

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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SAP AMERICA, INC.,  
Petitioner,

v.

CYANDIA, INC.,  
Patent Owner.

Case IPR2024-01496  
U.S. Patent No. 8,595,641  
Issued: November 26, 2013  
Application No. 13/086,258  
Filed: April 13, 2011

Title: Methods, Apparatus and Systems for Displaying and/or  
Facilitating Interaction With Secure Information Via Channel Grid Framework

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**PETITION FOR**  
**INTER PARTES REVIEW OF U.S. PATENT NO. 8,595,641**

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**LIST OF EXHIBITS**

| <b>No.</b> | <b>Description</b>                                                                                                                                                                    |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1001       | U.S. Patent No. 8,595,641 (“ <b>641 Patent</b> ”)                                                                                                                                     |
| 1002       | File History of U.S. Patent No. 8,595,641                                                                                                                                             |
| 1003       | Declaration of Christopher M. Schmandt, dated September 30, 2024 (“ <b>Schmandt Decl.</b> ”)                                                                                          |
| 1004       | <i>IBM Rational Application Developer V6 Portlet Application Development and Portal Tools</i> (August 2005) (“ <b>WebSphere-Portal</b> ”)                                             |
| 1005       | Ron Ben-Natan et al., <i>Mastering IBM WebSphere Portal</i> (2004) (“ <b>Ben-Natan</b> ”)                                                                                             |
| 1006       | <i>IBM WebSphere Everyplace Access V5 Handbook for Developers and Administrators Volume I: Installation and Administration</i> (May 2005) (“ <b>WebSphere-Everyplace-1</b> ”)         |
| 1007       | <i>IBM WebSphere Everyplace Access V5 Handbook for Developers and Administrators Volume II: Application Development</i> (March 2005) (“ <b>WebSphere-Everyplace-2</b> ”)              |
| 1008       | <i>IBM WebSphere Everyplace Access V5 Handbook for Developers and Administrators Volume III: E-Mail and Database Synchronization</i> (April 2005) (“ <b>WebSphere-Everyplace-3</b> ”) |
| 1009       | <i>IBM WebSphere Everyplace Access V5 Handbook for Developers and Administrators Volume IV: Advanced Topics</i> (March 2005) (“ <b>WebSphere-Everyplace-4</b> ”)                      |
| 1010       | <i>IBM Workplace Web Content Management for Portal 5.1 and IBM Workplace Web Content Management 2.5</i> (January 2006)                                                                |
| 1011       | <i>IBM WebSphere Portal Collaboration Security Handbook</i> (December 2004)                                                                                                           |
| 1012       | <i>IBM WebSphere Everyplace Access Version 4.3 Handbook for Developers</i> (2nd ed. Nov. 2003)                                                                                        |

| No.  | Description                                                                                                                                                                                                                      |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1013 | <i>IBM WebSphere Portal V5: A Guide for Portlet Application Development</i> (January 2004)                                                                                                                                       |
| 1014 | U.S. Provisional Application No. 61/052,765                                                                                                                                                                                      |
| 1015 | U.S. Patent No. 7,376,907 (“ <b>Santoro</b> ”)                                                                                                                                                                                   |
| 1016 | U.S. Patent Application Pub. No. 2008/0256643 (“ <b>Jones</b> ”)                                                                                                                                                                 |
| 1017 | <i>Microsoft Computer Dictionary</i> (5th ed.) (excerpts)                                                                                                                                                                        |
| 1018 | U.S. Patent No. 5,548,692 (“ <b>Cok</b> ”)                                                                                                                                                                                       |
| 1019 | <i>Microsoft Internet Explorer ResourceKit</i> , Microsoft (1998)                                                                                                                                                                |
| 1020 | U.S. Patent Application Pub. No. 2007/0174782 (“ <b>Russo</b> ”)                                                                                                                                                                 |
| 1021 | David Pogue, <i>iPhone The Missing Manual</i> (excerpts) (2007) (“ <b>Pogue 2007 (iPhone)</b> ”)                                                                                                                                 |
| 1022 | David Pogue, <i>Mac OS X Leopard The Missing Manual</i> (excerpts) (2007) (“ <b>Pogue 2007</b> ”)                                                                                                                                |
| 1023 | Harry Newton, <i>Newton’s Telecom Dictionary</i> (20th ed.2004) (excerpts) (“ <b>Newton 2004</b> ”)                                                                                                                              |
| 1024 | U.S. Patent Application Pub. No. 2004/0044736 (“ <b>Austin-Lane</b> ”)                                                                                                                                                           |
| 1025 | Affidavit of Nathaniel Frank-White, Records Request Processor at the Internet Archive, dated August 16, 2024                                                                                                                     |
| 1026 | IBM Redbooks, <i>WebSphere Application Server V6 - System Management and Configuration Handbook</i> (Feb. 2005)                                                                                                                  |
| 1027 | Copyright Office Public Catalog: detailed record catalog entry for <i>IBM Rational Application Developer V6, Portlet Application Development and Portal Tools</i> , 1st ed., Registration Number/Date: TX0006234319 / 2005-09-13 |
| 1028 | Library of Congress Catalog: detailed record catalog entry for <i>IBM Rational Application Developer V6, Portlet Application Development and Portal Tools</i> , LCCN number: 2005284159                                          |

| No.  | Description                                                                                                                                                                                                                                                               |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1029 | Copyright Office Public Catalog: detailed record catalog entry for <i>IBM WebSphere Everyplace Access V5 Handbook for Developers and Administrators Volume I: Installation and Administration</i> (May 2005), Registration Number/Date: TX0006244913 / 2005-08-12         |
| 1030 | Library of Congress Catalog: detailed record catalog entry for <i>IBM WebSphere Everyplace Access V5 Handbook for Developers and Administrators Volumes I-IV</i> , LCCN number: 2005280318                                                                                |
| 1031 | Copyright Office Public Catalog: detailed record catalog entry for <i>IBM WebSphere Everyplace Access V5 Handbook for Developers and Administrators Volume II: Application Development</i> (March 2005), Registration Number/Date: TX0006170514 / 2005-05-20              |
| 1032 | Copyright Office Public Catalog: detailed record catalog entry for <i>IBM WebSphere Everyplace Access V5 Handbook for Developers and Administrators Volume III: E-Mail and Database Synchronization</i> (April 2005), Registration Number/Date: TX0006169440 / 2005-06-17 |
| 1033 | Copyright Office Public Catalog: detailed record catalog entry for <i>IBM WebSphere Everyplace Access V5 Handbook for Developers and Administrators Volume IV: Advanced Topics</i> (March 2005), Registration Number/Date: TX0006170517 / 2005-05-20                      |
| 1034 | U.S. Patent Application Pub. No. 2007/0283020 (“ <b>Chowdary</b> ”)                                                                                                                                                                                                       |
| 1035 | U.S. Patent Application Pub. No. 2007/0033251 (“ <b>Mandalia</b> ”)                                                                                                                                                                                                       |
| 1036 | U.S. Patent No. 8,751,948                                                                                                                                                                                                                                                 |
| 1037 | WSRP standard 1.0 specification                                                                                                                                                                                                                                           |
| 1038 | WSRP standard 2.0 specification                                                                                                                                                                                                                                           |
| 1039 | U.S. Patent Application Pub. No. 2007/0130541 (“ <b>Louch</b> ”)                                                                                                                                                                                                          |
| 1040 | Claims Listing                                                                                                                                                                                                                                                            |
| 1041 | U.S. Patent Application Pub. No. 2005/0159823                                                                                                                                                                                                                             |

| No.  | Description                                                                                                                                                          |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1042 | Copyright Office Public Catalog: detailed record catalog entry for <i>Mastering IBM WebSphere Portal</i> (2004), Registration Number/Date: TX0006003513 / 2004-08-02 |
| 1043 | Library of Congress Catalog: detailed record catalog entry for <i>Mastering IBM WebSphere Portal</i> (2004), LCCN number: 2004274459                                 |
| 1044 | Affidavit of Nathaniel Frank-White, Records Request Processor at the Internet Archive, dated September 20, 2024                                                      |

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

**1. Real Party-In-Interest**

The real parties-in-interest are SAP America, Inc. (“Petitioner”) and SAP SE.

**2. Related Matters**

The ’641 Patent (EX1001) 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 1-11, 13, 16, 18, and 31-34) (“challenged claims”) of U.S. Patent No. 8,595,641 (“’641 patent”) (EX1001), allegedly assigned to Cyandia, Inc. (“Patent Owner”), but with a security interest assigned to HPCF Litigation Finance US I LLC. For the reasons below, these claims should be found unpatentable and cancelled.

## **I. INTRODUCTION**

The challenged claims relate to two concepts well-known in the prior art: (1) displaying a grid framework of user-selectable “channels,” through which users receive and/or interact with secure information across user platforms, and (2) authenticating users, user platforms, and channels based on a user profile. The prior art IBM WebSphere references (EXS1004-1009) describe providing secure information to a user within a grid of portlets (channels) across user platforms and authentication of the users, user platforms, and channels using a user profile. These references’ combined disclosure of the WebSphere system renders every challenged claim obvious.

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

Petitioner certifies that the ’641 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 IPR of the challenged claims of the '641 Patent, on the following statutory ground:

|                     | Reference(s)                                                                                          | Basis | Claims                        |
|---------------------|-------------------------------------------------------------------------------------------------------|-------|-------------------------------|
| <b>Ground<br/>1</b> | WebSphere-Portal (EX1004),<br>Ben-Natan (EX1005),<br>WebSphere-Everyplace <sup>1</sup> (EXS1006-1009) | § 103 | 1-11, 13,<br>16, 18,<br>31-34 |

#### B. Denial Under § 325(d) Is Improper

None of the prior art references relied on herein were 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

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<sup>1</sup> WebSphere-Everyplace is a four-volume set consisting of WebSphere-Everyplace-1 (EX1006), WebSphere-Everyplace-2 (EX1007), WebSphere-Everyplace-3 (EX1008), and WebSphere-Everyplace-4 (EX1009).

at 27-29 (PTAB Jan. 11, 2023). Accordingly, this petition should not be denied under Section 325(d).

**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 presents compelling merits, as explained in Section VII.

**IV. 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 '641 patent in May 2008 ("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.*, EX1004, 2-4; EX1006, 34, 390; EX1015, 6:38-51, 7:31-43, FIG. 1; EX1018, 1:15-19, 3:35-40, FIG. 1; EX1019, xxx, 183; EX1021, 5; EX1022, 22. EX1003, ¶34.

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). EX1004, xix, 12, 899; EX1024, [0004-5], [0031], [0033], [0048]; EX1023, 402, 702, 760, 933-934; EX1037 (WSRP 1.0); EX1038 (WSRP 2.0). EX1003, ¶35.

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. 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.

EX1004, 5, 11, 15-16, 51, 630, 638-639, 899-900; EX1005, 15, 365-401; EX1006, 5; EX1007, 182-183; EX1009, 327-360; EX1017, 42-43, 299, 310, 483, 495, 580; EX1023, 752. A POSITA also would have been familiar with techniques to manage users' sessions, for example, to track the lifetime of a given sign-on. EX1004, 134-139, 285; EX1005, 18-19, 164, 228, 233-234, 264, 480-482; EX1006, 28-29, 381-384; EX1024, [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. EX1004, 11, 630, 899-900; EX1005, 5-6, 380-383; EX1006, 315-337; EX1017, 495; EX1023, 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.* EX1003, ¶36.

## **B. State Of The Art**

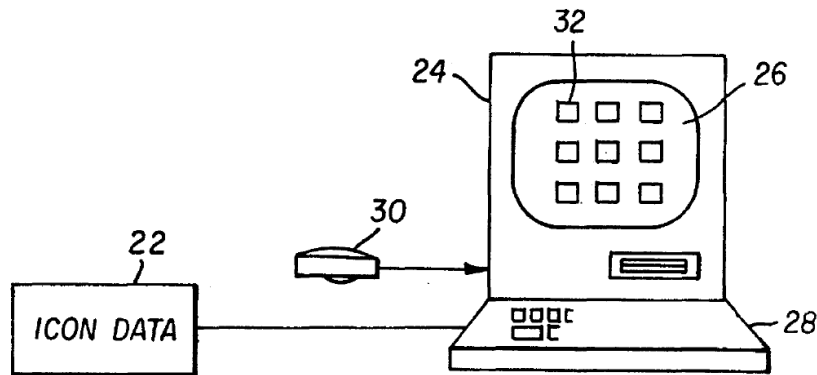
The knowledge and skill of a POSITA encompassed the following claim-recited features, as reflected in both background references and the references that form the grounds of unpatentability presented in Section VII. EX1003, ¶37.

### **1. Displaying A Grid of Secure User-Centric Information Channels (e.g., Icons Representing Computer Applications)**

It was well known in the art to display a grid with user-selectable icons, or other graphical representations of user-centric information channels (e.g.,

applications or files that provide users with access to information) (*see* Section VI.

1). For example, a 1996 patent publication showed a matrix of “icons” (32):



EX1018, FIG. 1, 1:15-19, 3:35-40; EX1020, Abstract, FIGS. 4A-4B. EX1003, ¶38.

And a 2004 publication showed a matrix of different information sources (channels):

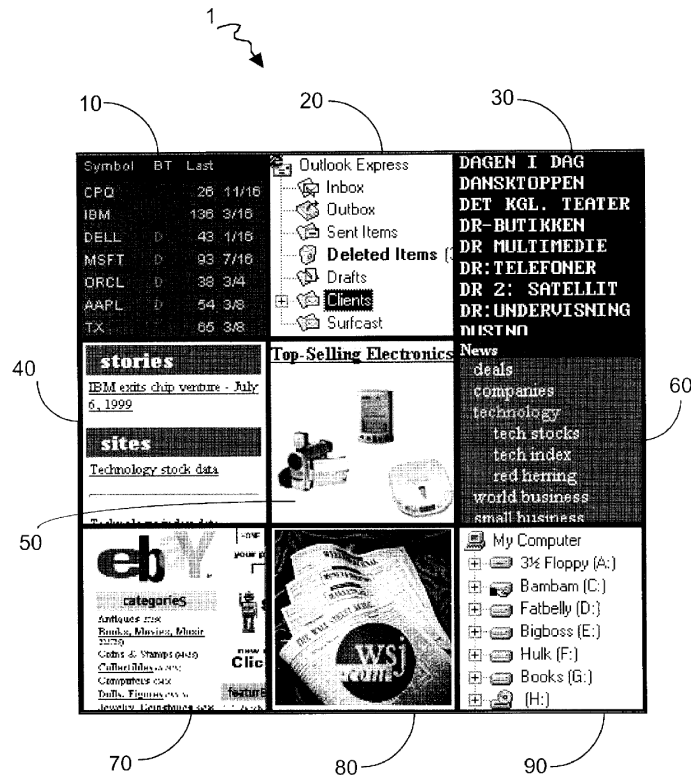


Fig. 1

EX1015, FIG. 1 (showing grid of tiles with access to secure user-centric information such as email, auction bids), 6:38-51, 7:31-43, FIG. 12 (showing passwords for tiles), 15:5-11 (user password protection for subscription services), 17:2-3 (password built into tiles), 26:25-26 (passwords stored with user profiles); EX1019, xxx (showing tiles displayed by Active Desktop), 183. EX1003, ¶39.

Some further examples follow:

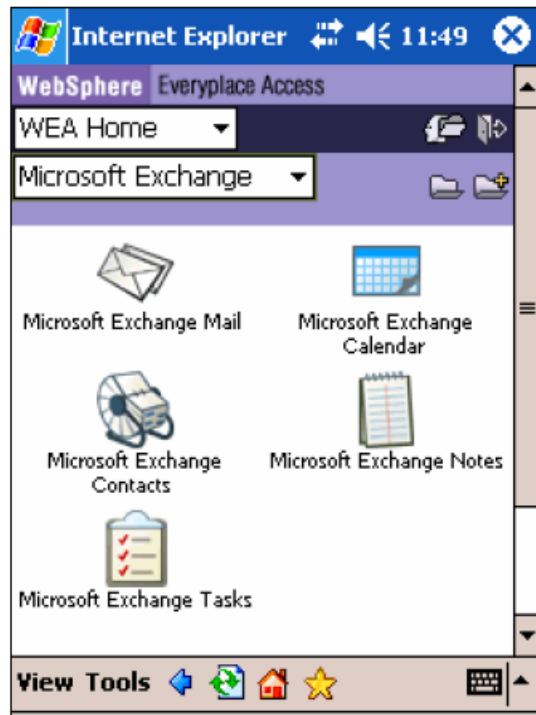
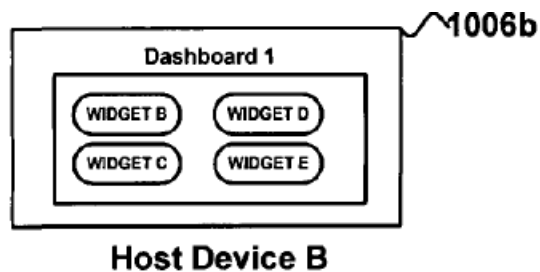


Figure 2-7 Microsoft Exchange PIM portlets

EX1006, 34 (icons representing applications for access to secure user-centric information such as e-mail, calendar, contacts in a grid); *see also id.*, 390.



EX1021, 5 (showing icons representing applications for access to secure user-centric information such as SMS messages); EX1022, 22 (Mac OS Sidebar showing icons representing applications in a grid);



EX1039, FIG. 10 (excerpted); EX1003, ¶¶40-41.

It was also well known to use security protocols such as secure socket layer (SSL) and Simple Authentication and Security Layer (SASL) to securely provide

information to users (e.g., via encryption). EX1004, 11, 630, 899-900; EX1005, 5, 380-383; EX1006, 315-337; EX1017, 495; EX1023, 777. EX1003, ¶42.

## **2.     Authenticating A User And/Or A Platform Associated With User**

Long prior to the challenged claims' earliest possible effective filing date, it was common practice to authenticate users (e.g., via username and password) and/or platforms/devices associated with users to prevent unauthorized access of private or sensitive information. *E.g.*, EX1004, 5, 7, 11, 14-16, 27, 33, 119, 630-631, 899-900; EX1005, xvii, xxix, 17, 21, 242, 256, 270, 365-401, 483-486; EX1006, 5, 182-183, 250-254, 340-341; EX1007, 240, 320-322; EX1008, 144; EX1009, 3, 9-10, 19-20, 302; EX1024, [0032], [0041]. EX1003, ¶43.

Moreover, it was well known to authenticate users, user's devices, and/or applications, including as part of a single sign-on (SSO) process, using lightweight directory access protocol (LDAP), tokens (e.g., LTPA tokens), and/or certificates. EX1004, 5, 11, 15-16, 630, 638-639, 899-900; EX1005, 15, 365-401; EX1006, 5; EX1007, 182-183; EX1009, 327-360; EX1017, 42-43, 299, 310, 483, 495, 580; EX1023, 752, 932. EX1003, ¶44.

## **3.     Communication Protocols And Markup Languages**

Communication protocols and markup languages such as HTTP, SMS, SMTP, HTML, XML, and RFC822, were well known before the alleged priority

date of the '641 patent. EX1004, xix; EX1024, [0004-5], [0031], [0033], [0048]; EX1023, 402, 702, 760, 933-934. For example, in 2002, Austin-Lane described XML and HTML as “standard” (EX1024, [0031]), and described how existing systems used, *inter alia*, email, SMS, and TCP/IP communication protocols to deliver electronic content and messages (EX1024, [0004]). EX1003, ¶45.

## V. **THE '641 PATENT**

The '641 patent issued from U.S. Patent Application No. 13/086,258 (“the '641 application”), which is a continuation of U.S. Patent Application No. 12/465,331, filed May 13, 2009, and claims priority to U.S. Provisional Application No. 61/052,765 (“’765 application”), filed on May 13, 2008.

### A. **The Prosecution History**

The '641 application was filed on April 13, 2011. EX1002<sup>2</sup>, 1-41. In the first Office action, the Examiner denied applicant’s claimed May 13, 2008 priority date but granted a priority date of May 13, 2009. EX1002, 84. The Examiner rejected certain claims under §§ 101, 112, and obviousness-type double-patenting. EX1002, 84-99. The Examiner rejected all pending claims for obviousness over U.S. Patent No. 7,376,907 (“Santoro”) in view of U.S. Publication No. 2008/0256643 (“Jones”).

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<sup>2</sup> EX1002 citations to page numbering are added by Petitioner.

EX1002, 99-115; EX1015; EX1016. On November 5, 2013, the Examiner allowed the claims with an Examiner's Amendment. *Id.*, 310-330.

**B. The Challenged Claims**

*See* EX1040 for a listing of the challenged claims.

**VI. CLAIM CONSTRUCTION**

Unless otherwise noted, Petitioner applies the plain and ordinary meaning of all claim terms below. *See* 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 '641 patent are indefinite or otherwise invalid nor does Petitioner waive its right to raise additional issues of claim construction in any litigation. EX1003, ¶¶46-47.

**1. "Channel"**

**"Channel"** (throughout the '641 patent claims) should be construed at least in part as: *"a mechanism for providing the user access to and interaction with the user-centric information, comprising a visual component presented on the at least one user platform and an information delivery component on a server."* EX1003, ¶48.

The '641 patent does not define "channel" but a related patent of the '641 application, U.S. Patent No. 8,751,948, explains that a "channel" is a "mechanism ... for providing the user access to and interaction with ... information" and that it

comprises “two pieces (1) a visualization piece that is presented on the client device (e.g., user devices 118) and (2) the integration piece residing at the server (e.g., application server 110).” EX1036, 8:60-9:3, 9:12-39, 9:57-61, 11:36-44, 12:1-4. While the ’948 patent issued from a continuation-in-part application, there is no indication that the applicants intended to change the meaning of “channel” in that application compared to their ancestor applications including the application issuing as the ’641 patent. EX1003, ¶¶49-53.

The ’641 patent claims priority to the provisional ’765 application, which states: “Channels are dynamic icon-like applications that can launch other applications, receive data about other applications, display streaming data (text, video & audio). Channels can be animated or static and can display images and/or text.” EX1014<sup>3</sup>, 20. A POSITA would have understood that the ’765 application’s description conforms with the proposed construction and the ’641 patent’s description of “channel.” EX1003, ¶54.

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<sup>3</sup> EX1014 citations to page numbering are added by Petitioner.

**VII. GROUND 1: THE CHALLENGED CLAIMS  
ARE OBVIOUS OVER THE WEBSHERE REFERENCES**

As explained below, the challenged claims are obvious over the WebSphere references. The WebSphere references disclose or suggest every element of the challenged claims. EX1003, ¶55.

**A. The WebSphere References**

The WebSphere references—WebSphere-Portal (EX1004), Ben-Natan (EX1005), and WebSphere-Everyplace (EXS1006-1009)—are books describing aspects of the same IBM product: WebSphere. *E.g.*, EX1004, (a); EX1005, xxvi, 4; EX1006, (a); EX1007, (a); EX1008, (a); EX1009, (a). They primarily explain how to design, develop, and implement WebSphere Portal, an aspect of the WebSphere product that allows users to access information from a plurality of sources on a single user interface (a Portal Page). EX1004, xix, 4-51; EX1005, xxvi-xxx, 3-4, 7-12, 276, 473-480; EX1006, xi, 5-6, 25. Ben-Natan and WebSphere-Everyplace also describe another aspect of the WebSphere product, Everyplace Access (aka “WEA”), which “extend[s] [P]ortal functionality to mobile devices,” allowing users to leverage Portal functionality from virtually everywhere, hence the name “Everyplace.” EX1005, 473-480; EX1006, 1-5, 25, 27-29. EX1003, ¶56.

