (“registered devices or platforms”) (*id.*, [0033]), and to evaluate at least some of the secure user-centric information (“evaluate content provided by the first computer application”) (*id.*, [0036], claims 8, 20, 32; *see also id.*, claims 9, 21, 33). *See also* EX1104, Abstract, [0008], [0028], [0031-32], [0035], [0039-40], [0050-62], [0065], [0067-68], claim 1; EX1108, 18, 23. EX1103, ¶76.

b) Element [1.2]

[1.2] at least one communication interface facilitating wired and/or wireless communications with the at least one user platform via one or more transmission media;

The PCT publication+Austin-Lane combination teaches this element at least because the PCT publication discloses or suggests it. EX1104, [0028-30], [0035-36], [0040], [0045], [0068-69]; EX1108, 25. For example, the PCT publication discloses that the apparatus (e.g., “servers or networks of servers”) are “implemented on the World Wide Web” (*id.*, [0068]) and include wired or wireless “transmission media” (*id.*, [0069]; *see also id.*, [0034], [0040], [0045]). A POSITA would have understood or at least found it obvious that the servers include at least one communication interface to be able to perform the PCT publication’s prescribed communications,

including wired and/or wireless communications with other networked devices. EX1104, [0020], [0027-31], [0034], [0038], [0040-41], [0045], [0047], [0068-69]. EX1103, ¶77.

c) Element [1.3]

[1.3] at least one memory storing processor-executable instructions; and

The PCT publication+Austin-Lane combination teaches this element at least because the PCT publication discloses or suggests that the apparatus (e.g., “servers or networks of servers”) comprises at least one memory storing processor-executable instructions (“computer-readable storage media including computer-readable instructions configured to cause one or more computer processors to execute”). EX1104, claims 1, 8; *see also id.*, Abstract, [0009], [0069]. EX1103, ¶78.

d) Element [1.4]

[1.4] at least one processor communicatively coupled to the at least one communication interface and the at least one memory, retrieving processor-executable [sic] instructions from the at least one memory, and executing the processor-executable instructions to provide and evaluate at least some of the secure user-centric information by:

The PCT publication+Austin-Lane combination teaches this element at least because the PCT publication discloses or suggests it. EX1104, Abstract, [0009], [0021-22], [0031], [0035-36], [0040], [0061], [0068-69], claim 8; EX1108, 25. The PCT publication discloses that the apparatus (e.g., “servers or networks of servers”)

comprises at least one processor (“one or more computer processors”) that implements one or more of the software modules (a channel server, a channel alert server, an identity management server, etc.) (EX1104, [0027]; *see also id.*, [0002], [0031-32], [0035-36], [0039-40], [0050-62], [0065], [0068]). EX1104, Abstract, claims 1, 8-11, [0009]; *see also id.*, [0068-69]. The PCT publication also discloses that the one or more computer processors “execute operations” (EX1104, Abstract) and one of the operations described by the PCT publication is to “evaluate content provided by the first computer application”) (*id.*, [0036], claims 8, 20, 32). A POSITA would have understood or found it obvious that the at least one processor is communicatively coupled to, and retrieves processor-executable instructions from, the at least one memory (“computer readable storage media”) and executes the processor-executable instructions at least because the PCT publication discloses that the memory “provid[es] instructions to [the] processor for execution.” *Id.*, [0069]). A POSITA also would have understood or found it obvious that the at least one memory is communicatively coupled to the at least one communication interface at least because it would need to be communicatively coupled to the communication interface to perform the PCT publication’s prescribed functions, including transmitting information to other devices (e.g., alerts to the user’s device(s)). EX1104, [0020-23], [0036], [0039], [0051], [0066-69]. EX1103, ¶79.

e) **Element [1.5]**

[1.5] A) implementing a channel grid framework including a matrix of a plurality of authorized channels through which the user receives and/or interacts with, via the at least one user platform, respective portions of the secure user-centric information based at least in part on information access rights and/or security protocols respectively associated with the plurality of authorized channels, the plurality of authorized channels including at least a first channel through which the user receives and/or interacts with first channel information constituting a first portion of the secure user-centric information;

The PCT publication+Austin-Lane combination teaches this element at least because the PCT publication discloses or suggests that the apparatus (e.g., “servers or networks of servers”) implements a “channel grid framework” (e.g., EX1104, Abstract, [0031]) including a matrix of a plurality of authorized channels (“three-by-four (3x4) matrix” that “display[s] twelve channels”) (*id.*, [0031]; *see also* EX1108, 19). EX1104, FIG. 3, [0009], [0036]; EX1108, 25.

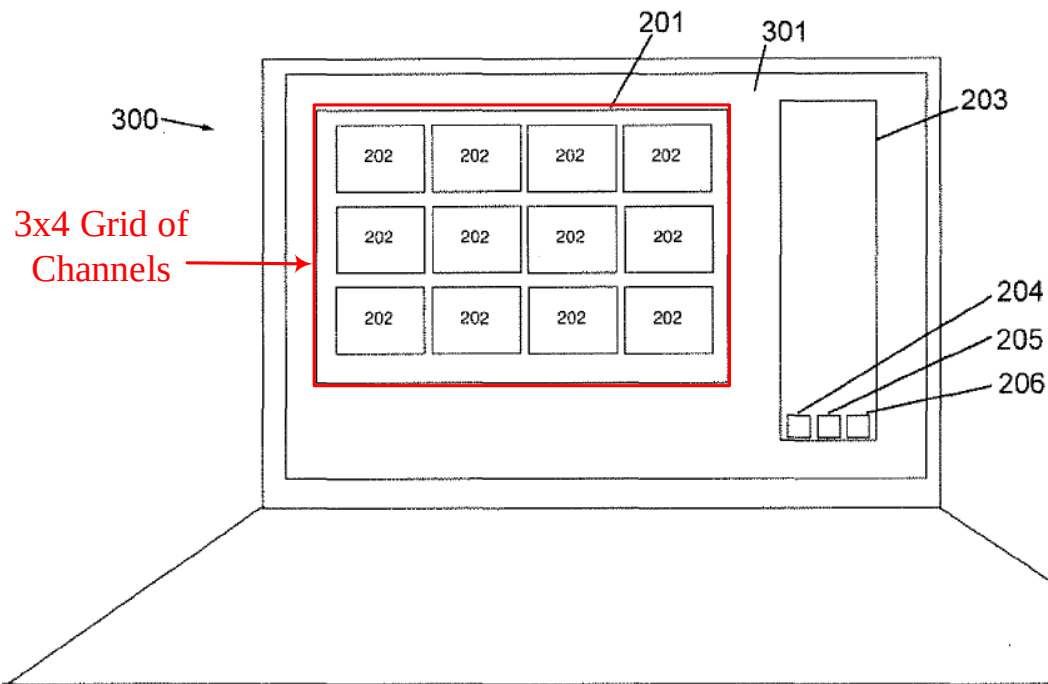


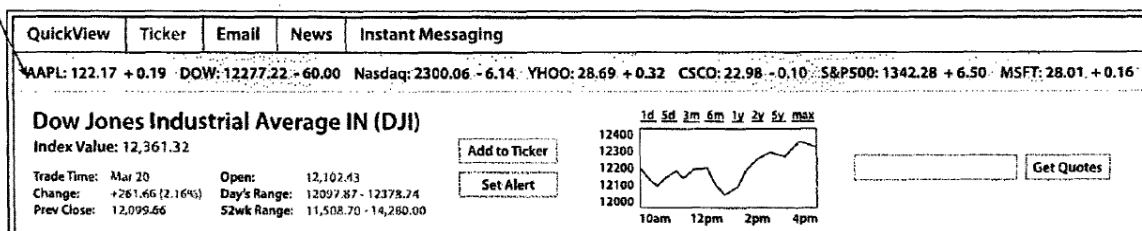
FIG. 3

EX1104, FIG. 3 (red annotations added). EX1103, ¶80.