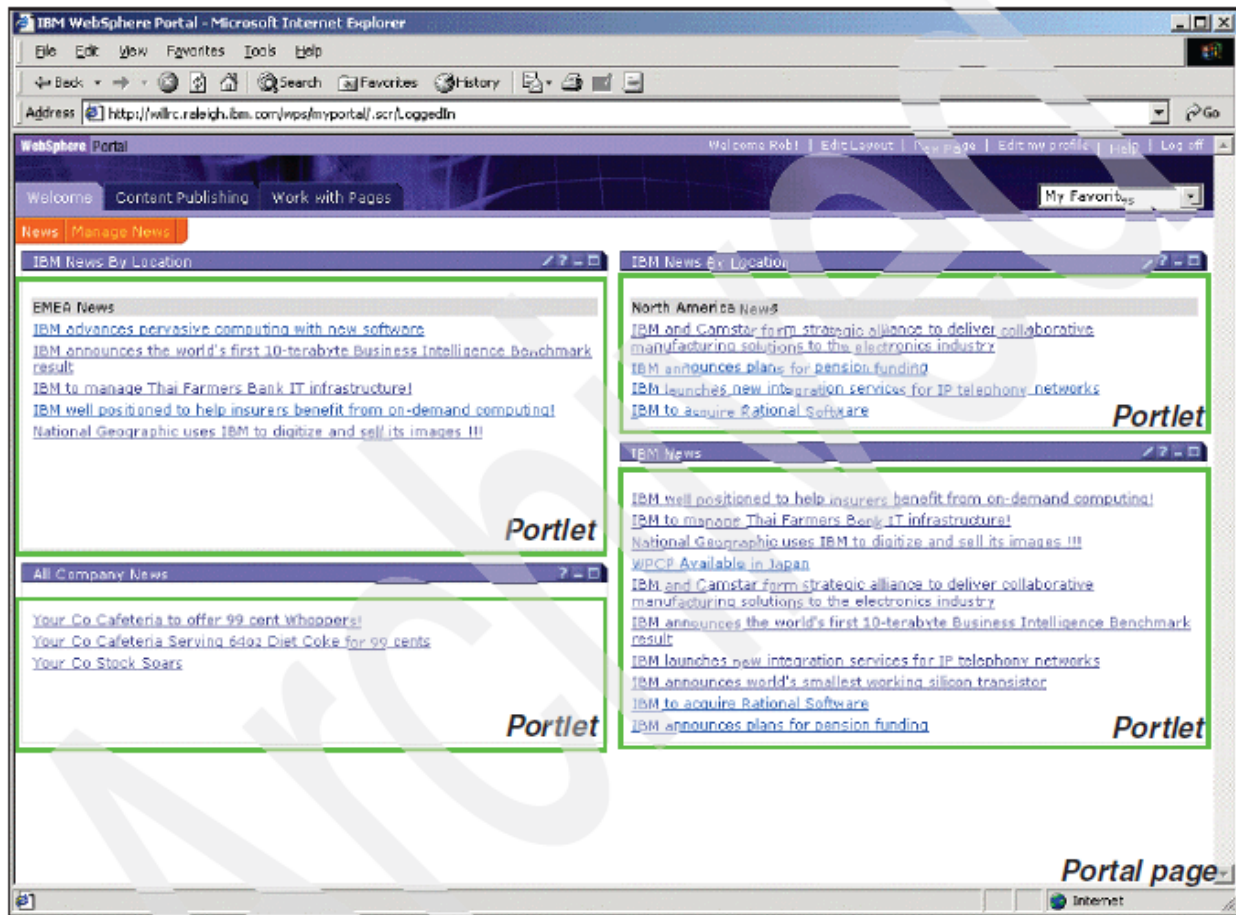


Figure 2-1 Portal page and portlets

EX1004, 49 (showing a Portal Page comprising a plurality of portlets, each of the portlets containing links to additional information); EX1003, ¶56.

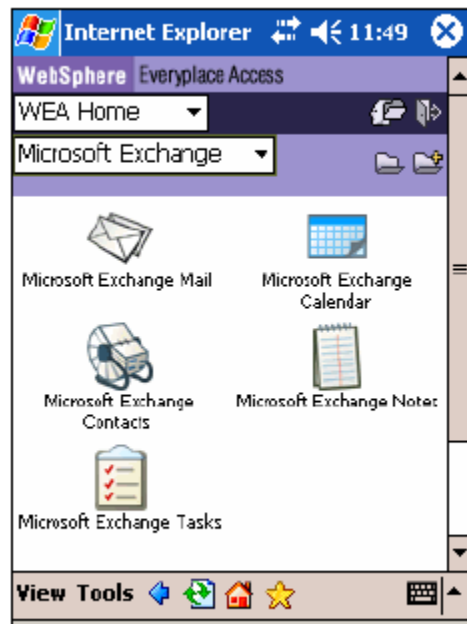


Figure 2-7 Microsoft Exchange PIM portlets

EX1006, 34 (showing a WEA Portal Page displayed on a mobile device comprising portlets for accessing various Microsoft Exchange applications); EX1003, ¶56.

To access their account from one of their devices, the user first logs in with a username and password, such as using a single sign-on (SSO) process. *E.g.*, EX1004, 5, 7, 11, 27, 33, 51, 76, 134-137, 630, 642; EX1005, 15, 195-196, 225-226, 270, 382-401; EX1006, 5, 30-33, 311, 378; EX1007, 28, 182-187, 320-322, 332, 342; EX1008, 70, 162, 182-184; EX1009, 289-290, 314, 324-355. EX1003, ¶57.



Figure 21-16 Running Edit mode of the portlet

EX1004, 665; EX1003, ¶57.

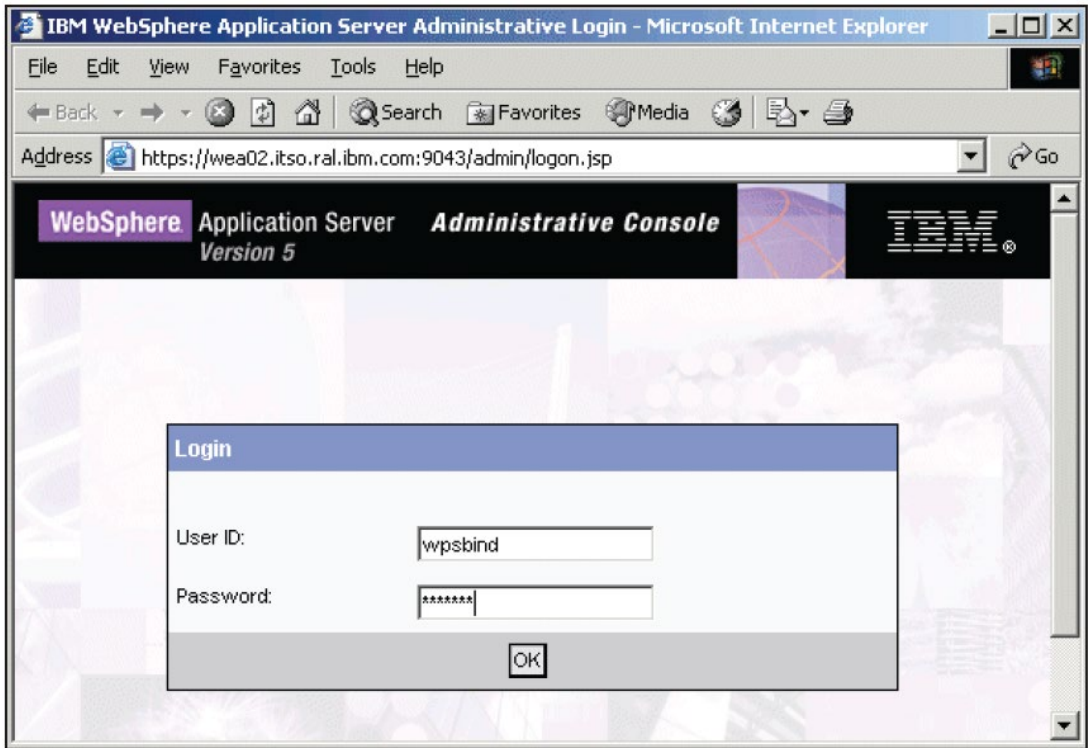


Figure 10-16 WebSphere Everyplace Access Login

EX1009, 347; EX1003, ¶57.



Figure 10-19 Login to WebSphere Everyplace Access

EX1007, 321; EX1003, ¶57.

Once logged in to their account, the user is presented with a grid of portlets.

E.g., EX1004, 28-29, 49, 60; EX1006, 30, 34; EX1008, 66-67, 182; EX1003, ¶58.

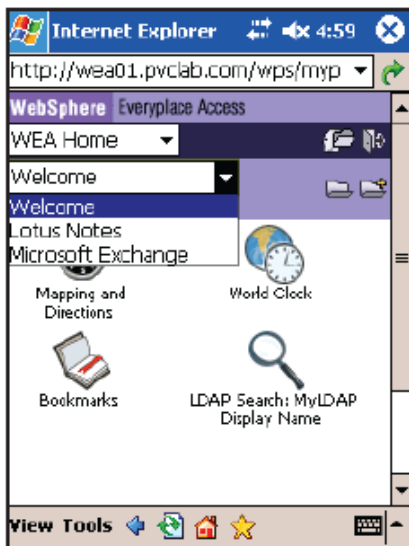


Figure 2-74 Welcome page (after login)

EX1008, 182; EX1003, ¶58.

The user can customize their profile, including modifying the layout and theme of their Portal Page(s). *E.g.*, EX1004, 18-20, 30, 58-64, 95, 247, 935-989, 1000; EX1005, 143-177; EX1006, 41-67. EX1003, ¶59.

The user also can set up alerts, such as a stock price alert, send by an email, an instant message, with the message center portlet, and a text message to a mobile device. *E.g.*, EX1006, 9-11; EX1009, 1-14, 19-25, 29-33, 40-50, 80-82; EX1003, ¶60.

Figure 1-31 Configure the stock subscription

EX1009, 44 (showing a user configuring to be alerted when stock CK drops below a stock price of 50), 41, 48 (showing details of the received alert/notification: the stock CK dropped to a price of 44, below the user-set threshold of 50); EX1003, ¶¶60-61.

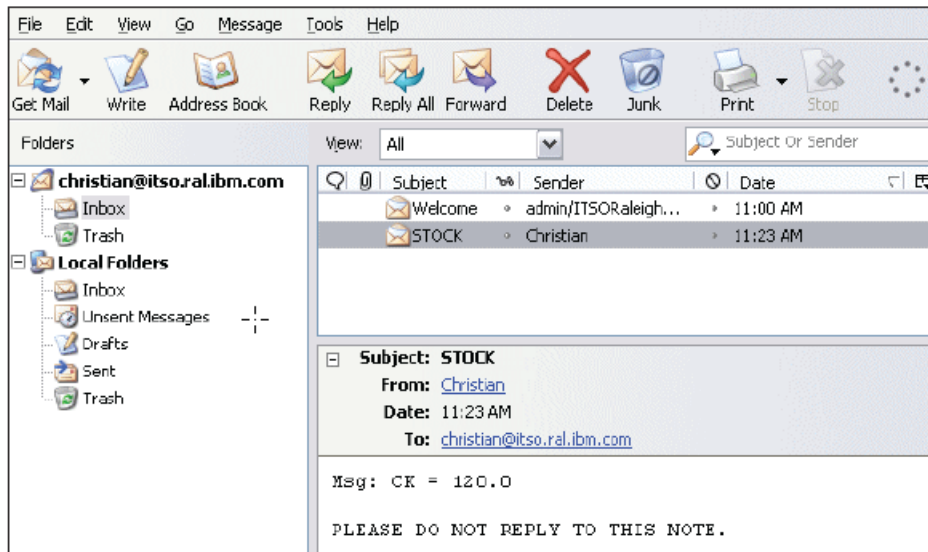


Figure 1-37 Stock notification to e-mail account

EX1009, 49 (showing an alert sent to a user's email); EX1003, ¶61.



Figure 1-38 Stock notification in the BlackBerry emulator

EX1009, 50 (showing an alert sent to a user's Blackberry); EX1003, ¶61.

Information (which includes alerts/notifications) is provided to the user based on their role (e.g., user, privileged user, manager, administrator, etc.) and is secured (e.g., encrypted) using a security protocol such as Secure Socket Layer (SSL). *E.g.*, EX1004, 5, 11, 19-20, 630, 899-900; EX1005, 5, 193, 380-383; EX1006, 315-337; EX1008, 234; EX1009, 277. A user's session is also tracked, such as by a Portlet Session Listener (*e.g.*, EX1004, 134-139, 285; EX1005, 264), and the user's online status (e.g., on an instant message service) is provided to other users (*e.g.*, EX1005, 18-19, 164, 228, 233-234, 480-482; EX1006, 28-29, 381, 384); EX1003, ¶62.

**1. WebSphere-Portal (EX1004)**

WebSphere-Portal qualifies as prior art under at least Section 102(b) (pre-AIA) at least because it was published in 2005 as part of IBM's well-known Redbooks series (EX1004, (a)-xxii; EX1003, ¶56), and available through IBM's searchable website by at least November 2005 (EX1025, 17-24, 45-46<sup>4</sup>). *See also* EX1027 (copyright registration); EX1028 (library catalog entry); EX1044. Its public availability is confirmed by the fact that it was cited by a 2007 patent publication. EX1034, [0009].

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<sup>4</sup> WebSphere-Portal is the publication listed on the webpage archived by the Wayback Machine at least because the document number (SG24-6681-00) and ISBN (073849352X) are the same. EX1004, 1022; EX1025, 46.

WebSphere-Portal is analogous art to the '641 patent because it is from the same field of endeavor: providing secure user-centric information to a user. EX1001, Abstract, 1:27-32; EX1004, 4, 7; EX1003, ¶63.

## 2. **Ben-Natan (EX1005)**

Ben-Natan qualifies as prior art under at least Section 102(b) (pre-AIA) at least because it published in 2004. EX1005, (iii)<sup>5</sup> (“Copyright © 2004 by Wiley Publishing, Inc.”); *see also* EX1042 (copyright registration); EX1043 (library catalog entry). It was publicly available on the website of an established publisher, Wiley, by at least November 2004. EX1005, (iii); EX1025, 5-16<sup>6</sup>; *see Angres, Ltd. v. Tinny Beauty & Figure, Inc.*, 116 F.3d 1497 (unpublished disposition), 1997 WL 355479, \*7 (Fed. Cir. 1997).

Ben-Natan is analogous art to the '641 patent because it is from the same field of endeavor: providing secure user-centric information to a user. EX1005, xxv-xxx, 3-23, 241; EX1001, Abstract, 1:27-32; EX1003, ¶64.

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<sup>5</sup> EX1005 citations to page numbering romanettes i-iii are added by Petitioner.

<sup>6</sup> Ben-Natan is the publication listed on the webpage archived by the Wayback Machine at least because the ISBN (0-7645-3991-4) is the same. EX1005, (iii); EX1025, 6, 8, 13, 16.

**3. WebSphere-Everyplace (EXS1006-1009)**

The WebSphere-Everyplace multi-volume reference (WebSphere-Everyplace-1 (EX1006), WebSphere-Everyplace-2 (EX1007), WebSphere-Everyplace-3 (EX1008), and WebSphere-Everyplace-4 (EX1009)) qualifies as prior art under at least Section 102(b) (pre-AIA) at least because it was published in 2005 as part of IBM's well-known Redbooks series (EX1006, (c); EX1007, (c), xi; EX1008, (d); EX1009, (d), xi; EX1003, ¶56), and was available through IBM's searchable website by at least January 2006 (EX1025, 17-24, 37-44<sup>7</sup>). *See also* EXS1029-1033 (copyright registration and library catalog entry); EX1044. Its public availability is confirmed by the fact that volumes II and IV were cited by a 2007 patent publication. EX1035, [0015].

WebSphere-Everyplace is analogous art to the '641 patent because it is from the same field of endeavor: providing secure user-centric information to a user.

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<sup>7</sup> The WebSphere-Everyplace reference's volumes are the publications listed on the webpages archived by the Wayback Machine at least because the document numbers (SG24-6462-00, SG24-6463-00, SG24-6676-00, SG24-6677-00) and ISBN (0738490733, 0738492485, 0738490636, 0738492418) are the same. EX1006, 444; EX1007, 458; EX1008, 316; EX1009, 392; EX1025, 38, 40, 42, 44.

EX1001, Abstract, 1:27-32; EX1006, 2, 6; EX1007, 4; EX1008, 2; EX1009, 2; EX1003, ¶¶65-66.

**4. Combining WebSphere-Portal,  
Ben-Natan, And WebSphere-Everyplace**

A POSITA would have been motivated with a reasonable expectation of success to combine the teachings of the three WebSphere references (WebSphere-Portal, Ben-Natan (entitled “Mastering IBM WebSphere Portal”), and WebSphere-Everyplace) at least because they describe the same IBM system—WebSphere Portal—and explain how to design, develop, and implement Portal functionality on desktop computers and mobile devices. *E.g.*, EX1004, xix; EX1005, xxvi; EX1006, xi, 27-29. *See RPX Corp. v. Rothschild Connected Devices Innovations, LLC*, IPR2016-00443, Paper 8 (“Dec. on Inst.”) at 21 (PTAB Jul. 7, 2016), Paper 28 (“Final Written Dec.”) at 35 (PTAB Jul. 6, 2017) (finding a motivation to combine two references because, *inter alia*, they described the same system). Moreover, WebSphere-Portal expressly identifies WebSphere-Everyplace as a related publication (EX1004, 1005) and both are IBM Redbooks that share at least one common author (EX1004, (b)-(c), xix-xx; EX1006, (b)-(c), xi-xiii; EX1007, (b)-(c), xii; EX1008, (c)-(d), ix-x; EX1009, (c)-(d), xii). Ben-Natan, in turn, provides “Expert Guidance” on building and deploying the same Portals described in

WebSphere-Portal and WebSphere-Everyplace. EX1005, (i), 1-22, 473-493. EX1003, ¶¶67-69.

Indeed, the WebSphere references have the same or similar descriptions of Portal and its functionality, including that Portal comprises portlets (e.g., windows, icons, etc.) that are assembled into portal pages and provide access to information of interest to a user. *Compare* EX1004, 8 (“Portlets are assembled into portal pages” and “combine Web-based content, application functionality and access to resources.”), 21-31 *with* EX1005, xviii, 7-9, 241 (“[P]ortlets [] are arranged on the portal page in a grid .... Common examples of portlets are portal applications that show the local weather forecast, the stock ticker, or a user’s email.”), 241 *with* EX1006, 6 (“Portlets are visual windows that organize content from different sources, such as Web sites, e-mail, and business applications, into a single interface for individual or group access. ... They are applications that ... run inside the Portal Container of the Portal ....”). Thus, when implementing or evaluating WebSphere Portal, a POSITA would have looked to the teachings of all three of these references to obtain a more comprehensive and complete understanding of the WebSphere Portal system, its features, capabilities, and interoperability of its corresponding modules, and how to implement it. EX1003, ¶68.

A POSITA would have been especially motivated to combine the teachings of WebSphere-Everyplace and Ben-Natan on WebSphere Everyplace Access

(WEA) with the teachings of WebSphere-Portal and Ben-Natan on WebSphere Portal because, as explained by Ben-Natan, WebSphere Everyplace Access “extend[s] [P]ortal functionality to mobile devices,” providing the benefit of allowing users to leverage Portal functionality from virtually anywhere. EX1005, 473-476, 479-480; EX1006, 1-7, 20, 25, 27 (“Everyplace Access extends the functionality of the Portal offering by providing specialized portlets for mobile devices.”), 28-29. EX1003, ¶67.

A POSITA would have reasonably expected to succeed in combining the teachings of these three references at least because the teachings are compatible with one another and were intended to be combined as part of the same system (WebSphere Portal). EX1004, 1005; EX1005, 473-476, 479-480; EX1006, 1-7, 20, 25, 27-29. For example, the three references disclose the same compatible features, including arranging portlets in a grid on a Portal Page (*e.g.*, EX1004, 28, 49; EX1005, 241; EX1006, 30, 34), enabling a user to sign in to their account with single sign-on (SSO) (*e.g.*, EX1004, 7, 630; EX1005, 382-401; EX1006, 5; EX1007, 182-187), and using Secure Socket Layer (SSL) to encrypt information relayed between the servers and the user devices (*e.g.*, EX1004, 899-900; EX1005, 380-383; EX1006, 315-337). That is, a skilled artisan would not have expected any incompatibilities between the teachings of the three WebSphere references relied on herein. EX1003, ¶¶68-74.

**B. The Prior Art Teaches All Elements Of Each Challenged Claim**

As explained below, the combination of WebSphere-Portal, Ben-Natan, and WebSphere-Everyplace (hereinafter “**WebSphere-Combination**”) discloses or renders obvious every element in the challenged claims and the claimed combination of those elements. EX1003, ¶75.

**1. Claim 1**

[1.1]<sup>8</sup> An apparatus serving as a user platform operated by a user to facilitate display of, and interaction with, secure user-centric information, the apparatus comprising:

WebSphere-Combination teaches this element. EX1003, ¶76.

WebSphere-Combination discloses an apparatus (one or more “server[s]”) serving as a user platform (“client” or “client device” such as a desktop computer/workstation, notebook/laptop computer, cellular/mobile phone, PDA, etc.) operated by a user to facilitate display of, and interaction with, secure user-centric information (encrypted information such as alerts, financial (e.g., stock) information, weather information, email, news, etc., that a user can access only after signing into their account). EX1004, 2 (“Personalization enables the portal to deliver user-specific information targeting a user based on their unique information.”), 4-11

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<sup>8</sup> Reference numbers in the format of [claim#.element#] are added throughout for ease of reference.

(“Portal ... provid[es] tooling for aggregating and personalizing Web-based content and making that content available via multiple devices.”), 14, 18, 39, 42-43, 48-49, 116, 152-154, 630, 899-900, 956, 995; EX1005, 4-8, 16, 141, 164, 241, 473-479, 495; EX1006, 4-7, 25, 41-42, 310-311, 316; EX1007, 4, 23, 209, 240; EX1008, 2, 305; EX1009, 2-3, 30, 58, 80, 159. EX1003, ¶77.