The PCT publication also discloses or suggests that the user receives and/or interacts with, via the at least one user platform, respective portions of the secure user-centric information based at least in part on information access rights and/or security protocols respectively associated with the plurality of authorized channels at least because the PCT publication discloses that (1) “the underlying actions enabled through each channel’s design” is “[b]ased on the [user’s] access rights” (EX1104, [0024]) and (2) “access and security protocols may be identified for each condition and action to be performed by the user” within a given channel (EX1104,

[0036]). The PCT publication further discloses or suggests that the plurality of authorized channels include at least a first channel (any of the twelve “channels 202”) (e.g., EX1104, [0031], FIG. 3) through which the user receives and/or interacts with first channel information (“streaming video, audio, voice-over-IP communication, environmental monitoring information, financial services information ... email, address book information, instant messaging information ... pictures, video,” etc.) (*id.*, [0022]). For example, the PCT publication discloses or suggests a stock/financial services channel that provides stock price information. EX1104, [0022]; EX1108, 45.

Stock Ticker: Ticker will be live, constantly updating and displaying stocks based on user-defined preferences.



EX1108, 45. EX1103, ¶81.

f) Element [1.6]

[1.6] B) establishing a user profile to identify user preferences, platform identities, and service support instructions that determine how the secure user-centric information behaves on the at least one user platform;

The PCT publication+Austin-Lane combination teaches this element at least because the PCT publication expressly discloses it. EX1104, [0034] (“a user profile

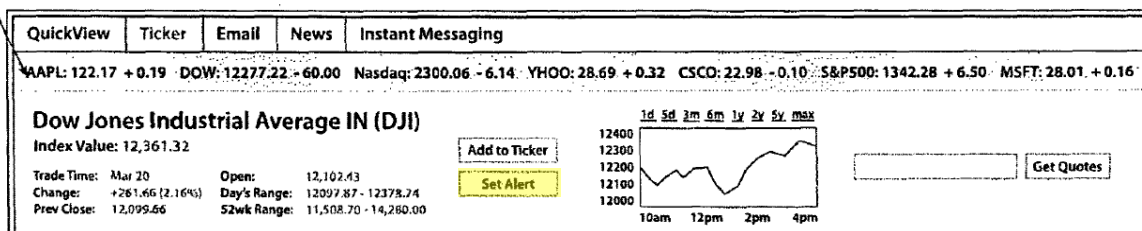
may be established which may identify user preferences, platform identities, and service support instructions as to how the user wishes information to behave on the selected platform”). EX1103, ¶82.

g) Element [1.7]

[1.7] C) receiving configuration data indicating one or more user preferences regarding alerts transmitted via the first channel based on the user profile;

The PCT publication+Austin-Lane combination teaches this element at least because the PCT publication discloses it, for visual and auditory alerts. EX1104, [0023], [0039]; EX1108, 45. “[A] user or developer may define threshold conditions with definitive values assigned to events, conditions ...” and that “[i]f an established condition is met, the channel alert server ... provide[s] a visual or auditory alert in the channel.” EX1104, [0039]. For example, the user can set a stock alert.

Stock Ticker: Ticker will be live, constantly updating and displaying stocks based on user-defined preferences.



EX1108, 45 (yellow annotations added). EX1103, ¶83.

h) Element [1.8]

[1.8] D) receiving session data indicating a current state of at least one external device of the user;

The PCT publication+Austin-Lane combination teaches this element at least because the PCT publication discloses that the channel alert server “determine[s] the active devices of the subscriber” of the alert, and, as explained below for element [1.10], the combination includes Austin-Lane’s teachings to determine a notification method based on session data³ (“presence information”). EX1104, [0039]; *infra* Section VIII.C.1.j. Thus, when implementing Austin-Lane’s teachings to determine a notification based on the session data (“presence information”) in the PCT publication’s disclosed system, a POSITA would have understood or found it obvious that the at least one processor receives the session data indicating a current state of the at least one external device⁴ of the user (i.e., data indicating whether and which of the user’s device(s) is/are active) (*see* EX1101, 21:1-15, 23:28-43) to “determine the active devices of the subscriber,” as taught by the PCT publication, and determine a notification method based on the session data, as taught by Austin-

³ The ’948 patent provides that session data indicates whether the user has an active session (i.e., whether they are online or offline). *See, e.g.*, EX1101, 20:60-21:15, 23:20-43.

⁴ The ’948 patent refers to user devices, user platforms, and clients synonymously. *See, e.g.*, EX1101, 8:25-26 (“[u]ser devices 118 serve as a user platform operated by a user 116”), 8:40-41 (“user devices or ‘platforms’ (clients)”).

Lane. *Id.*, [0039]; EX1105, [0006-9], [0019], [0021], [0023-24], [0027], [0029], [0035], [0039], [0046], [0055]. EX1103, ¶84.

i) **Element [1.9]**

[1.9] E) monitoring at least the first channel information so as to determine one or more events, conditions, logical workflows, discrete information values or signal data, based on at least one threshold condition or parameter relating to the first channel information and determined based on the user preferences indicated by the configuration data; and if⁵ the one or more events, conditions, logical workflows, discrete information values or signal data is/are determined in E):

The PCT publication+Austin-Lane combination teaches this element at least because the PCT publication discloses that the channel alert server “may continually monitor application and information activities defined by a channel. By way of non-limiting example, a user or developer may define threshold conditions with definitive values assigned to events, conditions, logical workflows, discrete information values or signal data. If an established condition is met, the channel alert server [] may ... provide a visual or auditory alert in the channel.” EX1104, [0039]; *see also id.*, claim 9. EX1103, ¶85.

⁵ Because of this conditional “if,” the subsequent claim elements ([1.10-1.12]) are optional and not entitled to patentable weight. For completeness, however, Petitioner shows how the PCT publication+Austin-Lane combination teaches these optional elements.

j) Element [1.10]

[1.10] F) determining a notification method by which to provide at least one alert on the at least one external device based on the current state of the at least one external device indicated by the session data;

The PCT publication+Austin-Lane combination teaches this element at least because Austin-Lane discloses it. Specifically, Austin-Lane teaches determining a notification method (a “delivery mechanism” (EX1105, *passim*), which can include: **(1)** the user device(s) to send the notification to (e.g., phone, PDA, notebook computer, desktop computer) (*e.g.*, EX1105, [0005], [0029], [0032], [0046], [0061], FIG. 1); **(2)** the communication protocol to use to send the notification, i.e., how to send the notification (e.g., SMTP (for email), SMS (for texts), HTTP (for web browsers)) (*e.g.*, EX1105, [0004], [0033], [0048]); and **(3)** the type of alert to provide, i.e., how to present the notification, (e.g., text, an icon, a pop-up window, a video, an email, an audible or tactile alarm) (*e.g.*, EX1105, [0039], [0046], [0079])), based on the current state of the at least one external device indicated by the session data (“presence information” (EX1105, *passim*)), which may include whether and on which device(s) the user is online and/or whether and on which applications the user has an active session (*e.g.*, EX1105, [0046], [0066-67], [0074-77])). *See also* EX1105, [0006-9], [0019], [0021], [0023-24], [0026-28], [0031-32], [0035], [0047-48], [0055], [0064-65], [0071-73], FIGS. 2, 7-9. For example, if “the presence information [] indicate[s] that the user 305 presently is online using notebook