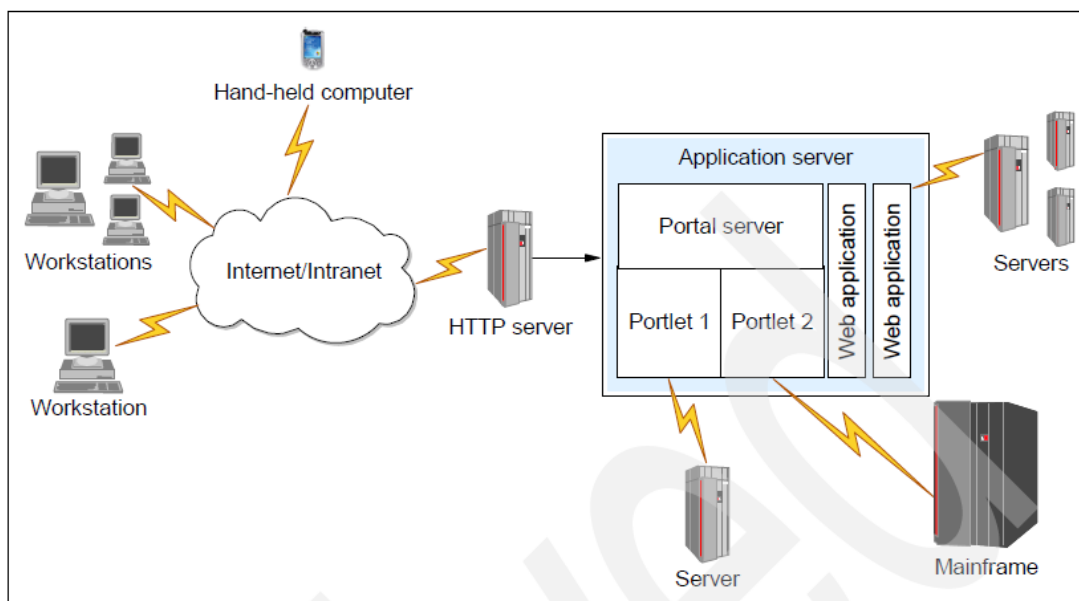


Figure 1-13 Portal Solutions - portlet to remote application

EX1004, 43 (showing servers providing secure user-centric information to facilitate display on a user platform), *see also id.*, 5, 10, 14, 18, 39, 42, 995; EX1005, 16, 26, 43-44; EX1006, 3, 5, 24, 41, 237; EX1008, 2; EX1009, 3, 359-360; EX1003, ¶77.

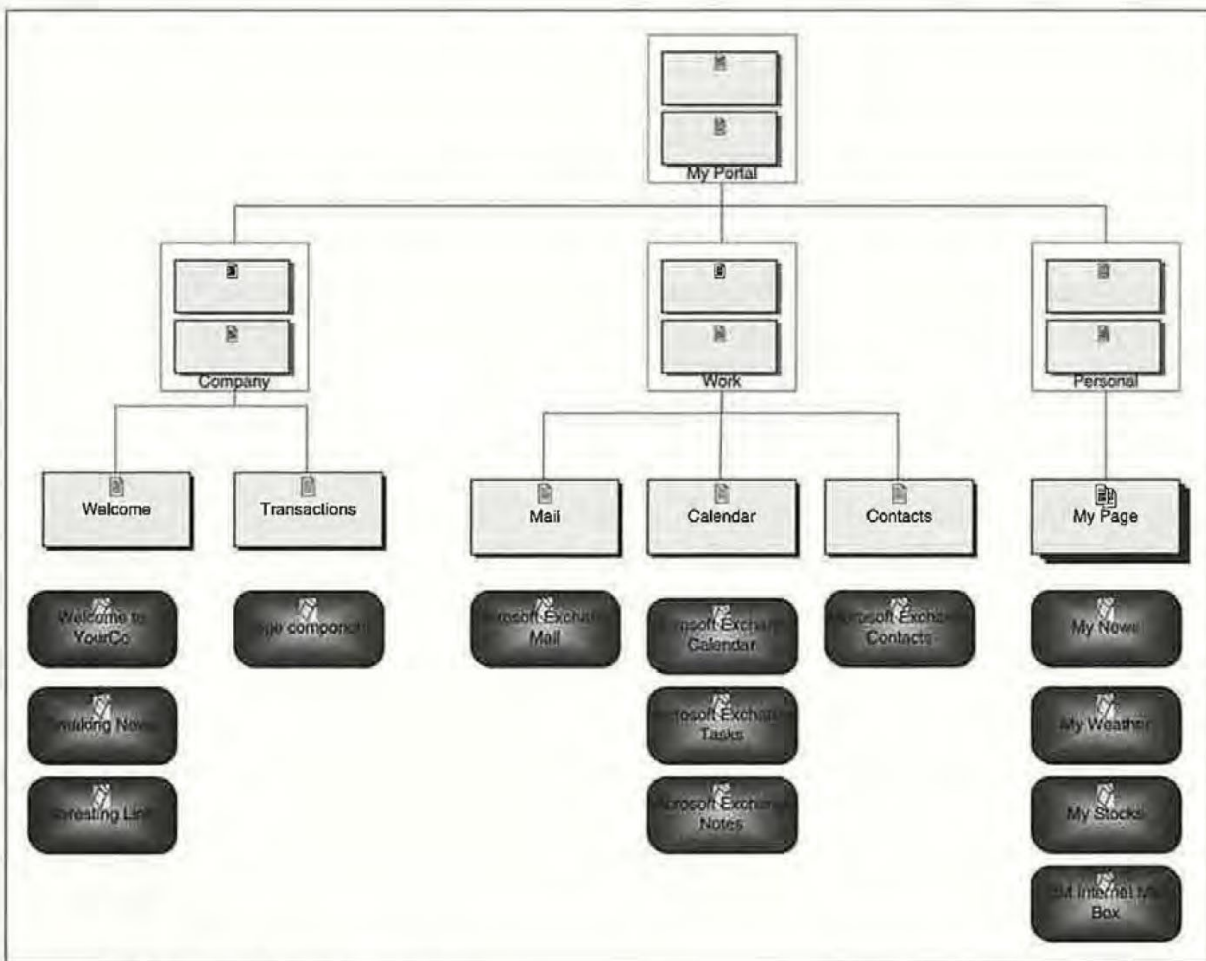


**Figure 7-11** New Portal structure.

EX1005, 141 (showing examples of secure user-centric information provided to a user platform, including, “news,” “email,” “contacts,” “notes,” “weather,” “stocks,” etc.); EX1004, 49; EX1006, 34; EX1008, 182; EX1003, ¶¶77, 78.

WebSphere-Combination discloses using secure socket layer (SSL) to encrypt communications (including the secure user-centric information) between the apparatus and user platform. EX1004, 11, 630, 899-900; EX1005, 380-383; EX1006, 22, 315-337; EX1008, 234; EX1009, 277. This “enables secure message

communication between servers and clients over the Internet.” EX1004, 899. WebSphere-Combination also discloses requiring a user to log into their account, e.g., using single sign-on (SSO) before they can gain access to secure user-centric information. *Id.*, 5, 7, 11, 27, 33, 51, 76, 134-137, 630, 642; EX1005, 15, 195-196, 225-226, 270, 382-401; EX1006, 5, 30-33, 310-311, 378; EX1007, 28, 182-187, 320-322, 332, 342; EX1008, 70, 162, 182-184; EX1009, 289-290, 314, 324-355. Moreover, it was well known to use security protocols to encrypt communication (*supra* Section IV.B.1) and to require a user to log into their account (*supra* Section IV.B.2). EX1003, ¶¶79-81.

[1.2] a display device to display a desktop for the user platform;

WebSphere-Combination teaches this element at least because WebSphere-Combination teaches that Portal uses a display device, such as a monitor, PDA screen, or mobile phone screen, to display a desktop for the user platform. EX1004, 5 (“Portals are the next-generation desktop, delivering e-business applications over the Web to all kinds of client devices.”), 8 (“Portlets are similar to Windows® applications in that they present their contents in a window-like display on a portal page.”); EX1005, 4 (“[Portal users] can create a personalized device-independent ‘desktop’ with a consistent look and feel ...”), 7 (“Portal allows users to create their own virtual desktops that are machine independent.”). The ’641 patent does not offer any indication of what the term “desktop” means, but a POSITA would understand

that the term was ordinarily applied to the graphical user interface provided by operating systems, such as Windows and MacOS, showing applications and documents on a screen simultaneously, either as icons or running / open. EX1017, 154 (Microsoft Dictionary defining desktop). EX1003, ¶¶82-83.

Websphere-Combination shows such an arrangement either within a browser window or on the entire screen of a mobile device.

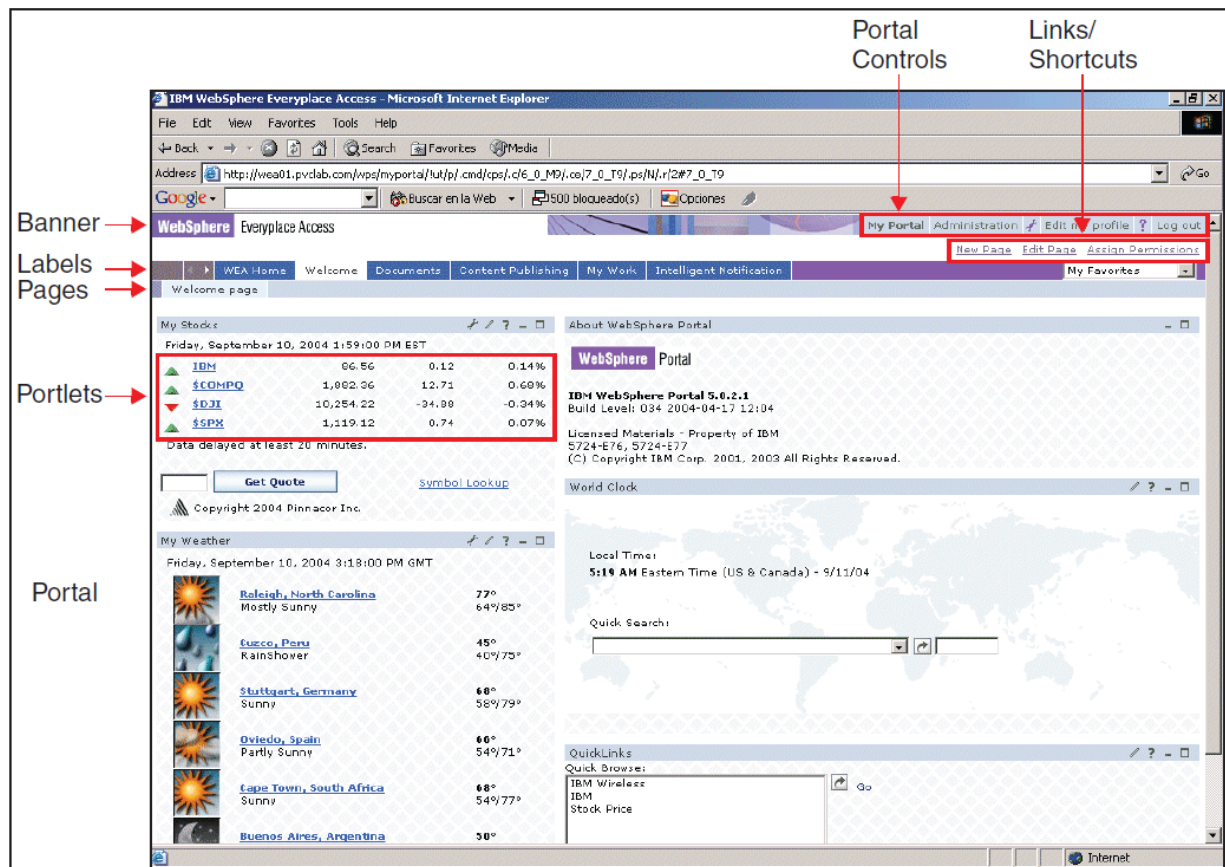


Figure 3-1 Welcome page example

EX1006, 43; EX1007, 261; EX1009, 287-290 (describing desktop client access to Portal), 302;

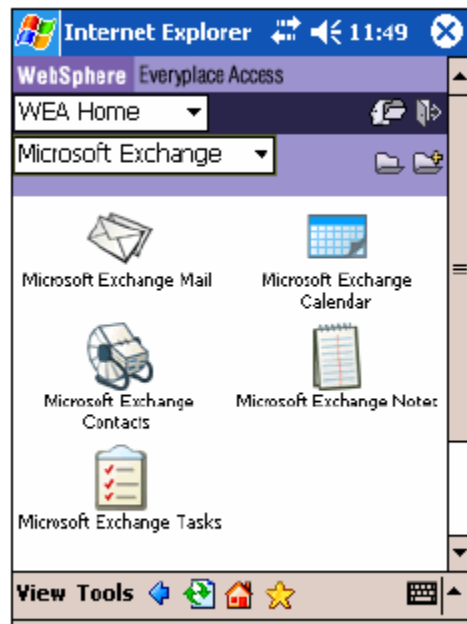


Figure 2-7 Microsoft Exchange PIM portlets

EX1006, 34;

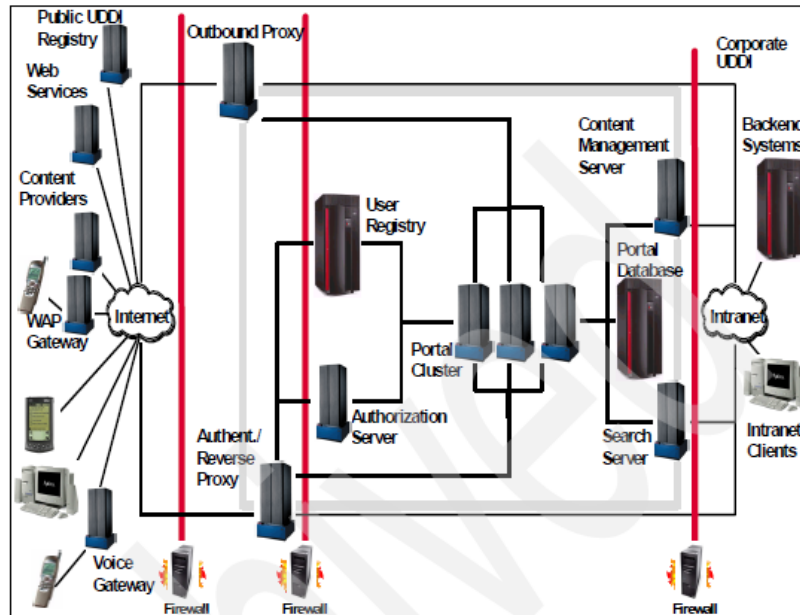


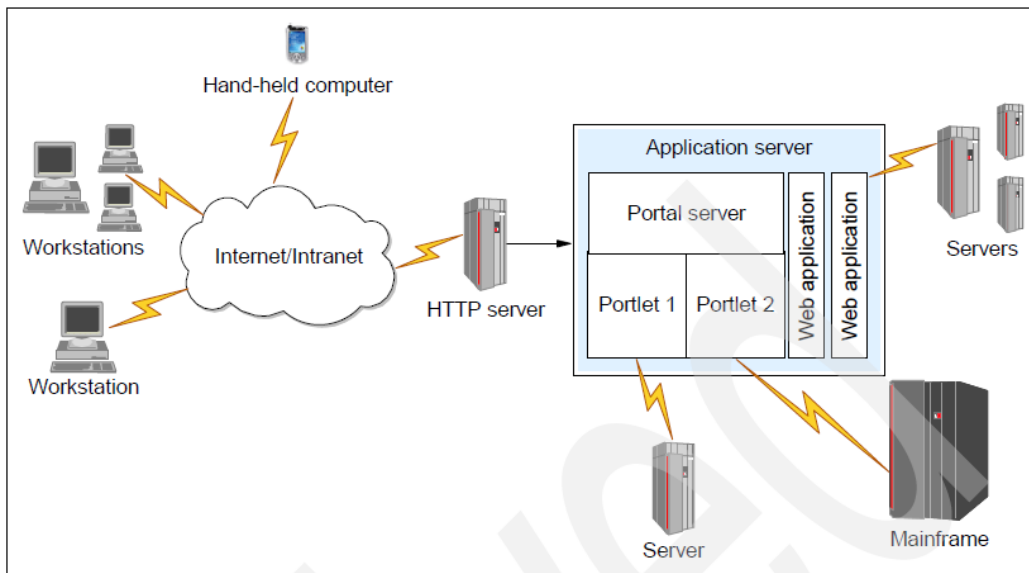
Figure 1-3 Distributed Portal system

EX1004, 10 (showing display devices); EX1006, 5 (showing desktop & mobile devices), 23 (showing support for desktops and handheld devices). EX1003, ¶84.

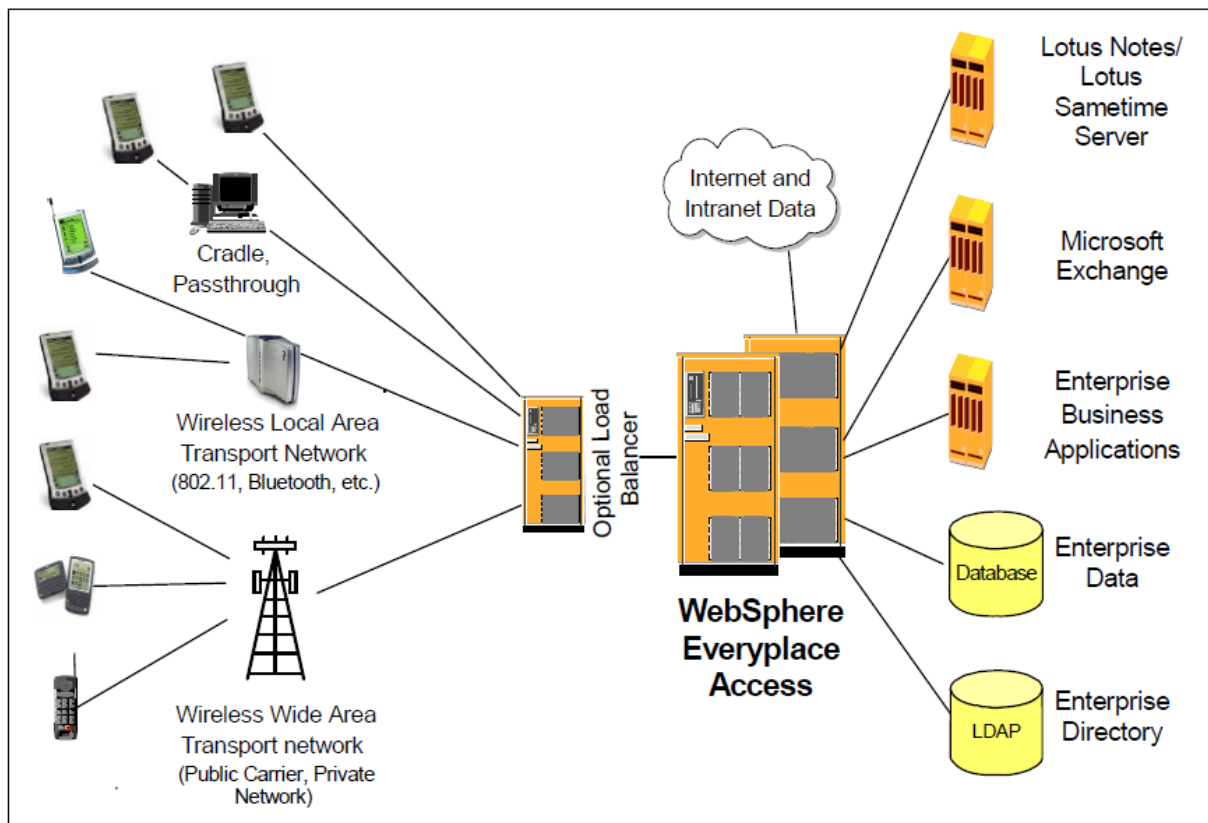
[1.3] at least one communication interface to facilitate wired and/or wireless communications via one or more transmission media;

WebSphere-Combination teaches this element. EX1003, ¶85.

Although WebSphere-Combination does not use the words “communication interface” or “transmission media,” a POSITA would have understood or found it obvious that the apparatus includes at least one communication interface (e.g., wireless transceiver, ethernet port and associated electronics to send and receive appropriate electrical or optical signals on the medium attached to the port) facilitating wired and/or wireless communication via one or more transmission media (e.g., ethernet cable, electromagnetic radiation) at least because the WebSphere references disclose that the apparatus communicates over the Internet using one or more communication protocols, including TCP/IP, 802.11, and HTTP. EX1004, 10-11, 42-43, 56, 81, 102, 997; EX1005, 13, 16, 26-27, 43-44, 71, 74, 324, 476, 482-483; EX1006, 3, 101, 113-114. Moreover, a POSITA would have understood or at least found it obvious that the apparatus includes a communication interface to perform at least the other disclosed types of communications, including email over SMTP and texting over SMS, at least because these types of communications also require a communication interface. EX1006, 5, 10, 47-48, 399. EX1003, ¶¶86, 88.



EX1004, 43.



EX1006, 3. Indeed, that the WebSphere references teach encrypting communications using SSL—an encryption systems used to “ensure privacy when information is sent across the Internet”—confirms that the apparatus and user platforms communicate over the Internet. EX1004, 11. EX1003, ¶86.

WebSphere-Combination also discloses communicating over a wireless network. *E.g.*, EX1006, 3. To perform these communications over a wireless wide area network and/or the Internet, a POSITA would have understood or at least found it obvious that the apparatus includes a communication interface at least because they understood that a communication interface is needed to communicate over a wide area network and the Internet. For example, a POSITA would have understood that for a wired connection, the apparatus (one or more servers) includes a port (e.g., ethernet port) that connects to the Internet via a cable (e.g., ethernet cable), and for a wireless connection, the apparatus (one or more servers) includes a wireless transceiver that emits electromagnetic radiation. EX1003, ¶87 (citing EX1041).

[1.4] at least one memory to store processor-executable instructions; and at least one processor communicatively coupled to the display device, the at least one communication interface, and the at least one memory, wherein upon execution of the processor-executable instructions by the at least one processor, the at least one processor manages display of and interaction with the secure user-centric information by:

WebSphere-Combination teaches this element. EX1003, ¶89.

WebSphere-Combination discloses that the apparatus (one or more servers) includes at least one memory (“2 GB of memory at a minimum”) and at least one processor (“Pentium 4 processor”) (EX1005, 24, 26, 44, 237; EX1004, 8, 16-18, 102, 1004; EX1006, 24, 237) and that the apparatus runs WebSphere software (*e.g.*, EX1004, 155-201; EX1005, 65-103; EX1007, 3-21; EX1009, 79-138). *See also* EX1013, 502. A POSITA would have understood or at least found it obvious that the at least one processor is communicatively coupled to the display device, the at least one communication interface and the at least one memory at least because it would need to be to be able to perform the WebSphere-Combination’s disclosed functionality. EX1003, ¶89.