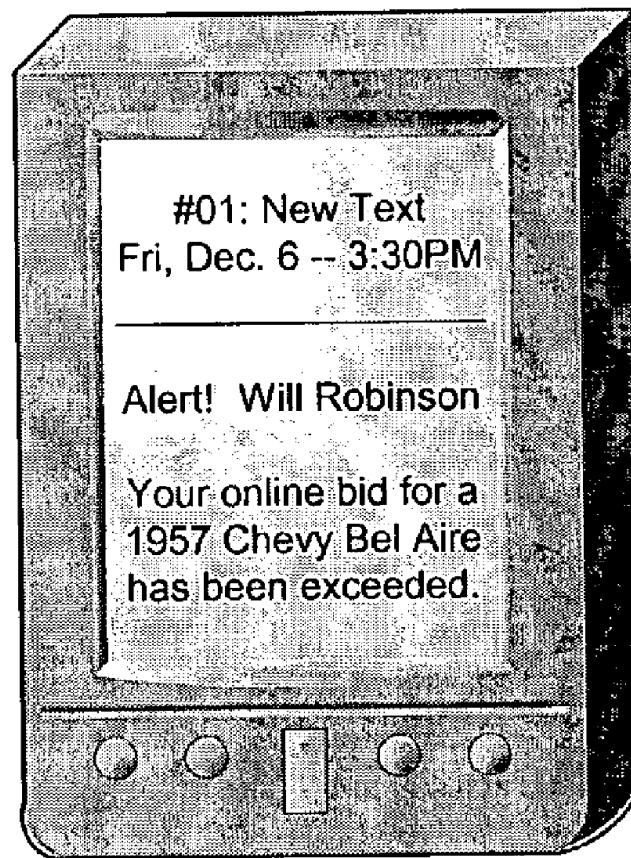
computer 310*d* ... and that the user 305 has an active IM connection ... the notification delivery service 352 may provide the notification to the user 305 using an instant message to the notebook computer 310*d*.” EX1105, [0046]. EX1103, ¶86.

As explained above, a POSITA would have been motivated to combine the PCT publication’s disclosed system with Austin-Lane’s teachings to determine a notification method for the alert based on the user’s presence information to provide the alert to the user “without significant delay.” *E.g.*, EX1105, [0046]. Because the PCT publication’s system already includes a channel alert server that determines the active devices of the user and delivers an alert to the user’s device(s) (EX1104, [0023], [0039], claim 9; EX1108, 23, 25, 45) and because the PCT publication discloses setting the same type of alert (stock alert) and presenting it in the same way (visually) as Austin-Lane (EX1104, [0039]; EX1105, [0036-40], [0057-58]; EX1108, 45), modifying the PCT publication system to include these teachings from Austin-Lane would have required only minor software changes that a POSITA would have reasonably expected to succeed in achieving. EX1103, ¶87.

k) Element [1.11]

[1.11] G) generating notification data according to the determined notification method, wherein the notification data is configured to cause the at least one external device to provide the at least one alert on the at least one external device; and

The PCT publication+Austin-Lane combination teaches this element at least because Austin-Lane discloses or suggests it. Austin-Lane describes how notification data (“electronic data” in the form of an “electronic notification”) (*e.g.*, EX1105, [0026], [0028]; *see also id.*, Abstract, [0014-15], [0019-20], [0046], claim 1), is generated and formatted according to the determined notification method. *Id.*, [0031], [0039], [0041], [0045-46], [0079]. The “notification generation service [] generates notifications based on the ... notification delivery service [] that delivers the notifications to the user [] using one or more of the delivery mechanisms.” *Id.*, [0041]; *see also id.*, [0044] (“Content for the notification may be provided by the notification generation service”). The delivery mechanisms “format the notification using a standard protocol, such as, ... (SGML), ... (XML), ... (HTML), ... (DOM) ...” (*Id.*, [0031]) and deliver the alert using a networking protocol, such as “SMS,” “WAP,” “TCP,” “IP,” (*Id.*, [0048]), etc. The notification data is configured to cause the at least one external device to provide the at least one alert on the at least one external device at least because it “provide[s] the notification to the user.” EX1105, [0039]; *see also id.*, [0009], [0046], [0079], claim 8, FIG. 10. For example, the notification data may cause an auction alert to be displayed to the user on a PDA or mobile phone. EX1105, [0079], FIG. 10.



PDA or mobile phone

EX1105, FIG. 10. The alert may be “an instant message, an icon, a pop-up window, a video, a flashing indicator, and/or an audio, or tactile alarm.” EX1105, [0039]; *see also id.*, [0079]. EX1103, ¶88.