WebSphere-Combination teaches how, upon execution of processor-executable instructions by the at least one processor, the at least one processor manages display of and interaction with secure user-centric information. EX1003, ¶90. Examples of Portal displaying secure user-centric information for interaction are shown below:

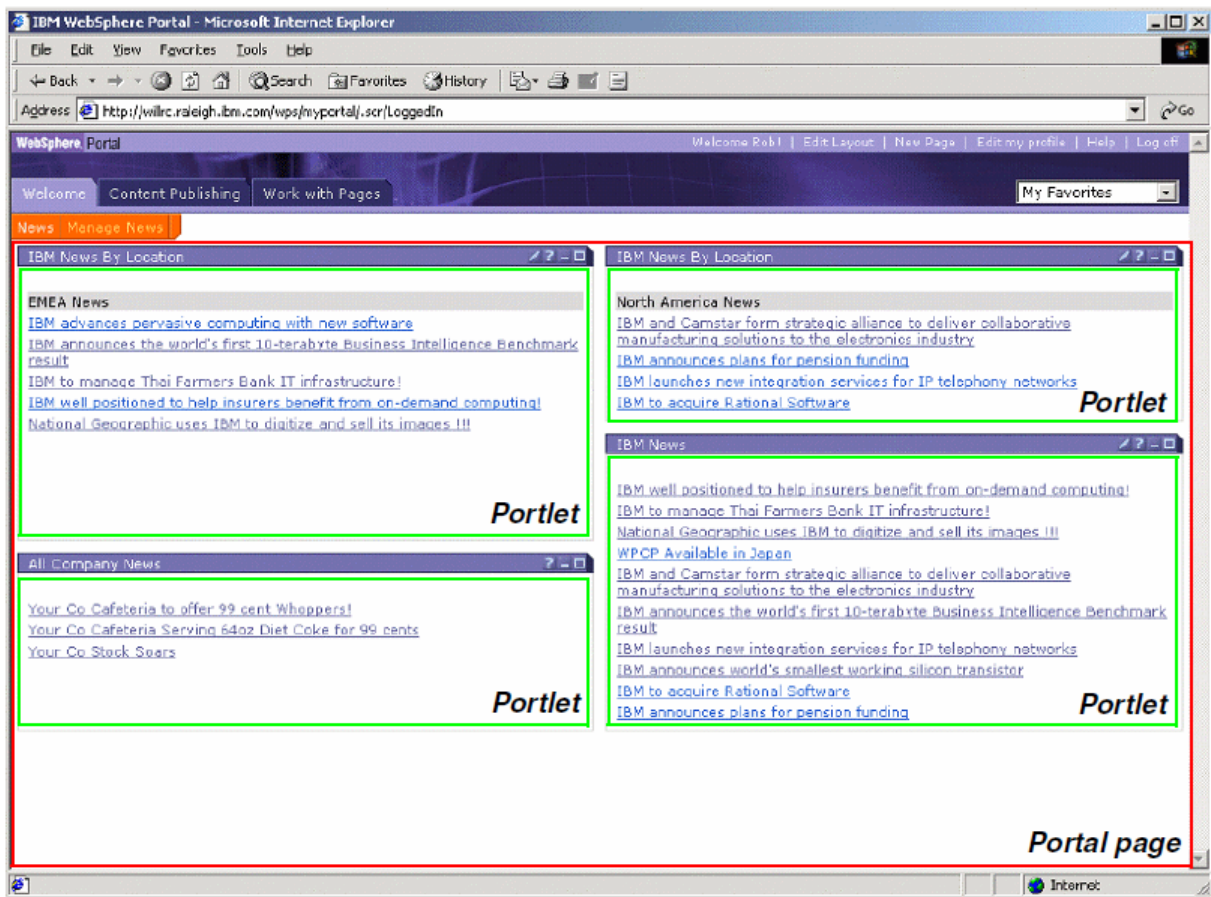


Figure 2-1 Portal page and portlets

EX1004, 49 (red annotation added).

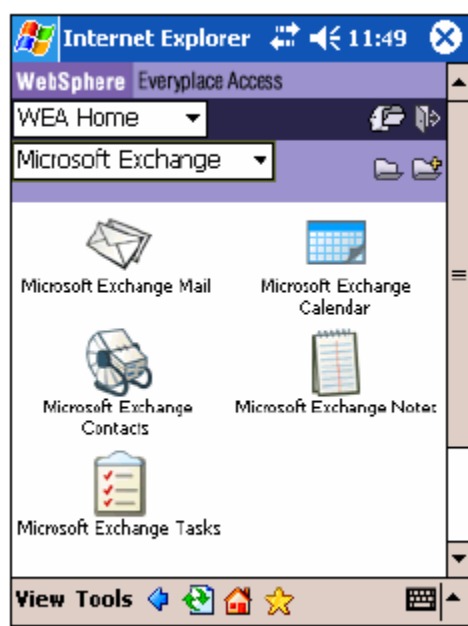


*Figure 2-7 Microsoft Exchange PIM portlets*

EX1006, 34.

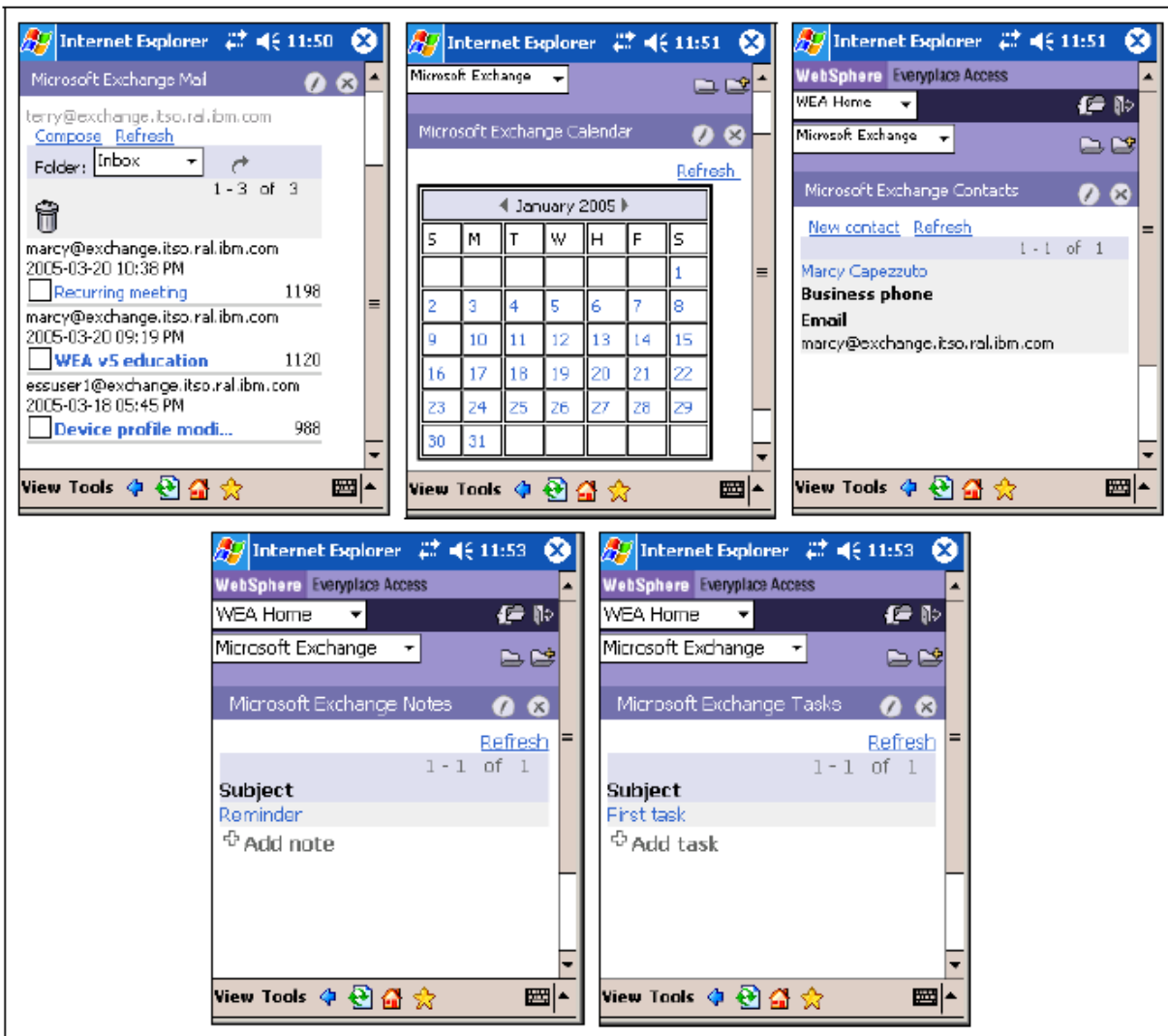


Figure 2-76 Microsoft Exchange Mail, Calendar, Contacts, Notes and Tasks

EX1008, 183. EX1003, ¶¶90.

WebSphere-Combination teaches that portlets display on a client side computer that uses memory with software and a processor communicatively coupled to a display device (*see* elements [1.2]-[1.3]), a communication interface, and memory because WebSphere-Portal discloses that “Portal itself installs as an Enterprise application in WebSphere Application Server” and “[g]ives users a

content publishing and personalization interface.” EX1004, 8, 16-18; EX1005, 474-476; EX1006, xi, 18. WebSphere-Portal discloses that the processor executes Portal software to manage a display and provide interaction with secure user-centric information. *See, e.g.*, EX1004, 8-9, 27. WebSphere-Portal teaches that Portal offers portlets that allow access to user e-mail, contacts, syndicated news, industry applications, and calendars, which a POSITA would have understood as managing display and interaction with secure-user-centric information. *Id.* EX1003, ¶91. Examples of a display with a portlet are shown below:

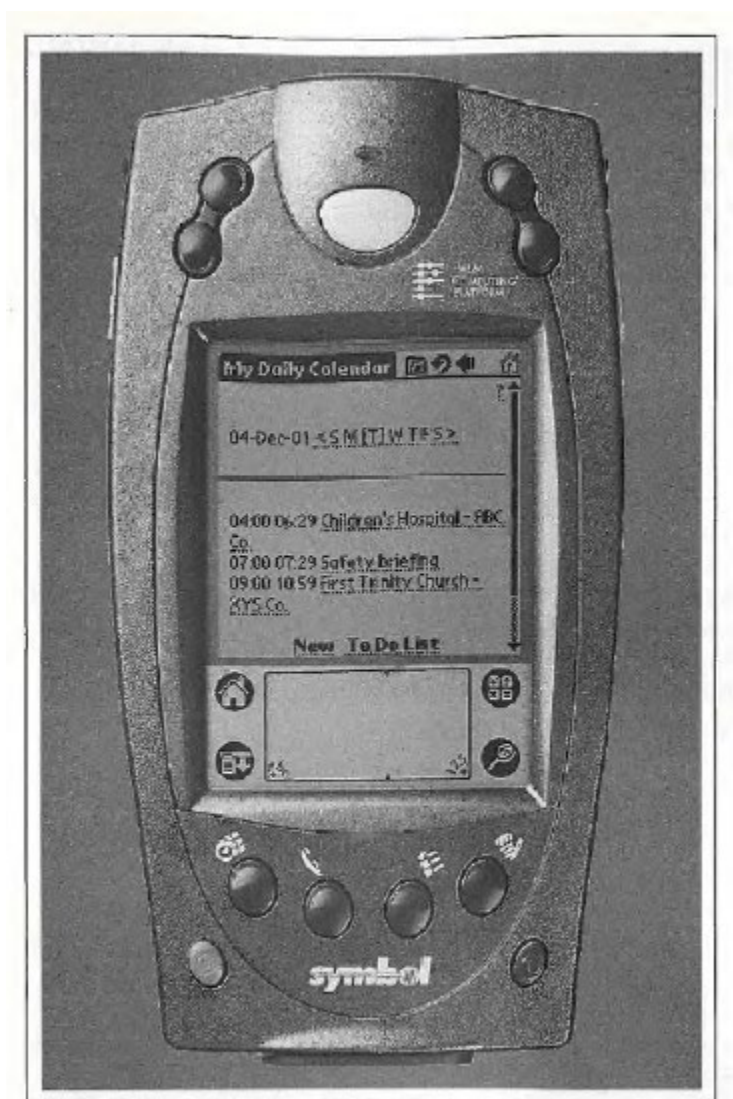


**Figure 24-1** Palm OS based Symbol PDA with bar code scanner.

EX1005, 475.

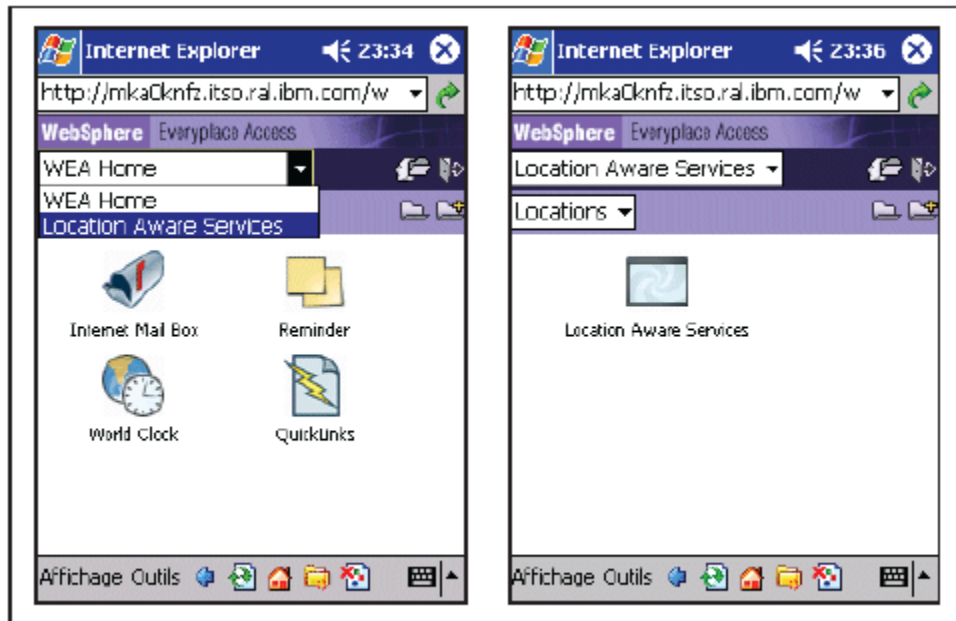


Figure 5-21 Location Aware Services on Pocket PC

EX1009, 185. EX1003, ¶91.

[1.5] A) controlling the display device to display the desktop for the user platform as a channel grid framework including a matrix having a plurality of user-selectable items representing a corresponding plurality of authorized channels through which the user receives and/or interacts with respective portions of the secure user-centric information, and

WebSphere-Combination teaches this element. EX1003, ¶92.

WebSphere-Portal discloses that the processor manages display and interaction with user-centric information by controlling the display device to display a desktop as a channel grid framework with a matrix of user-selectable items (portlets), which represent authorized channels for a user to receive and/or interact with secure user-centric information. EX1004, 3, 6-8, 18-19, 28-29, 30 (“Portlets provide access to specific services or information, for example, a calendar or news

feed.”), 34, 48-49, 60, 116, 152-153, 241, 620, 630, 946-947, 956, 989, 1000; EX1005, 4 (“[Portal users] can create a personalized device-independent ‘desktop’ with a consistent look and feel ...”), 7 (“Portal allows users to create their own virtual desktops that are machine independent.”), 13, 141, 241 (“[a] portal page typically contains several portlets that are arranged on the portal page in a grid of rectangles of varying size”), 242-247, 277, 493-494; EX1006, 6, 10, 30, 34, 42, 390; EX1007, 290-293, 308-311, 319-321; EX1008, 66-67, 182; EX1009, 1-50; EX1010, 205-214.

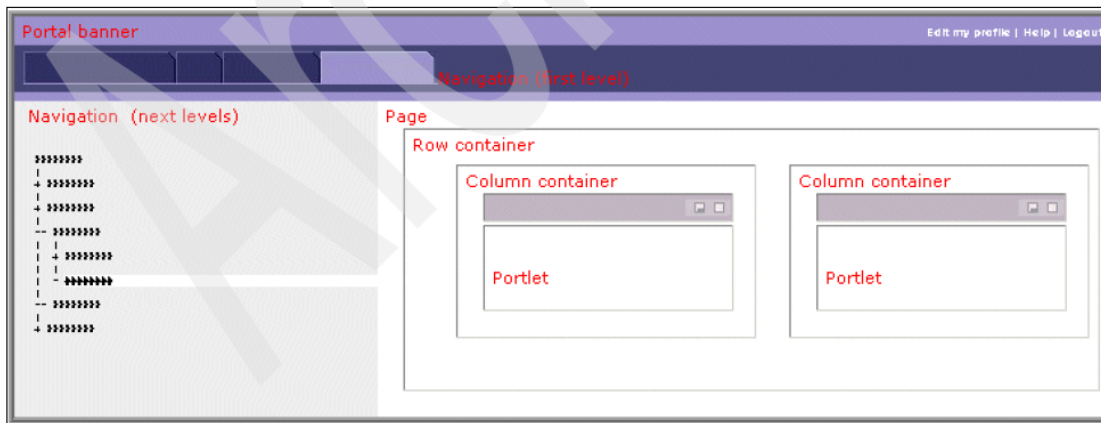


Figure 1-9 Portal page layout

A portal page is made up of the following elements.

EX1004, 28. EX1003, ¶93.

WebSphere-Portal teaches that Portal displays the desktop for Portal as a “channel grid framework including a matrix of channels” because WebSphere-Portal describes the customizable nature of portlet arrangements, including in a

grid. *Id.*, 18, 28 (showing customizable portlet grid), 60, 247 (showing portlets can be arranged in customizable columns and rows).

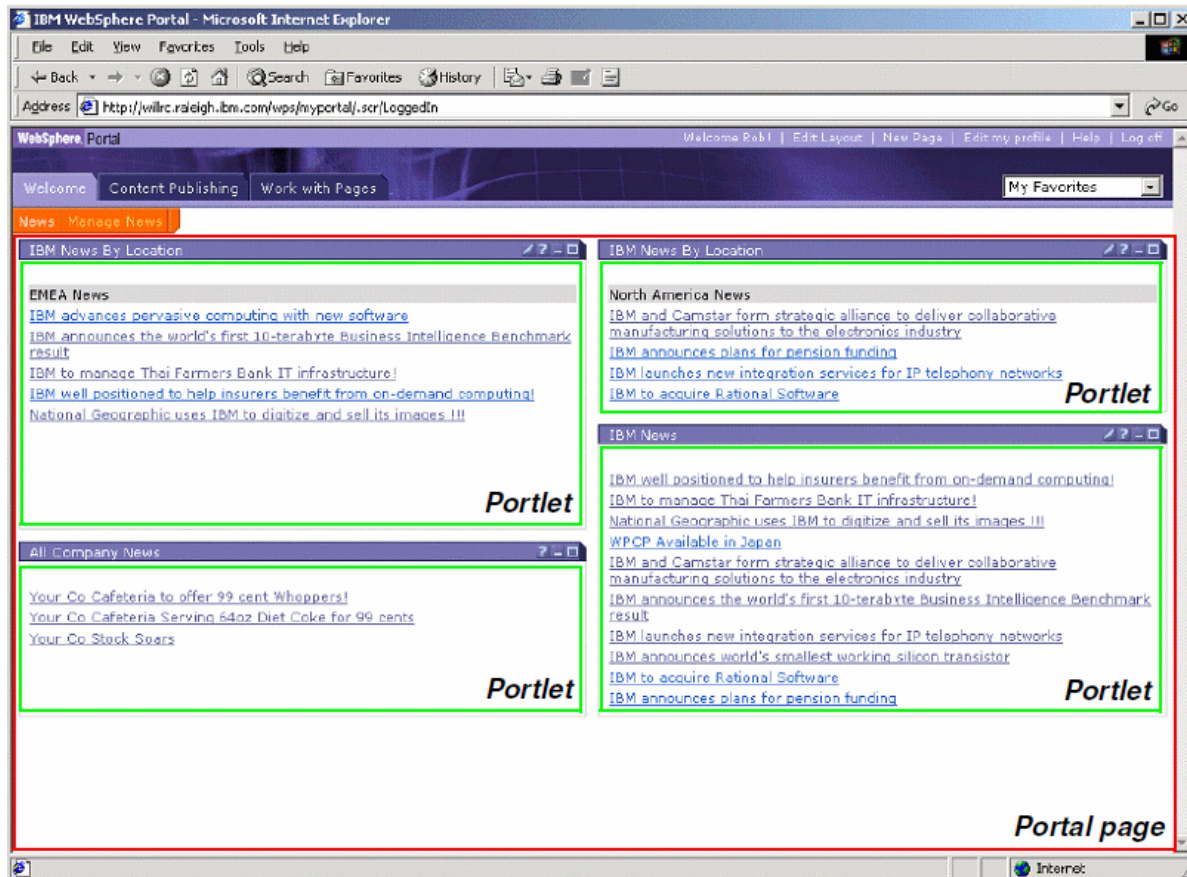


Figure 2-1 Portal page and portlets

EX1004, 49 (red annotation added showing portlets arranged in a channel grid framework including a matrix). EX1003, ¶94.

WebSphere-Everyplace-1 provides examples of a channel grid of portlets, shown as icons on a mobile device:

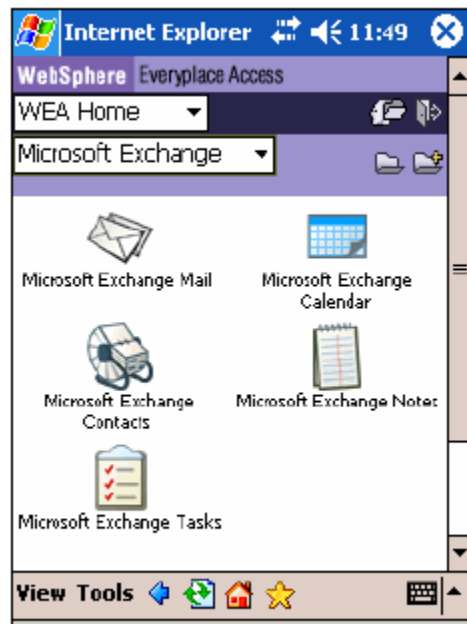


Figure 2-7 Microsoft Exchange PIM portlets

EX1006, 34 (showing a channel grid framework including a matrix). EX1003, ¶95.

Indeed, the Portal page developer can add as many rows and columns of portlets as they desire to the Portal page. EX1004, 247; EX1005, 134-139. Moreover, it would have been an obvious design choice to present the portlets in a grid, as this was one of a limited number of well-known ways to display widgets, such as portlets. Section IV.B.1. A POSITA would have been motivated to implement a grid layout to reduce the amount of time required to find a desired channel and to provide the user with a choice of channels without requiring searching. *Id.* Further, mobile phone and computer operating systems (MacOS, Windows, X-Windows) had been using a grid format with icons to display

applications and data for many years, so users of such devices would already be accustomed and facile with such layouts. *Id.* EX1003, ¶96.

As an example of user-selectable items representing authorized channels through which the user receives and/or interacts with portions of the secure user-centric information, a user receives and/or interacts with stock information from a stock portlet and/or a notification message center portlet. EX1004, 18, 48-49, 152, 989, 1000; EX1005, 241-242, 277; EX1006, 10; EX1007, 283-293, 308-324; EX1009, 6, 30, 40-50.

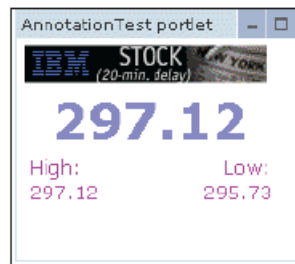


Figure 9-35 Portlet view after applying the annotator

EX1007, 287 (showing stock price information displayed within a stock portlet); *see also* EX1007, 319.