As explained above, when implementing Austin-Lane’s teachings to determine a notification method in the PCT publication’s system, a POSITA also would have been motivated with a reasonable expectation of success to combine Austin-Lane’s concomitant teachings to generate notification data according to the determined notification method. A POSITA would have understood and/or at least found it obvious that the content and/or format of the notification data depends on

the notification method (e.g., the notification data for an instant message to a laptop is different than a flashing indicator to a phone) (EX1105, [0039], [0046], [0066], [0079]). Thus, to ensure the notification is properly sent to and received by the user, a POSITA would have understood or found it obvious that the notification data must be generated to conform to the requirements/specifications of the determined notification method, as taught by Austin-Lane. EX1105, [0031], [0039], [0041], [0045-46], [0079]. EX1103, ¶89.

I) Element [1.12]

[1.12] H) controlling the at least one communication interface to transmit the notification data to the at least one external device via the first channel without being requested by the user, wherein the transmission of the notification data to the at least one external device is based at least in part on information access rights and/or security protocols respectively associated with the corresponding plurality of authorized channels, the user, and the at least one user platform.

The PCT publication+Austin-Lane combination teaches this element at least because the PCT publication discloses or suggests it in the context where the user has only a single external device. The PCT publication discloses or suggests that the apparatus controls the at least one communication interface to transmit the notification data to the external device via the first channel without being requested by the user at least because the PCT publication discloses transmitting the notification to the external device “when the evaluated content meets the predetermined threshold condition” (i.e., whether or not the user requests the

notification). EX1104, claim 9; *see also id.*, [0023], [0039]. The PCT publication also discloses or suggests that, like the transmission of any other information, the transmission of the notification data to the external device is based at least in part on information access rights and/or security protocols respectively associated with the corresponding plurality of authorized channels, the user, and the at least one user platform. *Supra* Section VIII.C.1.e (claim element [1.5]); EX1104, [0024] (“the underlying actions enabled through the channel’s design” are “[b]ased on the [user’s] access rights”), [0036] (“access and security protocols may be identified for each condition and action to be performed by the user”). EX1103, ¶90.

2. Claim 2

[2.1] The apparatus of claim 1, wherein if the one or more events, conditions, logical workflows, discrete information values or signal data is/are determined in E), the at least one processor performs H).

As explained above for claim element [1.9-1.12], the PCT publication discloses or suggests that the processor performs H) if the one or more events, conditions, logical workflows, discrete information values or signal data is/are determined in E). *Supra* Sections VIII.C.1.i-l. Thus, the PCT publication+Austin-Lane combination renders this claim obvious. EX1103, ¶91.

3. Claim 3

[3.1] The apparatus of claim 1, wherein if the one or more events, conditions, logical workflows, discrete information values or signal data is/are determined

in E), the at least one processor controls the at least one memory so as to store trigger information relating to the one or more determined events, conditions, logical workflows, discrete information values or signal data.

The PCT publication+Austin-Lane combination renders this claim obvious because of the PCT publication's disclosure. The PCT publication discloses that “[i]f an established condition is met, the channel alert server 211 may notify the identity management server 208 to confirm the subscriber of the event, determine the active devices of the subscriber, and then pass through the web services gateway 207 and the channel grid framework 201 to provide a visual or auditory alert in the channel 202.” EX1104, [0039]. A skilled artisan would have understood or at least have found it obvious that the processor would have to store the trigger information in memory to later transmit the trigger information to the web services gateway and the channel grid framework, as expressly taught by the PCT publication. Moreover, a POSITA would have understood or at least have found it obvious that the processor would store the trigger information in memory while waiting for the identity management server to confirm the subscriber of the event and determine the active devices of the user. EX1103, ¶92.

4. Claim 4

[4.1] The apparatus of claim 3, wherein if the one or more events, conditions, logical workflows, discrete information values or signal data is/are determined in E), the at least one processor further performs H).

As explained above for claim element [1.9-1.12], the PCT publication discloses or suggests that the processor performs H) if the one or more events, conditions, logical workflows, discrete information values or signal data is/are determined in E). *Supra* Sections VIII.C.1.i-l. Thus, the PCT publication+Austin-Lane combination renders this claim obvious. EX1103, ¶93.

5. Claim 5

[5.1] The apparatus of claim 1, wherein the first channel information includes at least one of: text information; graphic information; one or more pictures; one or more videos; audio or digital sound; streaming data, audio or video; content associated with an executing computer application; voice-over-IP communication; instant messaging/SMS information; video-conferencing information; environmental monitoring information; financial services information; enterprise resource planning information; enterprise content management information; building information; project management information; product lifecycle management information; RSS (Really Simple Syndication) reader information; remote device control/interaction information; a three-dimensional graphic visualization of one or more objects and/or immersive environments; one or more word processing documents; one or more spreadsheets; one or more presentation/slide shows; email; and address book information.

The PCT publication+Austin-Lane combination renders this claim obvious at least because the PCT publication expressly discloses at least one of the claim-recited information types. *E.g.*, EX1104, [0022], claim 7. EX1103, ¶94.

6. Claim 6

[6.1]. The apparatus of claim 1, wherein the at least one threshold condition or parameter includes a numerical limit or a trend.

The PCT publication+Austin-Lane combination renders this claim obvious at least because the PCT publication expressly discloses that “[n]on-limiting examples of triggers may include exceeding a quantified numerical limit and multiple similar events trending in a certain direction.” EX1104, [0023]. EX1103, ¶95.

7. Claim 7

[7.1] The apparatus of claim 1, wherein E) comprises: E1) making a comparison of the monitored first channel information and the at least one threshold condition or parameter based at least in part on at least one criterion for the comparison; and E2) establishing a trigger, based at least in part on E1), if the at least one criterion is met.

The PCT publication+Austin-Lane combination renders this claim obvious at least because the PCT publication discloses or suggests the limitations that claim 7 adds to independent claim 1. EX1104, [0023] (“The trigger may cause the information channel to ... provide a notification to the user.”), [0039], claim 9 (“[C]omparing the evaluated content provided by the first computer application to a predetermined intelligent alert threshold condition; and displaying an alert condition on the first and second platforms when the evaluated content meets the predetermined threshold condition.”). EX1103, ¶96.

8. Claim 10

[10.1] The apparatus of claim 1, wherein the at least one processor performs H), and wherein the at least one alert includes at least one of: at least one visual alert; at least one auditory alert; at least one email message; and at least one SMS text message.

As explained above for claim element [1.9-1.12], the PCT publication discloses or suggests that the processor performs H). *Supra* Sections VIII.C.1.i-l. The PCT publication also discloses or suggests that the alert is “a visual or auditory alert.” EX1104, [0039]. Thus, the PCT publication+Austin-Lane combination renders this claim obvious. EX1103, ¶97.

9. Claim 11

[11.1] The apparatus of claim 1, wherein the at least one processor performs H), and wherein the at least one alert includes activation of at least one channel of the plurality of channels.

As explained above for claim element [1.9-1.12], the PCT publication discloses or suggests that the processor performs H). *Supra* Sections VIII.C.1.i-l. The PCT publication also discloses or suggests that the alert includes activation of at least one channel because it discloses that the alert is provided “in the channel.” EX1104, [0039]; *see also* EX1108, 50, 56. Thus, the PCT publication+Austin-Lane combination renders this claim obvious. EX1103, ¶98.

10. Claim 13

[13.1] The apparatus of claim 1, wherein the at least one processor performs H), and wherein: H) comprises transmitting the notification data so as to generate the at least one alert on at least one external device; the at least one processor further provides the at least some of the secure user-centric information by: I) controlling the at least one communication interface so as to transmit to the at least one external device channel information relating to at least one authorized channel of the plurality of authorized channels implemented in A); and the notification data transmitted in H) causes an appearance of the at least one

authorized channel, as represented on the at least one external device, to change so as to generate the at least one alert on the at least one external device.

As explained above for claim elements [1.5] and [1.11-12] the PCT publication discloses or suggests that the processor transmits to the external device: (1) channel information (e.g., stock information) and (2) notification data that causes the alert to be provided. *Supra* Sections VIII.C.1.e, VIII.C.1.k-l. As also explained above for claims 10-11, the PCT publication discloses or suggests that the appearance of the authorized channel changes to generate the alert at least because the PCT publication discloses that the alert is a visual alert that is provided in the channel. EX1104, [0039]; *see also supra*, Sections VIII.C.8-9. Thus, the PCT publication+Austin-Lane combination renders this claim obvious. EX1103, ¶99.