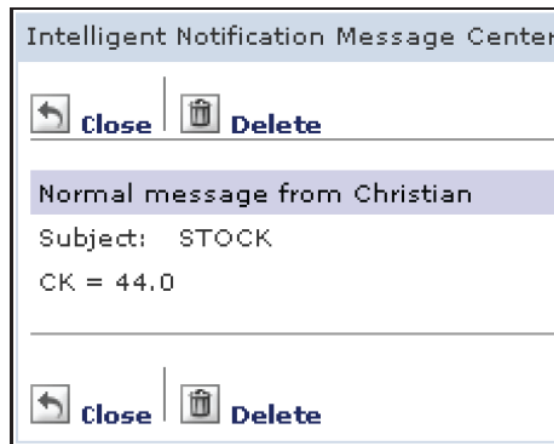


*Figure 1-36 Stock notification details*

EX1009, 48 (showing stock price information displayed within the notification message center portlet); *see also id.*, 7, 9, 12, 28, 58; EX1006, 10. EX1003, ¶97.

The portlets are channels at least under Petitioner's proposed construction. *See* Section VI.1. Each portlet comprises a visual component (e.g., the stock portlet and message center portlet on the Portal Page) on the user's platforms/devices that provides the user access to and interaction with the user-centric information. *E.g.*, EX1004, 18, 48-49, 152, 989, 1000; EX1005, 241-242, 277; EX1006, 10; EX1007, 283-293, 308-324; EX1009, 6, 30, 40-50. Further, each portlet comprises a component on the one or more servers that delivers the information to the user platforms/devices. EX1004, 4-11, 42-43, 48-49, 116, 152-154, 630, 899-900, 956; EX1005, 4-6, 16, 141, 164, 241, 473-479, 495; EX1006, 5, 41-42, 316; EX1007, 4; EX1009, 2-3, 30, 58, 80.

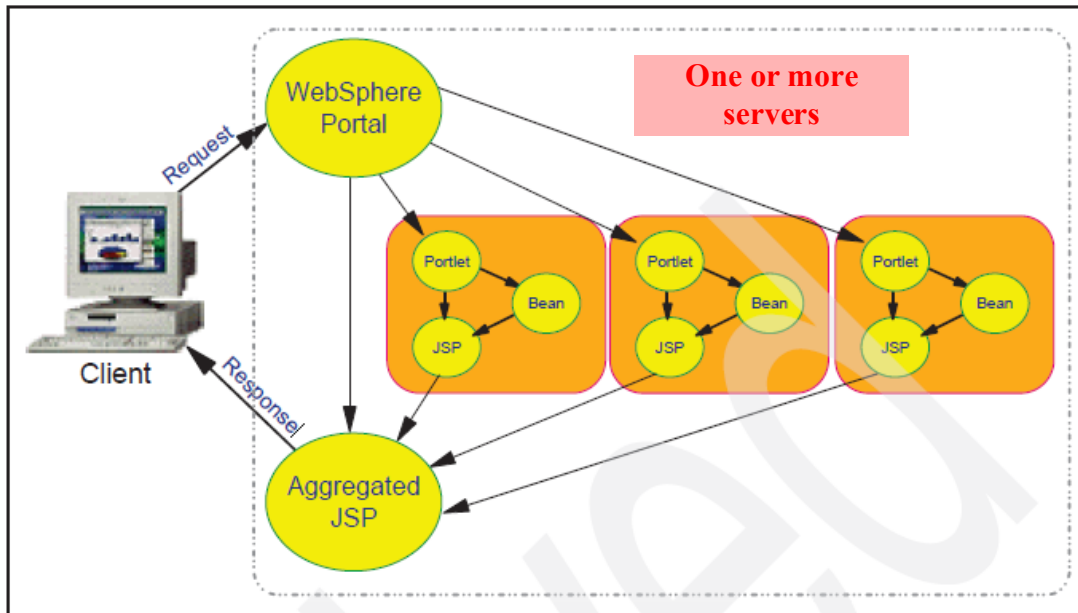


Figure 1-8 Portlet MVC architecture

EX1004, 26 (red annotation added). EX1003, ¶98.

WebSphere-Portal provides examples of Portal’s “channels” (portlets) implemented for the user to receive and/or interact with secure user-centric information, such as channels for receiving/interacting with information in a user’s calendar, RSS feed, e-mail, notifications, stocks, and internal corporate communications. EX1004, 3, 7, 30, 152, 620. EX1003, ¶¶99-100.

WebSphere-Everyplace-4 also discloses channels for interaction with secure user-centric information, e.g., e-mail, contacts, journal entries, or calendars:

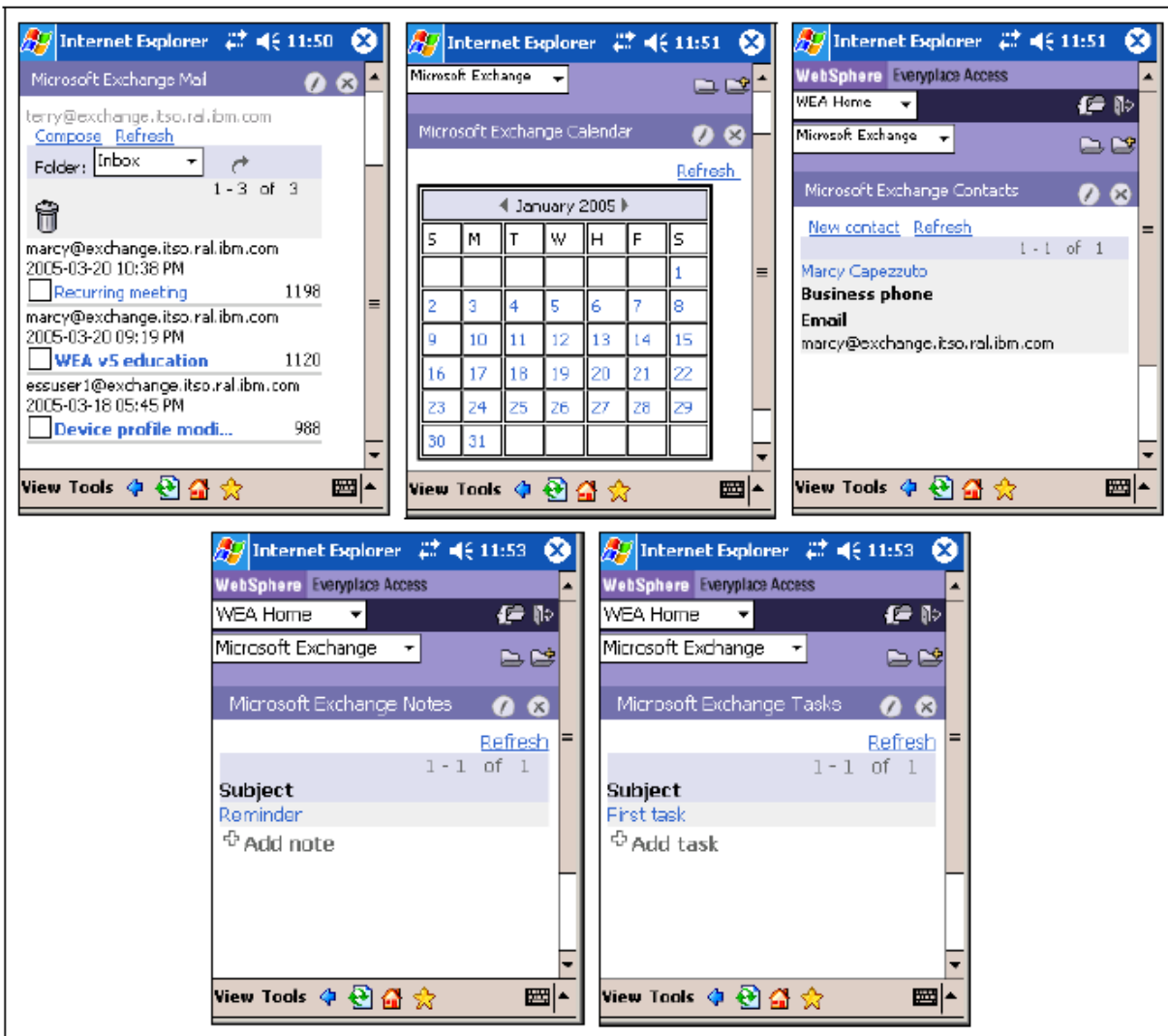


Figure 2-76 Microsoft Exchange Mail, Calendar, Contacts, Notes and Tasks

EX1008, 183. EX1003, ¶101.

[1.6] B) receiving configuration information from the user and transmitting the configuration information to at least one external computing device, wherein the configuration information is configured to cause the at least one external computing device to establish a user profile identifying user preferences, platform identities, and service support instructions that determine how the plurality of authorized channels behave on the user platform,

WebSphere-Combination teaches this element. EX1003, ¶102.

WebSphere-Combination discloses that the processor manages display and interaction with user-centric information by receiving configuration information from the user (e.g., input for a user profile) and transmitting that configuration information to at least one external device, where the configuration information establishes a user profile on the at least one external device. Ben-Natan defines a user profile as “[t]he collection of all the pieces of information relating to one user.” EX1005, 164; EX1004, 6-9, 23, 50, 401-406, 411, 462, 949; EX1006, 5, 7, 83, 411-412, 418; EX1007, 87, 115-118, 130, 243-245, 267; EX1008, 55, 101, 121-122, 128, 144-145, 157-161; EX1009, 6; *see also* EX1005, 11, 14, 164-165, 267, 342, 365-366.

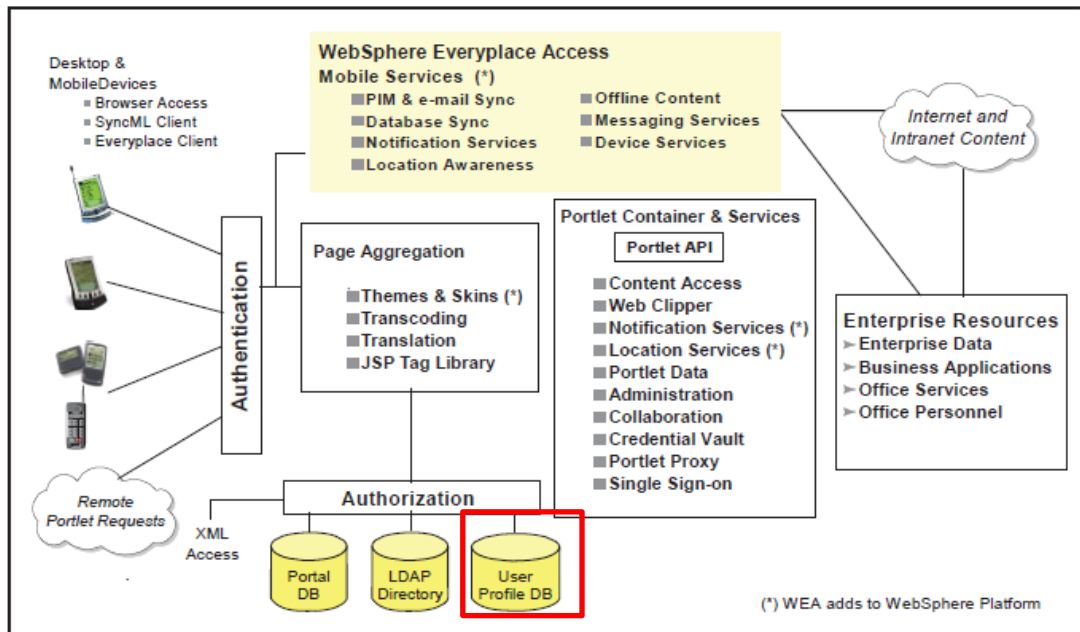
The screenshot shows a web browser window with the title 'WebSphere Portal'. The navigation bar includes links for 'New Page', 'Edit Page', 'Assign Permissions', and a 'Search' box. Below the navigation bar is a 'My Favorites' dropdown menu. The main content area is titled 'Edit My Profile' and contains a message: 'Change the information below and click OK to change your profile.' The form fields are as follows:

- \* User ID:
- Password:
- Confirm Password:
- \* First Name:  (indicated by a red arrow)
- \* Last Name:  (indicated by a red arrow)
- Email:
- Preferred language:  (indicated by a red arrow)

At the bottom of the form, there is a legend: '\* Required Field' and two buttons: 'OK' and 'Cancel'.

Figure 12-25 User profile

E.g., EX1004, 402 (showing an interface for entering configuration information editing aspects of a user profile).



EX1006, 5 (red annotations added) (showing a user profile database that stores configuration information establishing a user profile); *see also*, e.g., EX1005, 14 (“User profile information can be supported in an LDAP and/or a database.”); EX1003, ¶103.

Part of this user profile includes: (1) “user preferences,” (EX1004, 6-9, 16, 23, 50, 274, 430, 466; EX1006, 5-10, 13, 144; EX1007, 115-119; EX1008, 2-10, 134, 157-162; EX1009, 2, 7), which include the user’s custom alert settings (EX1006, 9-10; EX1009, 1-50) and the user-selected themes, skins, and behavior of the portlets (EX1004, 20, 27, 50-51, 61, 152, 296; EX1006, 42); and (2) platform identities, like the user’s devices (EX1004, 27, 287; EX1006, 340-341, 354;

EX1007, 240; EX1008, 2, 38, 144). *See also* EX1005, 4, 143-178, 246-247, 266, 353, 365, 484-486. EX1003, ¶104.

As one example of configuration information received from user establishing a user profile identifying user preferences, the WebSphere references describe how the user can subscribe to receive an alert/notification when a certain event happens (e.g., when a stock reaches a user-set threshold) and how the apparatus (one or more servers) stores this subscription as part of the user's preferences. EX1006, 9-10; EX1009, 2, 4, 6, 19, 30, 40-50, 80.

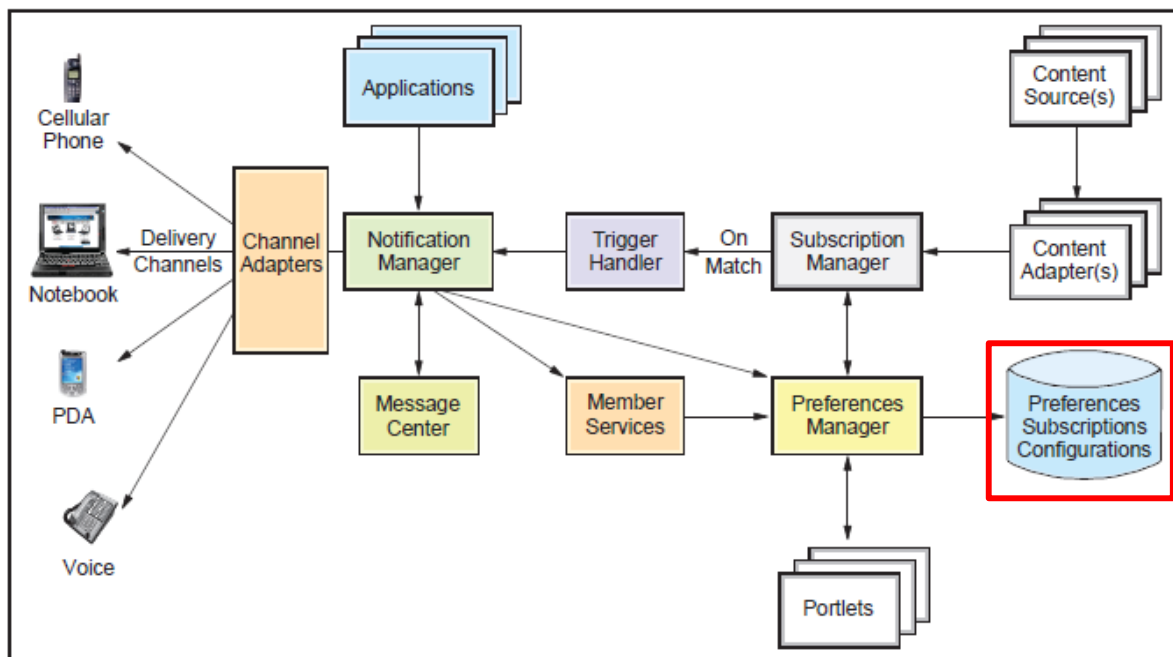


Figure 1-1 Intelligent Notification Services architecture

EX1009, 3 (red annotations added). EX1003, ¶105.

As another example of user preferences, the WebSphere references describe how the user can select themes, which dictate “the overall look and feel of the

portal,” and skins, which dictate “the look and feel of each portlet.” EX1004, 20, 61; *see also id.*, 58-64, 354, 424, 957-986; EX1005, 143-163, 242-243; EX1006, 5, 42, 48, 64-66; EX1009, 302. EX1003, ¶106.

The user’s platform identity (e.g., device information) is collected and stored in at least two instances: during initial device enrollment and/or at the start of a new session. EX1004, 27; EX1006, 340-341, 354; EX1007, 240; EX1008, 144; *see also* EX1005, 484-486. “The first time the device connects to the Device Services ... the enrollment server [] enrolls the device with the user.” EX1006, 354. “During the collection of user information ... [t]he user’s device is determined by information contained in the request header” and “is also stored in the session.” EX1004, 27; Section IV.B.3. EX1003, ¶107.

WebSphere-Combination also teaches that the user profile identifies service support instructions that determine how the secure user-centric information behaves on the at least one user platform at least because a POSITA would have understood or found it obvious that such service support instructions are necessary to provide the WebSphere-Combination’s disclosed functionality allowing a user to create a personalized device-independent desktop with a consistent “look and feel.” EX1004, 30, 48 (“Customization allows the user to organize the look and feel of the portal to suit their individual needs and preferences.”), 50, 61, 118, 255, 296, 424, 962; EX1006, 42; *see also* EX1005, 4, 7-8, 143-163, 242-243. EX1003, ¶108.

Indeed, the WebSphere references disclose that “[p]ortlets may need to behave differently based on the user” (EX1004, 296), *e.g.*, based on “user attributes” (*id.*, 16, 133, 287, 296-297), and that the apparatus “takes that information” about the user’s choices and the user’s device “and combines it to create a display that is appropriate for the device.” *Id.*, 27-28. When developing Portal pages, “[r]endering of page components is done using JSPs, images, style sheets, and other resources.” EX1004, 27; *see also id.*, 512-513. When delivering the Portal pages and their secure user-centric information to the user device(s), the one or more servers use transcoding technologies and markup languages to ensure the Portal page(s) display properly on the user’s device(s). *Id.*, 16, 37, 56, 125, 243-244, 287, 296-297; EX1006, 5, 13-14, 91-94; EX1007, 243-244; *see also* EX1005, 475-491. Thus, the instructions needed to deliver information to the user so that the portlet behavior (*e.g.*, look and feel) conforms to the user’s preferences and their device(s), as taught by the WebSphere references, constitute service support instructions that determine how the secure user-centric information behaves on the at least one user platform. EX1003, ¶109.

[1.7] wherein the at least one external computing device is configured to synchronize functions and features of one or more of the plurality of channels across a plurality of user platforms by deploying secure user-centric information to the plurality of user platforms;

WebSphere-Combination teaches this element. EX1003, ¶110.

WebSphere-Everyplace teaches an external computing device configured to synchronize functions and features of channels across user platforms by deploying secure user-centric information to user platforms. WebSphere-Combination provides details on synchronizing personal information and email portlets across the user's devices: "The mobile device users share PIM and e-mail data between their devices and their company mail servers using SyncML protocols and messages exchange. ... With this solution we can synchronize PIM (contacts, tasks, calendar, memos, etc.) and e-mail data with the IBM Everyplace client and native SyncML clients. You may synchronize your e-mail account with several devices, and you may define unique profiles for each of those devices." EX1008, 2, 29, 133 (Synchronization Server); *see also* EX1005, 4 ("[Portal users] can create a personalized device-independent 'desktop' with a consistent look and feel ..."), 7, 479-480 ("WEA includes ... synchronization functionality with Microsoft Exchange and Lotus Notes, and support for offline access."); Section VII.A.4. EX1003, ¶¶111-112.

WebSphere-Portal teaches how Portal configures an external computing device to synchronize content across platforms by deploying secure user-centric information to two or more platforms: "WebSphere Portal provides an engine whose main responsibility is to aggregate content from different sources and serve the aggregated content to multiple devices." EX1004, 14. A POSITA would have

understood that WebSphere-Portal's disclosure of serving aggregated content to multiple devices is synchronizing functions and features of channels across user platforms by deploying secure user-centric information to a plurality of user platforms. *Id.*, 9, 39, 995; EX1003, ¶113.

WebSphere-Combination shows “PIM & e-mail Sync and “Database Sync” for mobile devices:

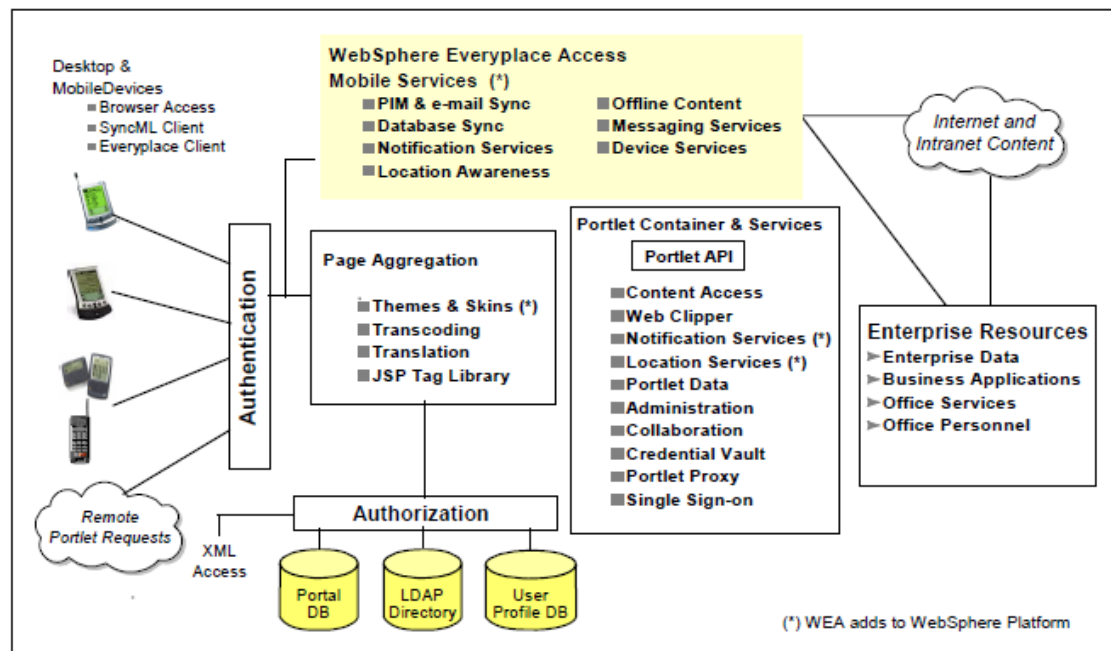


Figure 1-2 WebSphere Everyplace Access server

EX1006, 5 (showing synchronization of mobile services). EX1003, ¶114.

[1.8] wherein at least a portion of the user-centric information provided to the user through the plurality of authorized channels 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 user platform, and

WebSphere-Combination teaches this element at least because WebSphere-Combination discloses that at least a portion of user-centric information (*e.g.*, email, notifications) provided to the user through authorized channels (authorized portlets) is based in part on information access rights and/or security protocols respectively associated with the portlets, user, and user platform (device). EX1004, 2, 8-9, 15 (“Access to portlets is controlled by checking access rights during page aggregation, page customization, and other access points.”), 27-28 (Portal “collects information about the user’s choices, the device being used and the selected portlets [channels], then takes that information and combines it to create a display that is appropriate for the device.”), 34 (“WebSphere Portal uses a role-based approach to manage user authorization for accessing portal resources such as portlets and pages.”). *See also* EX1008, 2 (“[t]o use the e-mail synchronization system ... a user needs a user ID to log in.”); EX1006, 8 (“A user may have multiple unique profiles for each device they wish to synchronize to the mail server.”). EX1003, ¶¶115-116.

A POSITA would have understood the user-centric information related to an authorized channel is based at least in part on information access rights and/or security protocols, such as, *e.g.*, access privileges, permissions, role-based restrictions, and subscription services. EX1004, 11 (“Directory and Security Services ... are used for authentication and can also control and verify the resource access privileges or permissions granted to users.”), 12 (describing user subscription

services to third-party vendors). The user-centric information provided is thus controlled in part by information access rights and security protocols, including authorizations based on a role-based approach. *Id.*, 15 (“Access to portlets is controlled by checking access rights during page aggregation, page customization, and other access points.”), 34 (“[] Portal uses a role-based approach to manage user authorization for accessing portal resources such as portlets”), 19 (describing Portal “roles” for access rights and security protocols through “Resource Permission”); EX1003, ¶116.

WebSphere-Combination teaches that at least a portion of the user-centric information provided to the user through the plurality of authorized channels is based at least in part on information access rights and/or security protocols (roles, permissions, privileges, encryption protocols (e.g., SSL) and/or user authorization protocols (e.g., SSO)) respectively associated with the plurality of authorized channels. EX1004, 5, 7, 11-12, 15, 19-20, 27, 33-34, 39, 51, 76, 134-137, 630, 642, 665, 899-900; EX1005, 5, 8, 15, 191-196, 225-226, 270, 380-401; EX1006, 5, 7, 22, 30-33, 310-311, 315-337, 378-383; EX1007, 28, 182-187, 320-322, 332, 342; EX1008, 2, 70, 162, 182-184, 234; EX1009, 277, 289-290, 314, 324-355. EX1003, ¶117.

For example, the user must sign into their account with their username and password to access the secure user-centric information and, e.g., match with the roles and/or permissions assigned to them:

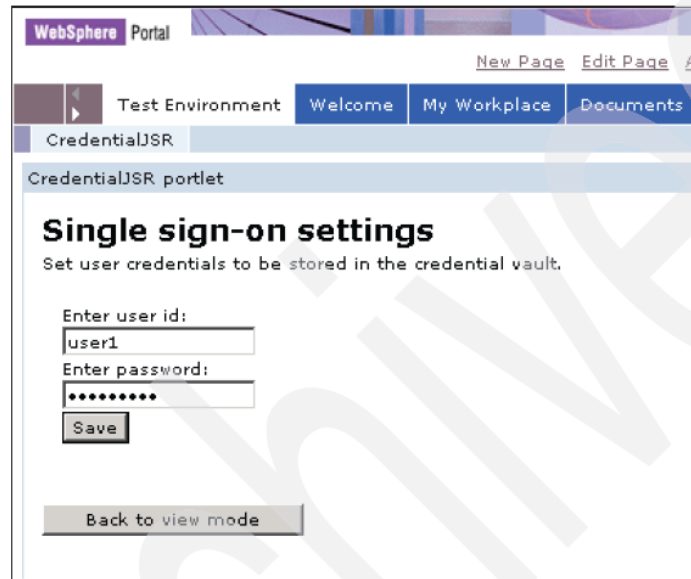
The screenshot shows a WebSphere Portal interface. At the top, there's a 'WebSphere Portal' header with links for 'New Page', 'Edit Page', and 'Add Page'. Below this is a navigation bar with 'Test Environment', 'Welcome', 'My Workplace', and 'Documents'. The main content area is titled 'CredentialJSR' and 'CredentialJSR portlet'. It features a section for 'Single sign-on settings' with the instruction 'Set user credentials to be stored in the credential vault.' There are two input fields: 'Enter user id:' with the value 'user1' and 'Enter password:' with masked characters. A 'Save' button is below the password field, and a 'Back to view mode' button is at the bottom.

Figure 21-16 Running Edit mode of the portlet

EX1004, 665.

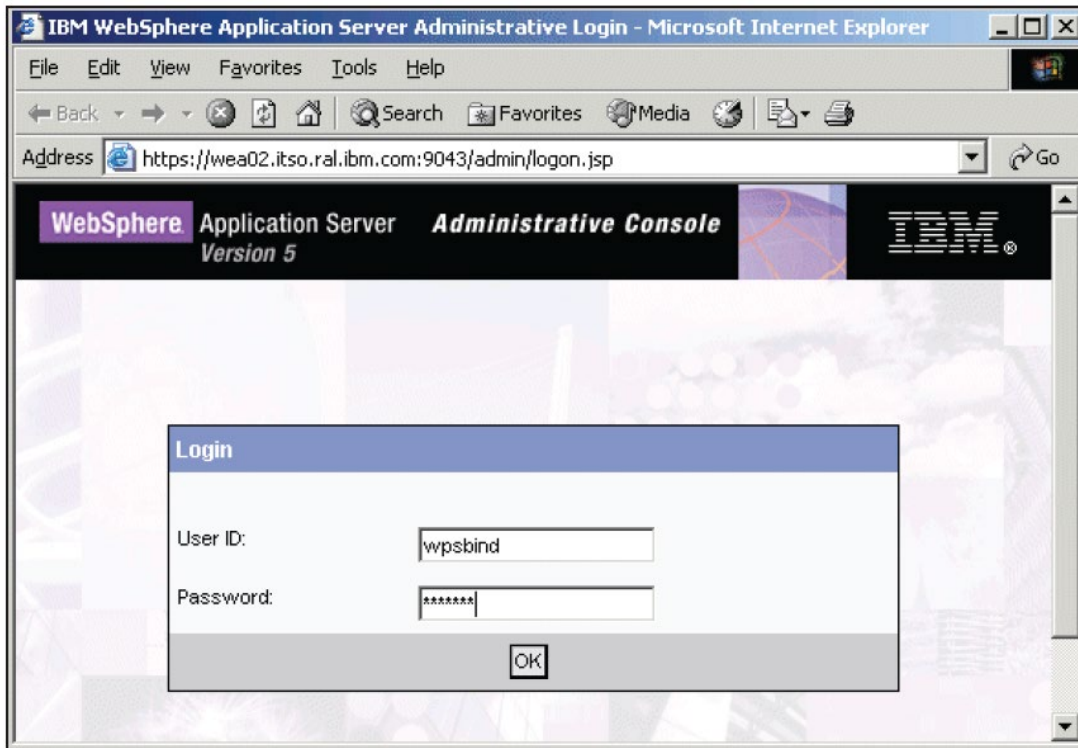


Figure 10-16 WebSphere Everyplace Access Login

EX1009, 347.



Figure 10-19 Login to WebSphere Everyplace Access

EX1007, 321. EX1003, ¶118.

In at least some instances, the user's access rights are portlet-specific in that at least one portlet (the Sametime messaging portlet) requires the user to sign in with the user's login information for that specific portlet. EX1006, 378-383.

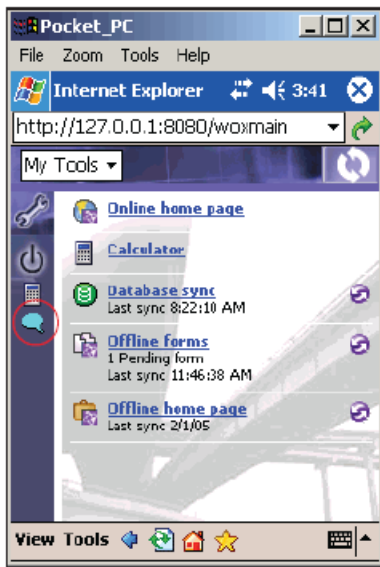


Figure 10-3 Starting Sametime from Everyplace Client on Pocket PC

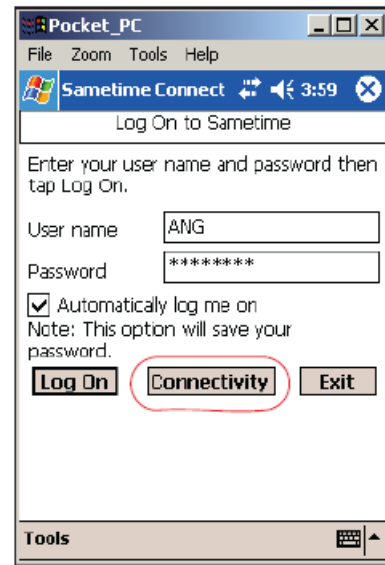


Figure 10-4 Startup window on Pocket PC

EX1006, 378. EX1003, ¶119.

The user's access to the secure user-centric information is limited by their role and permissions:

**Table 10-2** Role Definitions

| ROLE                   | DESCRIPTION                                                                                                                                           |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Administrator          | Super-user. Can do everything including creating, configuring, and deleting resources. Administrator can also change the access control configuration |
| Security Administrator | Can create and delete role assignments for roles tied to specific resources                                                                           |
| Delegator              | Can assign users or user groups to roles                                                                                                              |
| Manager                | Creates, configures, and deletes new or existing resources for use by one or more users                                                               |
| Editor                 | Creates, and configures new or existing resources for use by one or more users                                                                        |
| Privileged User        | Can create new private pages, view portal content, and personalize portlets/pages                                                                     |
| User                   | Can view portal content                                                                                                                               |
| No Access              | Can do nothing                                                                                                                                        |

EX1005, 193. EX1003, ¶120.

[1.9] wherein at least a portion of the user-centric information provided to the user through the plurality of authorized channels is based at least in part on the user profile and is provided to the user without being requested by the user; and

WebSphere-Combination teaches this element at least because WebSphere-Portal and WebSphere-Everyplace disclose a portion of user-centric information is provided to the user through authorized channels (portlets) based in part on a user profile without being requested by the user. EX1003, ¶121.

For example, WebSphere-Everyplace-1 teaches notification based on user profiles (element [1.6]), and that user-centric information is *proactively* provided to a user through authorized channels without being requested by the user. *E.g.*, EX1006, 9-10 (“The Intelligent Notification Services are used to deliver information to users through different delivery channels (defined by the users) based on their preferences. This service allows the enterprise to proactively notify mobile workers (based on their subscription to particular notification applications) of important information and events. The notifications can be generated (when criteria is met) from a wide variety of sources, such as e-mail, news feeds, data management events, and directly from business applications.”). Similarly, WebSphere-Everyplace-4 discloses that “the user receives notifications [] based on user preferences (such as the weather forecast, news, e-mail notification based on subject, and so on).” EX1009, 2. WebSphere-Everyplace-4 describes *pushing* secure user-centric information through authorized channels based on subscriptions (without being requested by the user). *Id.*, 5, 19; *see also* EX1006, 10 (“a subscriber could be notified when their favorite stock shifted five points”). A POSITA would have understood such pushed notifications as being based on user profiles (e.g., preferences, subscriptions), thus providing to the user notifications and updates without request from the user. EX1003, ¶122.

WebSphere-Everyplace-4 illustrates a content “push” to subscription manager (via the content adapter, which presents it in the proper form depending on the device capabilities):

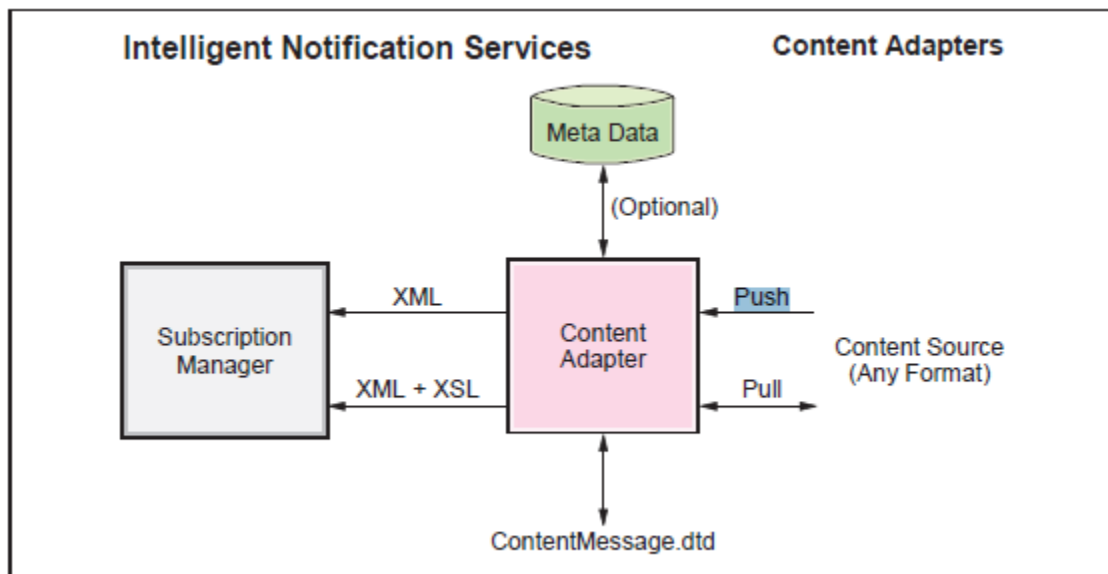


Figure 1-3 Components of a content adapter

EX1009, 5, 10 (describing BlackBerry “message push”, blue highlighting added); EX1003, ¶123.

WebSphere-Everyplace-3 describes how the synchronization process is based on “a personal profile” without being requested by a user because a user’s email and calendar is synchronized and updated as new emails are received, or calendar entries have passed. EX1008, ix, 2 (“[W]e can synchronize PIM (contacts, tasks, calendar, memos, etc.) and e-mail data with the IBM Everyplace client and native SyncML clients.”). EX1003, ¶124.

WebSphere-Portal also describes stocks tickers and exchange rates which a POSITA would have understood as providing secure user-centric information to a user through portlets based on a user profile without being requested by the user. *E.g.*, EX1004, 18 (describing portlets with stock tickers and exchange rates), 48 (describing personalization and page aggregation, which are based on user profiles, and describing stock tickers), 23, 152 (describing “live” portlets), 900; EX1003, ¶125.

WebSphere-Portal also explains how Portal’s “cooperative portlets” also provide secure user-centric information without being requested by a user by “remembering the user choice for each step (so that only that choice is presented or automatically executed during subsequent interactions), supporting cross-page data transfer, so that the next step in the task is automatically surfaced to the user ...” EX1004, 39, 226, 741; *see also* EX1005, 269. A POSITA would have understood WebSphere-Portal’s disclosure of Portal’s cooperative portlets to provide secure user-centric information based on the user profile without being requested by the user. EX1003, ¶126.

[1.10] wherein at least a portion of the secure user-centric information provided to the user through the plurality of authorized channels is received based in part on a bi-directional interrogation of one or more of the plurality of authorized channels, wherein the bi-directional interrogation comprises the one or more of the plurality of authorized channels interrogating an identity management server,

WebSphere-Combination teaches this element at least because both WebSphere-Portal and WebSphere-Everyplace teach that at least a portion of secure user-centric information is provided to the user through authorized channels (portlets) based in part on bi-directional interrogation (queries and answers in two directions) between authorized channels (portlets) and an identity management server<sup>9</sup>. EX1003, ¶127.

First, WebSphere-Portal teaches Portal's portlet authentication and authorization use an identity management server such as Portal's Authentication Server, Authorization Server, Application Server (which uses an LDAP server), and/or Credential Vault. EX1003, ¶128.

WebSphere-Portal teaches portlets bi-directionally interrogate Portal's Authentication Server to confirm user rights, which requires establishing a user identity. EX1004, 15 ("The Authentication Server is a third-party authentication proxy server that sits in front of the Portal engine. Access to portlets is controlled by checking access rights during page aggregation, page customization, and other access points."), 16 ("A user's authorization for a particular resource such as page

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<sup>9</sup> The '641 patent states that "[t]he identity management server 208 may be a hardware device or software application that may provide user, application, device, location, equipment and information authentication." EX1001, 8:26-29.

or a portlet is handled by the portal engine.”); EX1003, ¶129. WebSphere-Portal illustrates an authentication and authorization server in Figure 1-3 below:

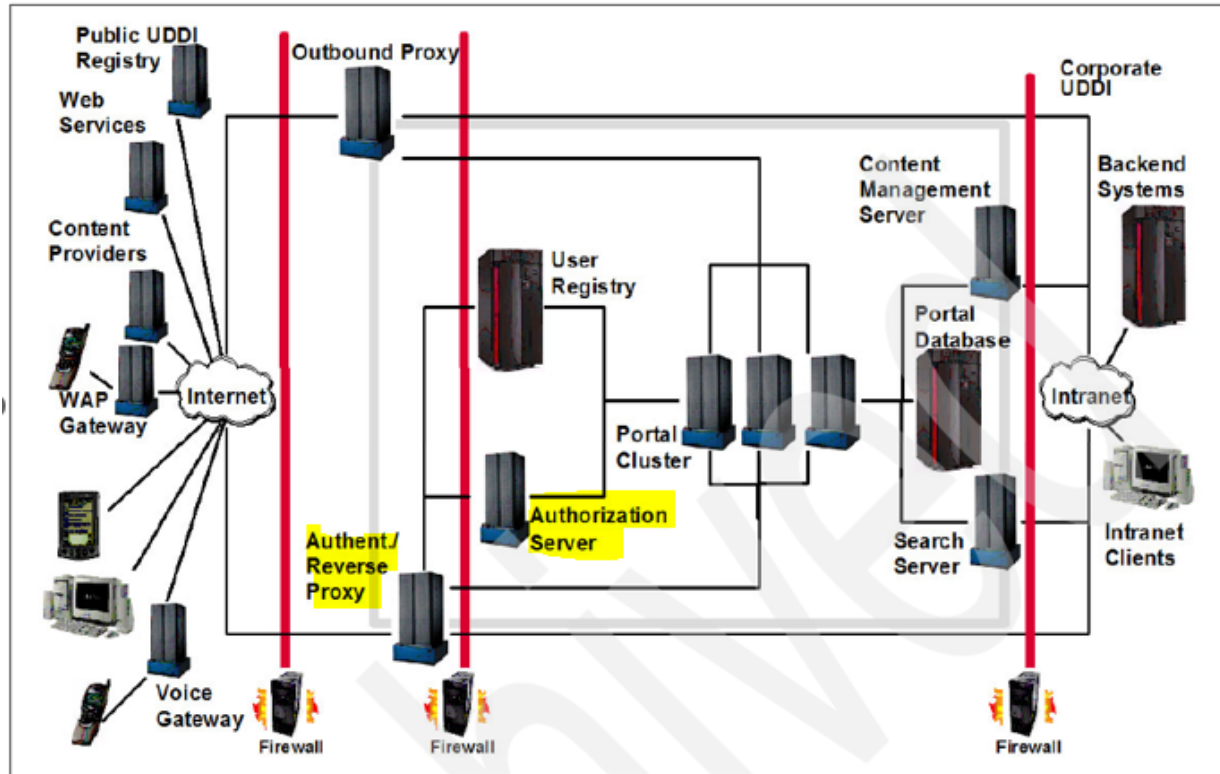


Figure 1-3 Distributed Portal system

EX1004, 10 (highlighting added). EX1003, ¶129.

Second, WebSphere-Portal also teaches portlets bi-directionally interrogating an LDAP server via Portal’s WebSphere Application Server for user and portlet authentication. EX1004, 5 (“The Lightweight Directory Access Protocol (LDAP) infrastructure provides a foundation for deploying comprehensive identity management and advanced software architectures such as Web services.”), 11 (“The Directory and Security Services provide support for a directory of users accessible through LDAP. These services are used for authentication and can also control and

verify the resource access privileges or permissions granted to users. ... WebSphere Application Server uses LDAP to perform authentication. The client ID and password are passed from WebSphere Application Server to the LDAP server.”). WebSphere-Portal illustrates the LDAP server in Figure 1-6 below:

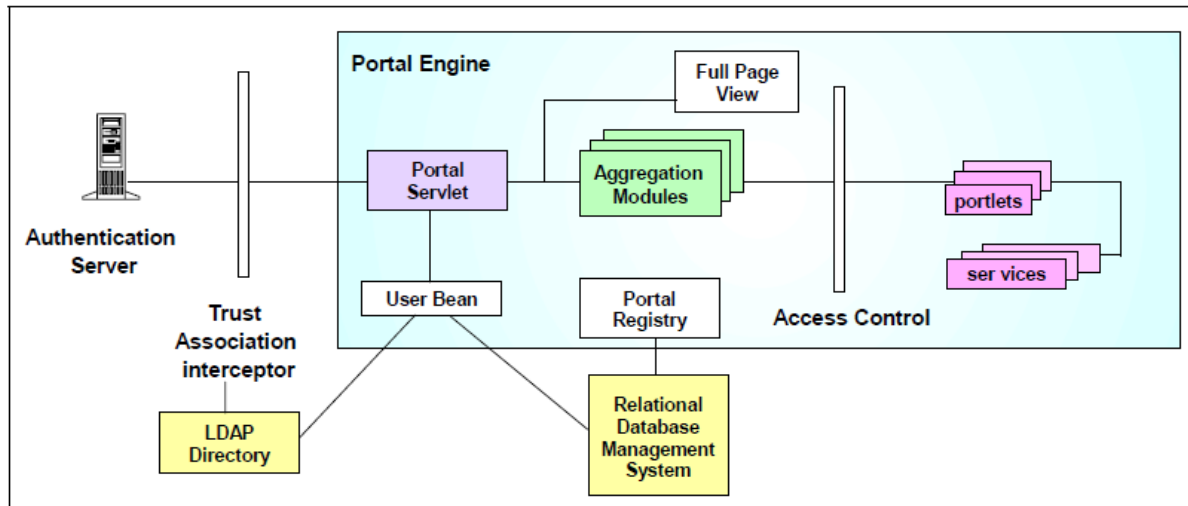


Figure 1-6 WebSphere Portal engine

EX1004, 15. EX1003, ¶130.