11. Claim 18

[18.1] The apparatus of claim 1, wherein the at least one processor performs H), and wherein in H), the at least one external device includes at least one of a mobile device, a television, and a Blu-ray player.

The PCT publication+Austin-Lane combination renders this claim obvious at least because the PCT publication expressly discloses that the external device on which the alert appears includes “a mobile device, a television (set top box), [and] a Blu-ray player.” EX1104, [0039]. EX1103, ¶100.

12. Claim 19

[19.1] The apparatus of claim 1, wherein the at least one processor further provides and evaluates at least some of the secure user-centric information by: I) controlling the at least one communication interface to transmit at least some of the first channel information to the at least one user platform.

As explained above for claim element [1.5], the PCT publication discloses or suggests that the processor controls the at least one communication interface to transmit at least some of the first channel information (e.g., stock price information) to the user platform. *Supra* Section VIII.C.1.e; EX1104, [0022]; EX1108, 45. Thus, the PCT publication+Austin-Lane combination renders this claim obvious. EX1103, ¶101.

13. Claim 23

[23.1] The apparatus of claim 1, wherein the at least one processor further provides and evaluates at least some of the secure user-centric information by: I) authenticating the user and the at least one user platform to receive at least the first channel information and/or the at least one alert.

The PCT publication+Austin-Lane combination renders this claim obvious at least because the PCT publication discloses that the apparatus “support[s] [] user, application, and device authentication.” EX1108, 23; *see also* EX1104, [0035-36], [0054]. EX1103, ¶102.

14. Claim 29

[29.1] The apparatus of claim 1, wherein in A), the at least one processor implements a channel server that defines one or more one or more visual

characterizations, one or more functions or features, and/or one or more information types provided by respective channels of the plurality of channels through which the user receives and/or interacts with the respective portions of the secure user-centric information, wherein the channel server implements at least the first channel, and wherein the at least one processor further provides and evaluates at least some of the secure user-centric information by: I) controlling the at least one communication interface to transmit at least some of the first channel information to the at least one user platform.

The PCT publication+Austin-Lane combination renders this claim obvious at least because the PCT publication discloses or suggests the limitations that this claim adds to claim 1. EX1104, [0040], [0061], claim 33. The “channel server [is] configured to provide the first computer application” (EX1104, claim 33), including the information associated with the first computer application. EX1104, [0040], [0061], claim 33. EX1103, ¶103.

15. Claims 35-36

Claims 35 and 36 are substantively identical to claim 1 except they do not require a communication interface or processor. Thus, these claims are obvious for the same reason claim 1 is obvious. *Supra* Section VIII.C.1. EX1103, ¶104.

IX. NO OBJECTIVE INDICIA OF NON-OBVIOUSNESS

Petitioner does not expect Patent Owner to argue for any objective indicia of non-obviousness that have a nexus to the difference between the claimed invention and the disclosure in the prior art cited herein. *Novartis AG v. Torrent Pharms. Ltd.*, 853 F.3d 1316, 1331 (Fed. Cir. 2017) (affirming PTAB obviousness decision).

X. CONCLUSION

Petitioner requests institution and cancellation of the challenged claims.

Respectfully submitted,

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**CERTIFICATE OF COMPLIANCE WITH
TYPE-VOLUME LIMITATION PURSUANT TO 37 C.F.R. § 42.24**

This brief complies with the type-volume limitation of 37 C.F.R. § 42.24(a)(1)(i).

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CERTIFICATE OF SERVICE
IN COMPLIANCE WITH 37 C.F.R. § 42.6(E)(4)

The undersigned certifies that the **Petition for *Inter Partes* Review of U.S. Patent No. 8,751,948 and Exhibits 1101-1120, 1122-1130** were served on September 20, 2024, via **Express Mail** on the Patent Owner at the following address of record as listed on the USPTO Patent Center:

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