Third, WebSphere-Portal also teaches portlets bi-directionally interrogating Portal’s Credential Vault for portlet authentication using SSO. EX1004, 76 (“Use the Single Sign-On screen to add sample code to support credential vault handling which is used to safely store credentials that are used in portlet authentication.”). WebSphere-Portal explains that portlets using Portal’s Credential Vault can access remote applications that require authentication through credentials such as “user IDs and passwords, SSL client certificates and private keys.” EX1004, 630, 637-640 (describing forms of bi-directional credentials for portlets such as HTTP Basic

Authentication, HTTP Form-Based Authentication, and tokens). A POSITA would have understood these credentials were a form of bi-directional interrogation between the portlet and the identity management server. WebSphere-Portal illustrates bi-directional use of a Credential Vault in Figure 20-1 below:

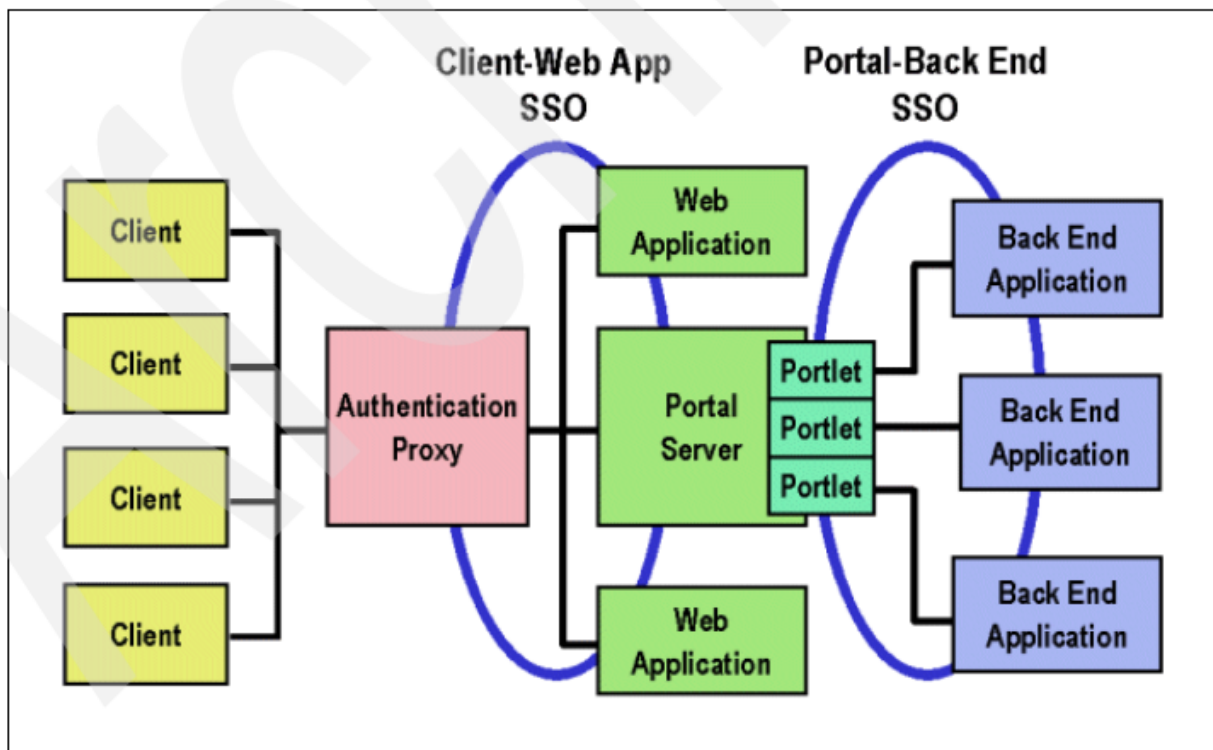


Figure 20-1 Credential Vault in action

EX1004, 630. EX1003, ¶131.

Thus, at least the Authentication Server, LDAP server, and/or Credential Vault service thus act as an identity management server in Portal. A POSITA would have understood that portlets seeking to authenticate with these identity management servers would do by sending and answering queries (bi-directional interrogation).

EX1003, ¶132; *see also* EX1004, 899-900 (describing SSL and LTPA token authentication).

WebSphere-Portal illustrates the Authentication Server, LDAP server and Credential Vault service in Figure 1-5 below:

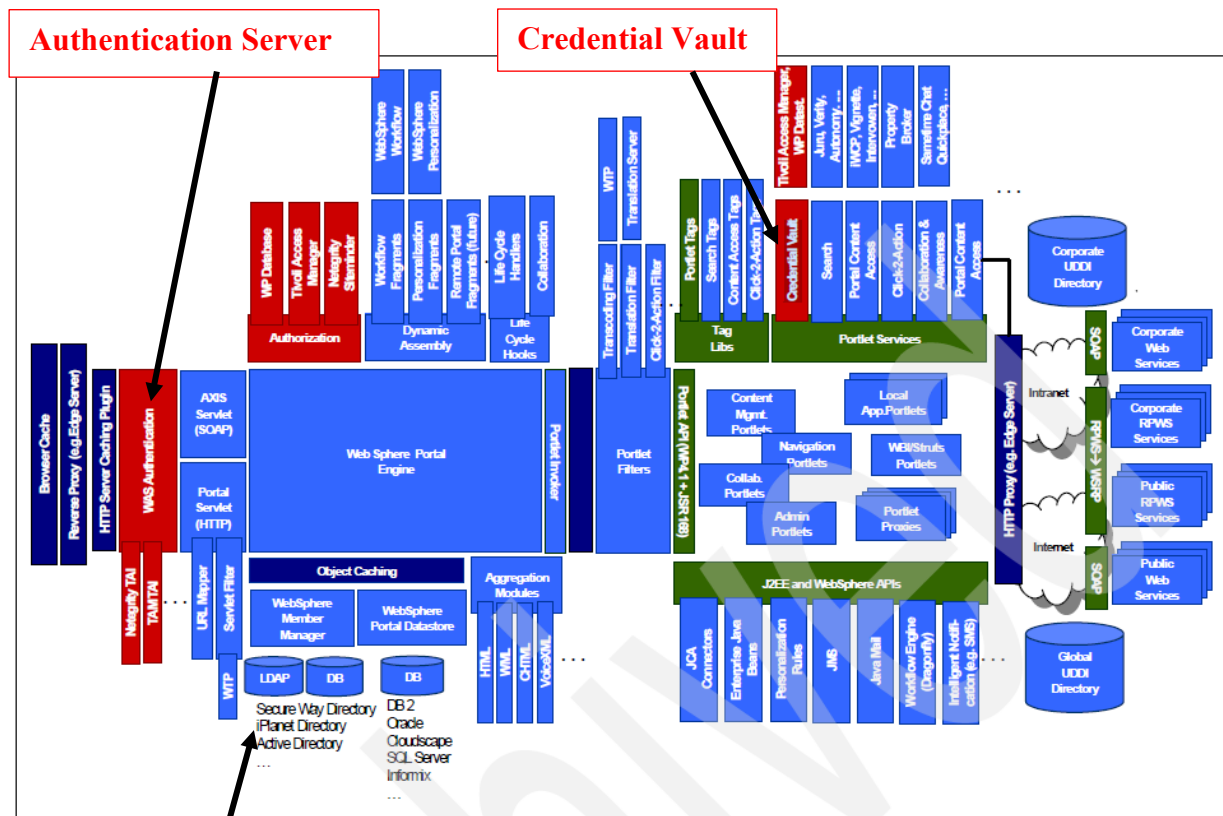


Figure 1-5 WebSphere Portal architecture

EX1004, 14 (annotations added). WebSphere-Portal's Figure 1-5 shows an Authentication Server (WAS [WebSphere Application Server] Authentication), LDAP server, and Credential Vault leading to the portlets. *Id.*; EX1003, ¶133. A skilled artisan would have understood that these servers use bi-directional

interrogation with the portlets. EX1006, 24 (“WebSphere Everyplace Connection Manager also protects the data with bi-directional user and server authentication and data encryption, ensuring that the mobile data is protected and secure.”); *see, e.g.* EX1011, 144 (extrinsic evidence showing knowledge of POSITA on “Server and client authentication[:] This type of authentication provides for two-way authentication between the LDAP client and the LDAP server.”); *see also* EX1012, 23; Section IV.B.2; EX1003, ¶133.

WebSphere-Portal discloses bi-directional interrogation with Portal’s identity management servers because it teaches “SSL authentication, [where] the server exchanges the server certificate with the client, and optionally, the client exchanges the client certificate with the server. This certificate exchange is for purposes of verify[ing] both server and client (optional) identities.” EX1004, 899. WebSphere-Portal provides an illustration of the bi-directional nature of authentication in Figure 29-17:

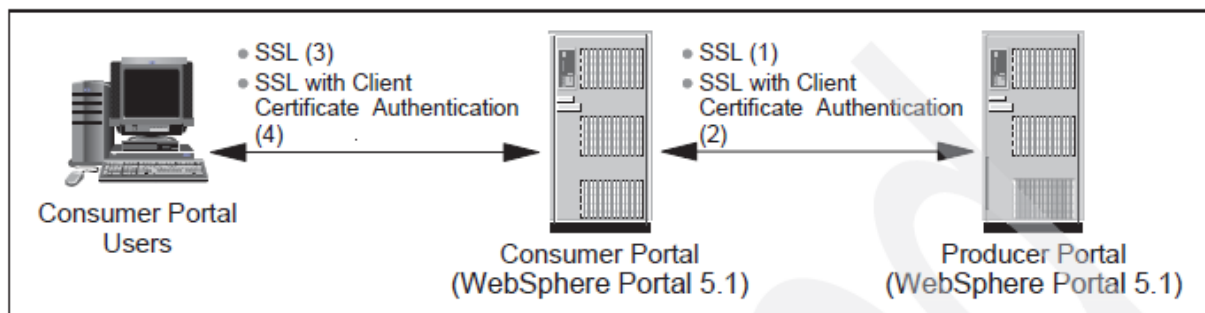


Figure 29-17 SSL scenarios for WSRP with WebSphere Portal

EX1004, 900 (showing bi-directional interrogation). EX1003, ¶134.

Ben-Natan also discloses portlets bi-directionally interrogating through evaluating content from the identity management server (e.g., Authentication Server, LDAP Server and/or Credential Vault service) and the identity management server interrogating and/or evaluating contents of the portlet via SSL and certificate exchange. EX1005, 380 (“A method to ensure privacy is to enable WebSphere Application Server and WebSphere Portal to access the LDAP server with SSL enabled. ... SSL is a security protocol that supports data encryption, authentication, and data integrity verification. An SSL operation consists of an initiation and a data transfer. At the initiation stage, the client/server and the server try to set up the session and connection state by coming to an agreement on encryption and authentication. Agreement is made once the protocol version is chosen, the encryption algorithm chosen, and both parties have authenticated each other (optional). Upon successful initiation stage, data will be transferred using public-key encryption. Data required for the public key encryption (including keys) is done through certificates. Certificates need to be created for each component and stored on each counterparts’ key database.”); EX1004, 630 (“By using Credential Vault portlets, you can provide a single sign-on experience to the user, hiding the login challenge from the user. ... Portlets running on WebSphere Portal may need to access remote applications that require some form of authentication by using appropriate credentials. Examples of credentials are user IDs and passwords, SSL

client certificates and private keys.”); *see also* EX1011, 144 (“Server and client authentication[:] This type of authentication provides for two-way authentication between the LDAP client and the LDAP server. With client authentication, the LDAP client must have a digital certificate (based on the X.509 standard). This digital certificate is used to authenticate the LDAP client to the server. Server and client authentication: This type of authentication provides for two-way authentication between the LDAP client and the LDAP server. With client authentication, the LDAP client must have a digital certificate (based on the X.509 standard). This digital certificate is used to authenticate the LDAP client to the server.”). A POSITA thus would have understood that SSL is a form of bi-directional interrogation. EX1003, ¶135.

WebSphere-Everyplace also teaches this element. For example, WebSphere-Everyplace-1 explains bi-directional user and server authentication (i.e., through an identity management server) and data encryption for mobile data, a form of bi-directional interrogation to evaluate channel content. EX1006, 24 (“WebSphere Everyplace Connection Manager also protects the data with bi-directional user and server authentication and data encryption, ensuring that the mobile data is protected and secure.”); EX1003, ¶136.

Similarly, WebSphere-Combination explains how database synchronization and notifications require portlets to bi-directionally interrogate an identity

management server. EX1008, 2 (resolving synchronization conflicts), 4, 209 (“DB2 Everyplace Synchronization Server carries out bi-directional synchronization of data between the database on the mobile device and the source database on the server.”); EX1009, 2-7, 19-20 (Intelligent Notification Services), 41-48 (Subscription Manager; stock notification). EX1003, ¶¶137-138.

[1.11] wherein the bi-directional interrogation further comprises the identity management server and a web services gateway interrogating the one or more of the plurality of authorized channels, wherein the web services gateway is a tool through which the channel grid framework interacts with the identity management server.

WebSphere-Combination teaches this element. EX1003, ¶139.

WebSphere-Portal discloses bi-directional interrogation between at least one authorized channel and an identity management server. *See* element [1.10]. EX1003, ¶139.

WebSphere-Portal also discloses a web services gateway interrogating portlets, where the web services gateway is a tool for Portal to interact with its identity management services. Portal’s WebSEAL, Wireless Access Point (WAP) Gateway, HTTP proxy edge server, and Network Dispatcher each constitute a “web

services<sup>10</sup> gateway” in Portal. EX1004, 10 (Figure 1-3), 13 (Figure 1-4), 14 (Figure 1-5), 15 (Figure 1-6), 630 (Figure 20-1). WebSphere-Portal teaches that Portal uses these web services gateways as a tool to access at least remote portlets using the Internet via standard Internet protocols. EX1004, 17 (“WebSphere Portal provides services for exposing and integrating portlets as remote portlets hosted on another portal platform via Web Services technology.”). WebSphere-Portal also explains that Secure Socket Layer (SSL) is a protocol used by Portal’s Web Services for Remote Portlets (“WSRP”) standard. EX1004, 899; EX1037; EX1038. EX1003, ¶140.

WebSphere-Portal explains how “Portal is configured so that incoming [authentication] requests pass through an authentication component such as WebSphere Application Server, WebSEAL or other proxy servers.” EX1004, 16. WebSphere-Portal explains these gateways apply to “Web services.” *Id.*, 5 (“[LDAP] infrastructure provides a foundation for deploying comprehensive

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<sup>10</sup> “Web services” means a “collection of Web protocol-based applications” that “provide[s] business functionality through an Internet connection” and “use standard Internet protocols such as HTTP, XML, and SOAP.” EX1017, 564; EX1004, 12 (describing open standard of Web Services for Remote Portals); Section IV.B.3. EX1003, ¶140.

identity management and advanced software architectures such as Web services.”).

EX1003, ¶141.

WebSphere-Portal's Figure 1-5 shows examples of a Web Services Gateway because it shows Corporate Web Services and Public Web Services connect via SOAP to the internet to HTTP Proxy (Edge Server) and then Portal Content Access and Credential Vault in Figure 1-5 below. EX1004, 14.

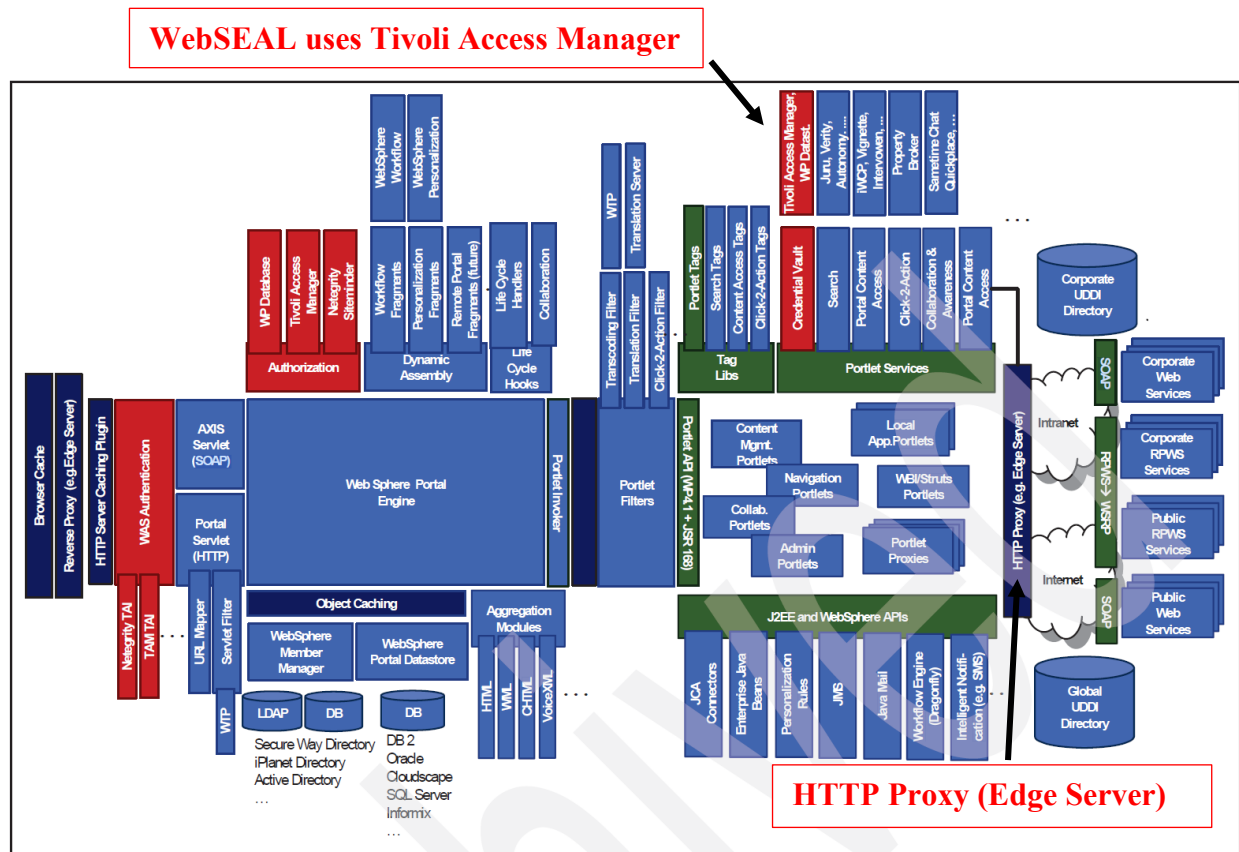


Figure 1-5 WebSphere Portal architecture

EX1004, 14 (annotations added showing web services gateways). WebSphere-Portal's Figure 1-5 also shows WAS Authentication connected to an AXIS Servlet

(SOAP) to the Web Sphere Portal Engine which leads to Portlet API. *Id.*; EX1003, ¶142.

WebSphere-Everyplace also teaches a “web services gateway” such as Portal’s Edge Server. *E.g.*, EX1006, 2, 25 (“WebSphere Edge Server: Can be used with Everyplace Access to distribute the application processing to the edge of the network while at the same time ensuring centralized administration and application control.”); EX1009, 275 (“a reverse proxy such as IBM WebSphere Edge Server includes a reverse proxy component and passes HTTP traffic to one of several servers based on the URL received from the Everyplace Connection Manager machine.”), 308, 330; *see generally* EX1007, 207-236 (Chapter 7 - “Accessing Web Services”); *see also* EX1005, 387-388 (reverse proxy), 483-484 (“[T]he WebSphere Wireless Gateway (another component within WebSphere Everyplace) abstracts all the networks to an IP network resolving all the complexities.”), 495; *see also* EX1026, 7. EX1003, ¶143.

## 2. Claim 2

2. The apparatus of claim 1, wherein: the plurality of authorized channels includes at least a first authorized channel through which the user receives and/or interacts with first authenticated channel information constituting a first portion of the secure user-centric information; the first authenticated channel information is provided by at least one authenticated channel application and/or at least one authenticated service; and the plurality of user-selectable items displayed in A) includes at least a first user-selectable item representing the first authorized channel.

WebSphere-Combination teaches this element because at least WebSphere-Portal discloses authorized channels (portlets) through which users receive and/or interact with authenticated secure user-centric information from an authorized channel, which is provided by at least one authenticated channel application and/or authenticated service. EX1004, 630 (“Portlets running on WebSphere Portal may need to access remote applications that require some form of authentication by using appropriate credentials.”). As discussed for element [1.5], Portal displays user-selectable items representing channels (portlets). EX1003, ¶144.

A POSITA would have understood that Portal uses a desktop user interface which makes the screen analogous to a user’s desktop, where various items on the desktop are replaced by graphic icons on the screen, such icons being user-selectable items representing authorized channels. The channel grid services this purpose by laying out portlet applications (channels) across the surface of the screen. EX1017, 154 (definition of desktop); EX1003, ¶¶145-146.

Examples of a Portal page with user-selectable items are shown below:

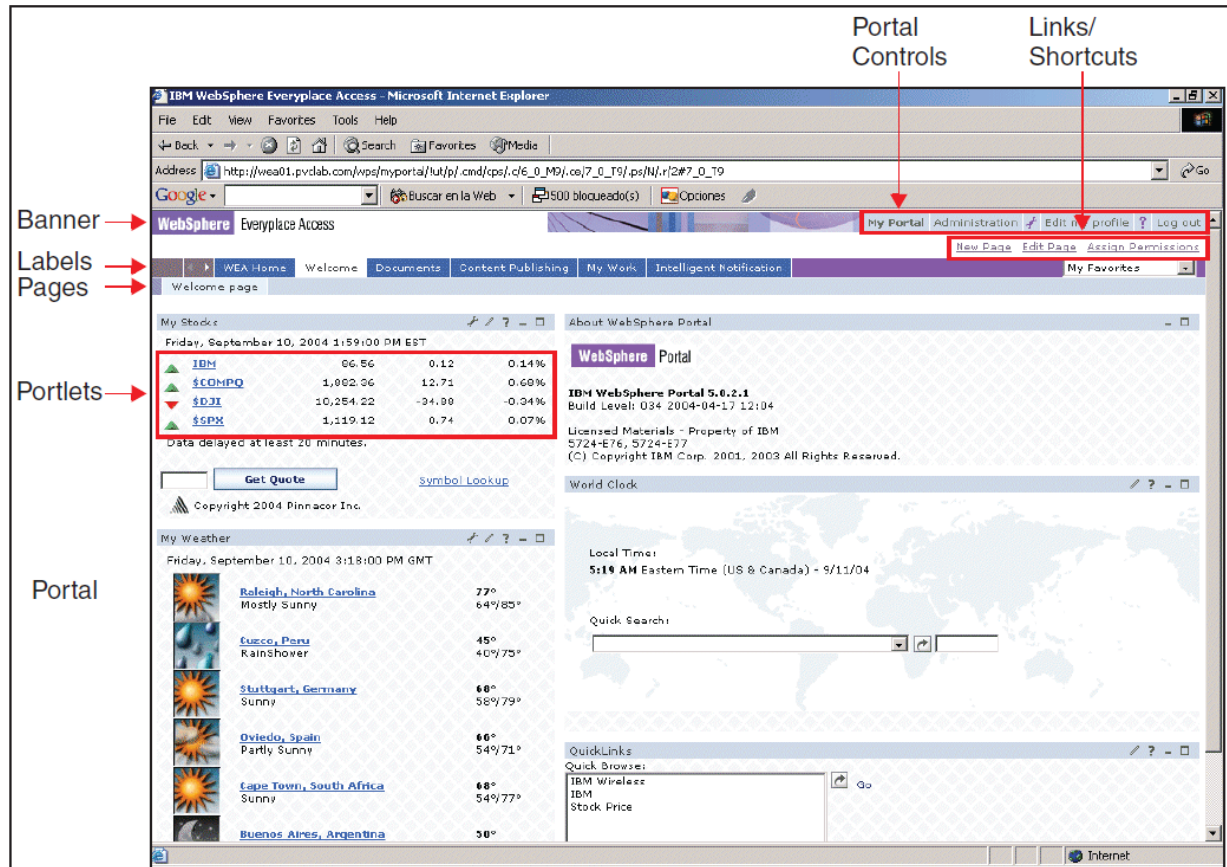


Figure 3-1 Welcome page example

EX1006, 43;

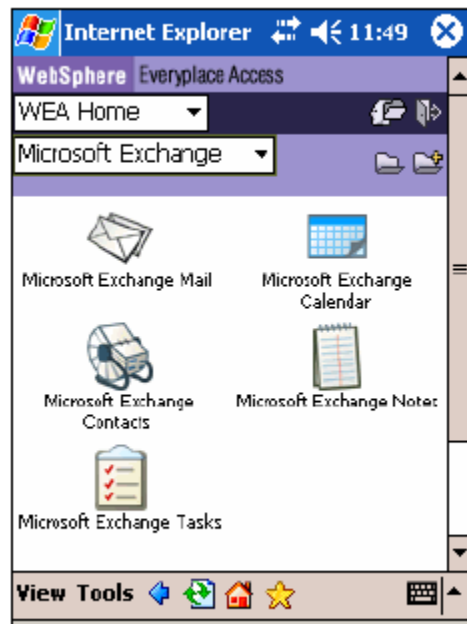


Figure 2-7 Microsoft Exchange PIM portlets

EX1006, 34. EX1003, ¶147.

WebSphere-Portal also discloses authenticated channel information constituting a first portion of secure user-centric information provided by an authenticated portlet service, such as e-mail, calendars, syndicated news, industry applications. EX1004, 7-8 (“WebSphere Portal’s extensible framework allows the end user to interact with enterprise applications, people, content, and processes.... WebSphere Portal provides additional services (see Figure 1-2) such as Single Sign-On, security, directory services, content management, personalization, search, collaboration, search and taxonomy, support for mobile devices, accessibility support, internationalization, e-learning, integration to applications, and site analytics.”); EX1009, 2. EX1003, ¶148.

3. Claim 3

3. The apparatus of claim 1, wherein the user platform includes at least one of: a desktop computer; a laptop computer; a tablet computer; a net-book computing device; a handheld computing device; a personal, enterprise, or portable digital assistant; a telecommunications device including one of a telephone, a cell phone, and a smart phone; ...; and a game console.

WebSphere-Combination teaches this element at least because WebSphere-Portal discloses user platforms including at least a desktop computer, cell phone and PDA:

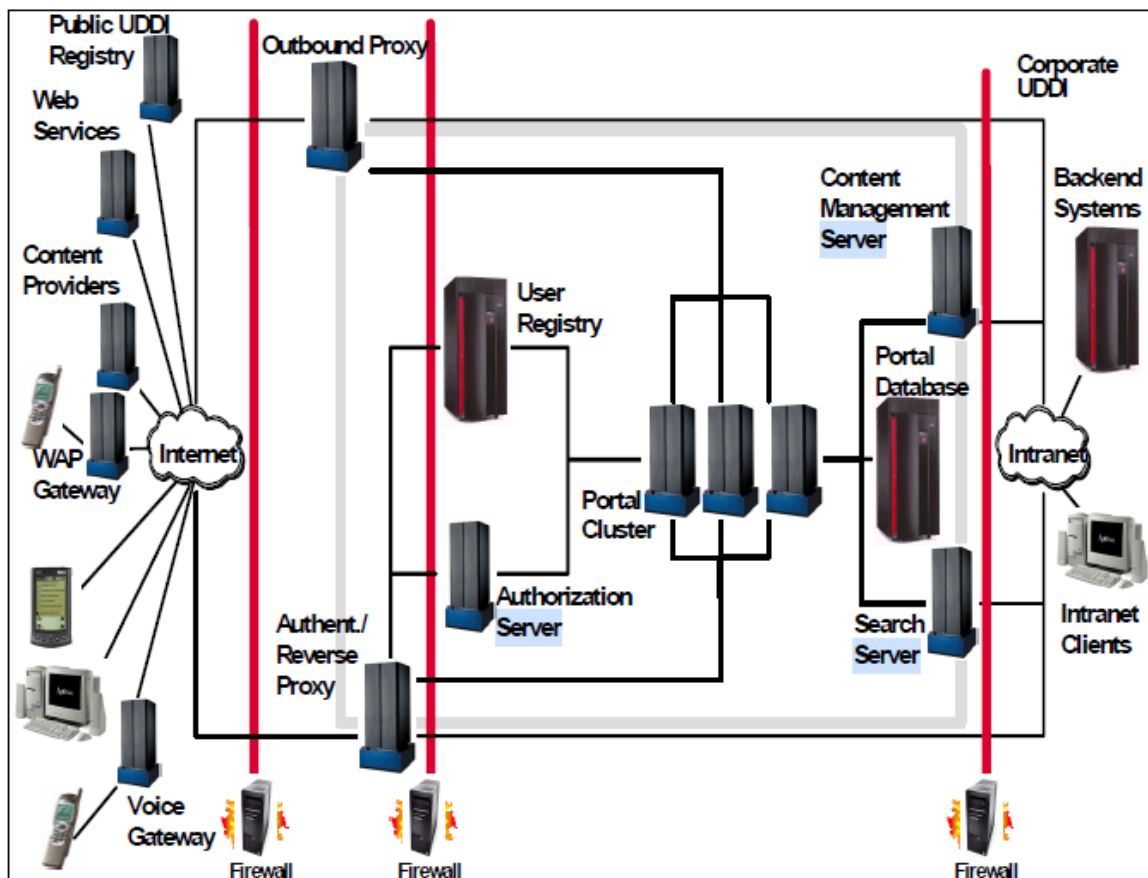


Figure 1-3 Distributed Portal system

EX1004, 10; *see also* EX1006, 23 (desktop, Pocket PC); EX1007, 307 (PDAs).  
EX1003, ¶149.

**4. Claim 4**

4. The apparatus of claim 1, wherein the secure user-centric information includes at least one of: text information; graphic information; one or more pictures; one or more videos; audio or digital sound; ...; content associated with an executing computer application; ...; instant messaging/SMS information; ...; environmental monitoring information; financial services information; enterprise resource planning information; enterprise content management information; ...; project management information; product lifecycle management information; RSS (Really Simple Syndication) reader information; ...; one or more word processing documents; one or more spreadsheets; one or more presentation/slide shows; email; and address book information.

WebSphere-Combination teaches this element at least because WebSphere-Portal discloses Portal's information as including at least text, graphics, pictures, financial services information, and RSS. EX1004, 8, 18, 39. EX1003, ¶150.

WebSphere-Combination discloses that Portal "[o]ffers numerous portlets for e-mail, calendars, syndicated news, industry applications and many other functions," including text, graphics, enterprise content, RSS, word documents, weather, email, and address book information. *Id.*, 8, 12-13 (RSS), 16, 18 (stocks), 41-42 (enterprise resource planning information, enterprise content management information), 632 (word processing, personnel records, bank accounts); EX1005, 8 (financial services), 9 (RSS), 241 (email), 245, 275 (graphic poll results), 474 (human resources content); EX1009, 2 (messaging/SMS, voice), 6 (news, weather and

stocks). An example of text and graphic information displayed in a portlet is shown below:

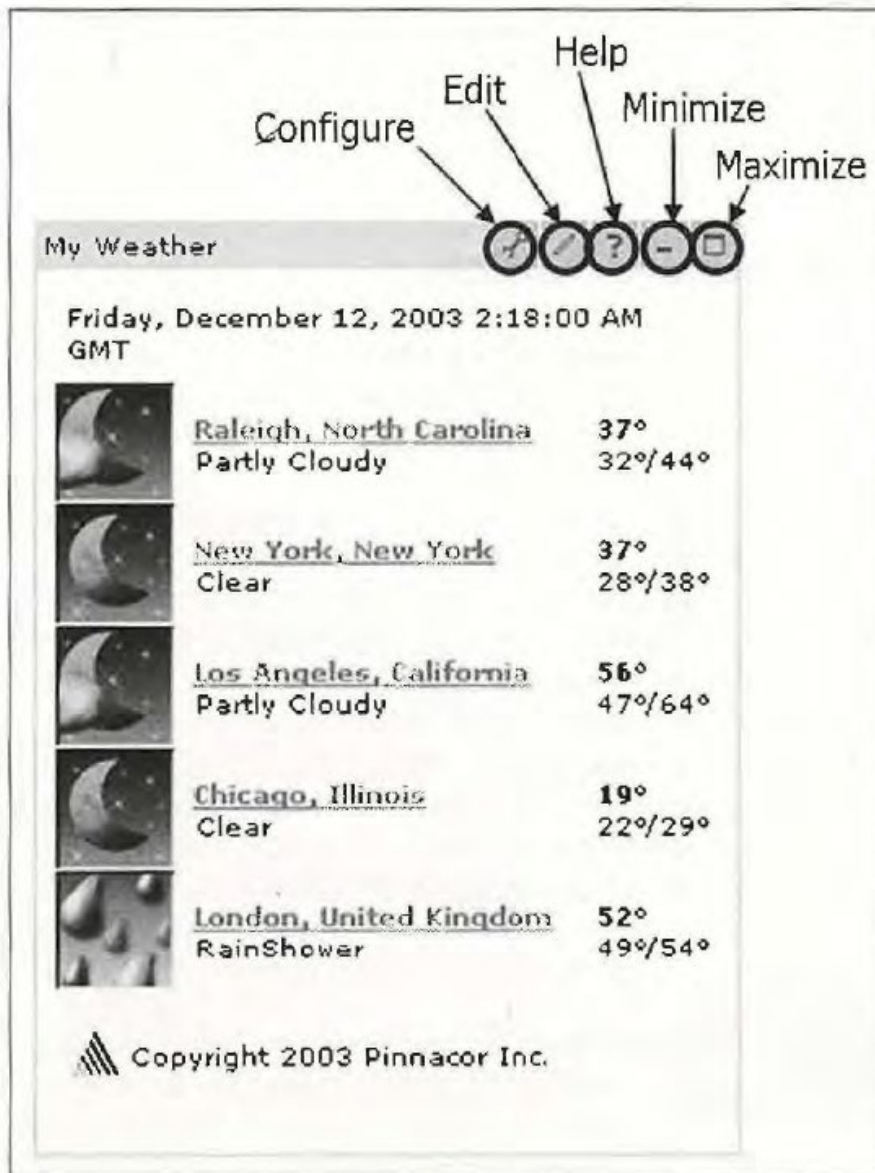


**Figure 13-3** Sample portlet.

EX1005, 245. EX1003, ¶151.

**5. Claim 5**

5. The apparatus of claim 1, wherein the at least one communication interface includes a web services gateway communicatively coupled to the at least one external computing device via the one or more transmission media.

WebSphere-Combination teaches this element at least WebSphere-Combination teaches this element. *See* elements [1.10]-[1.11]. A POSITA would have understood WebSphere-Portal disclosure of Portal's web services gateways (at least Portal's WebSEAL, WAP gateway, HTTP proxy edge server, and Network Dispatcher) is communicatively coupled to at least one external device via transmission media. *See* EX1004, 10 (Figure 1-3), 13 (Figure 1-4), 14 (Figure 1-5), 15 (Figure 1-6), 630 (Figure 20-1); EX1005, 387, 410. WebSphere-Everyplace also teaches that WEA uses a "web services gateway" such as Portal's Edge Server. *E.g.*, EX1006, 2, 25; EX1009, 275; *see also* EX1026, 7. EX1003, ¶152.

**6. Claim 6**

6. The apparatus of claim 1, wherein the channel grid framework includes a two-dimensional array of the user-selectable items.

WebSphere-Combination teaches this element at least because it shows portlets provided in a channel grid framework with a two-dimensional array of user-selectable items. *See* element [1.5].

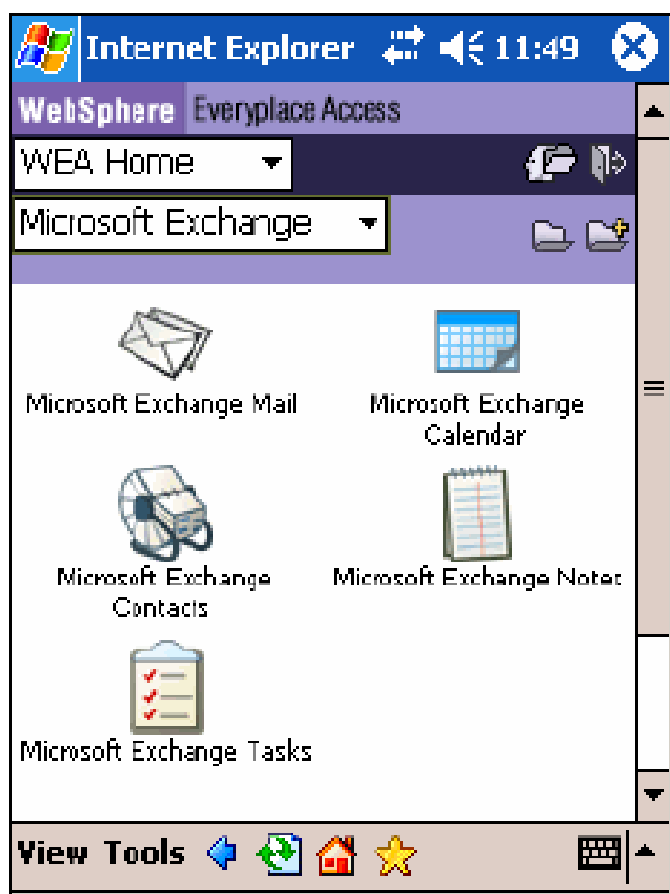


*Figure 2-7 Microsoft Exchange PIM portlets*

EX1006, 34.

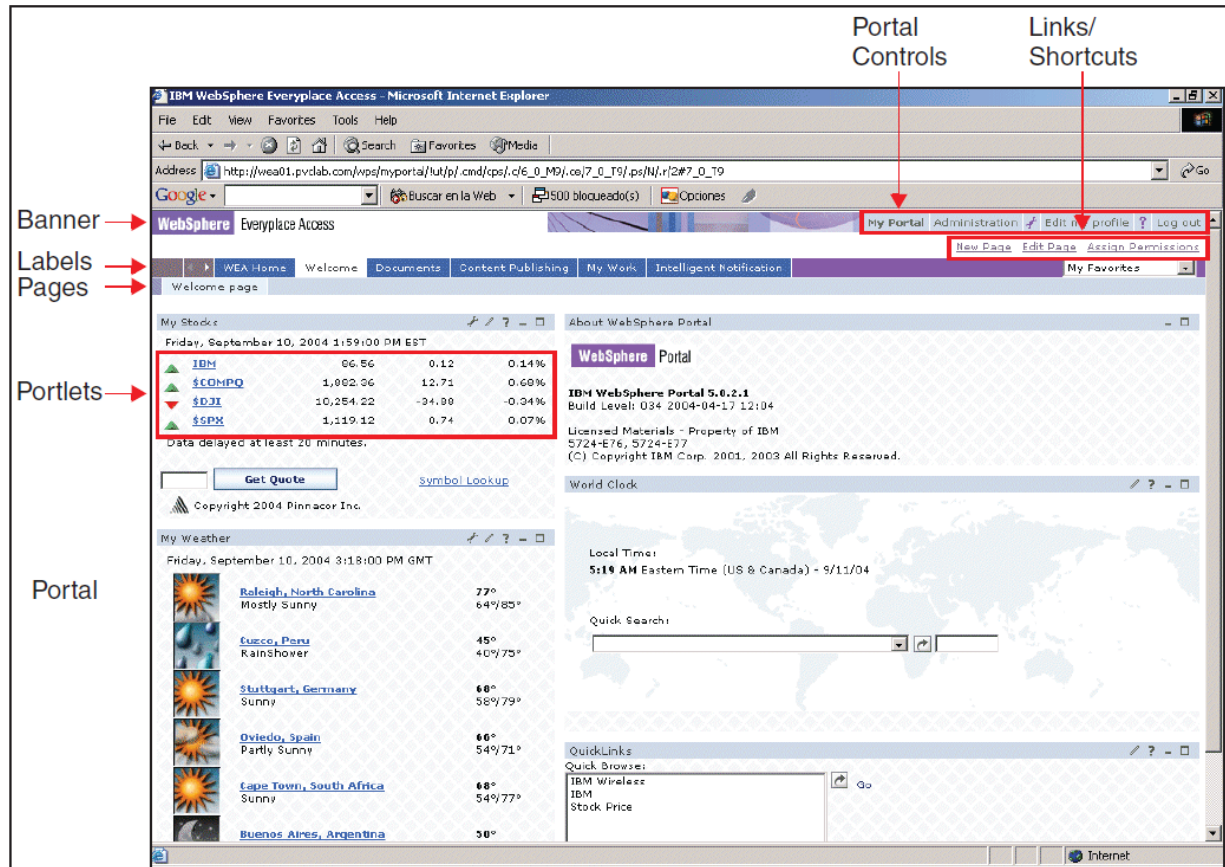


Figure 3-1 Welcome page example

EX1006, 43. EX1003, ¶153.

## 7. Claim 7

7. The apparatus of claim 1, wherein the channel grid framework occupies a majority of the desktop.

WebSphere-Combination teaches this element at least because it discloses a channel grid framework occupying a majority of the desktop. *See* element [1.5]. A POSITA would have understood that Portal's browser was resizable on a desktop platform to occupy a majority of the desktop. A POSITA would understand the browser window could even be made to run full screen as well.

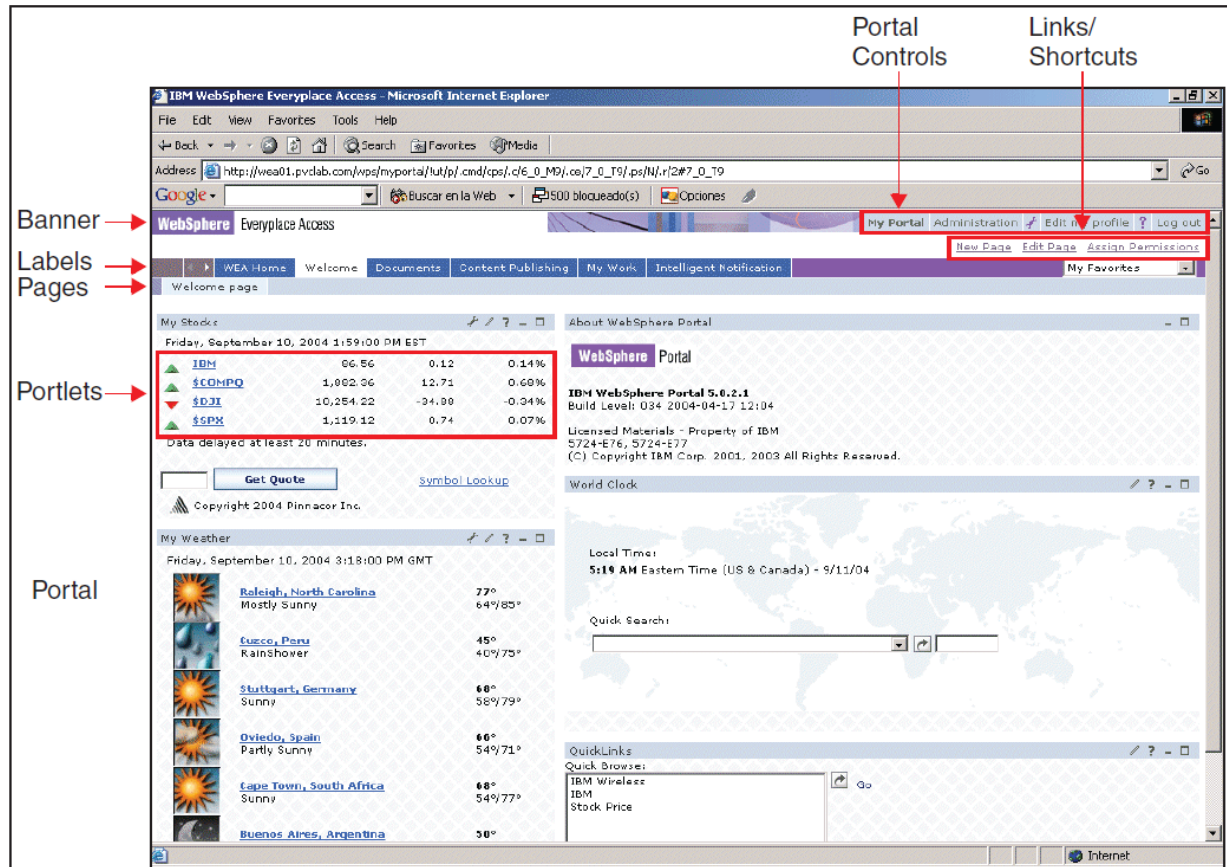


Figure 3-1 Welcome page example

EX1006, 43. EX1003, ¶154.

An example on a mobile device showing a channel grid framework occupying the majority of the displayed desktop is shown below:

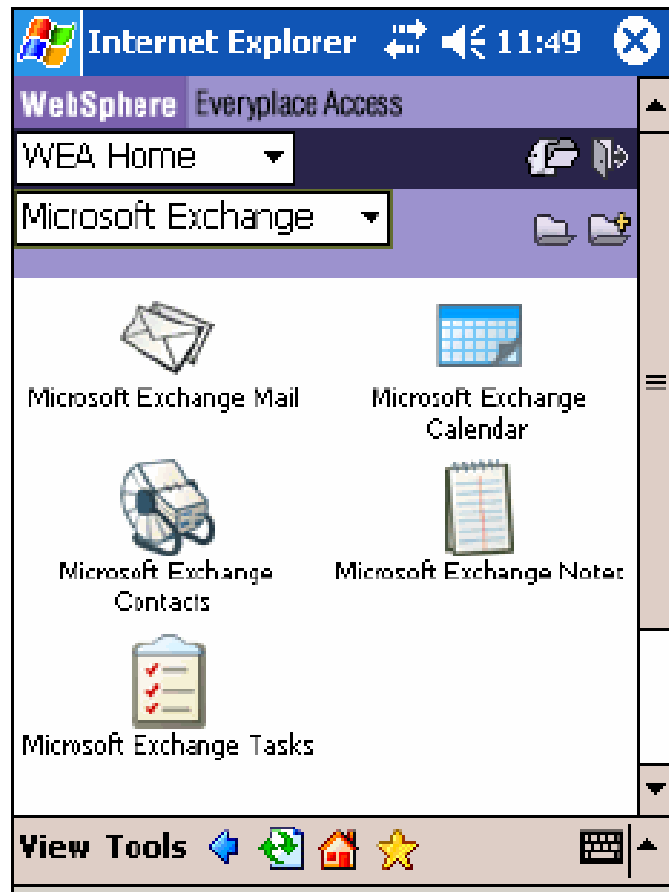


*Figure 2-7 Microsoft Exchange PIM portlets*

EX1006, 34. EX1003, ¶155.

**8. Claim 8**

8. The apparatus of claim 1, wherein the channel grid framework includes a twelve-item grid of the user-selectable items.

WebSphere-Combination teaches this element at least because WebSphere-Portal suggests that Portal's customizable layout includes a twelve-item grid of user-selectable items. *See* element [1.5]; EX1004, 60 ("When using Portal Designer, the portal page layout can be altered. The layout refers to the number of content areas

within a page and the number of portlets within those content areas. Page content includes rows, columns, URLs and portlets.”); EX1003, ¶156.

A POSITA would have found it obvious to arrange Portal’s channel grid framework into a twelve-item grid of the user-selectable items. *Supra* Section IV.B.1. EX1003, ¶157.

**9. Claim 9**

9. The apparatus of claim 1, wherein the user-selectable items included in the channel grid framework are identically-sized rectangular user-selectable items.

WebSphere-Combination teaches this element at least because WebSphere-Portal discloses that Portal’s customizable layout would allow identically-size rectangular user-selectable items. *See* element [1.5]; EX1003, ¶158.

A POSITA would have found it obvious to arrange the portlets in Portal’s channel grid framework as identically-sized rectangular user-selectable items. *Supra* Section IV.B.1.

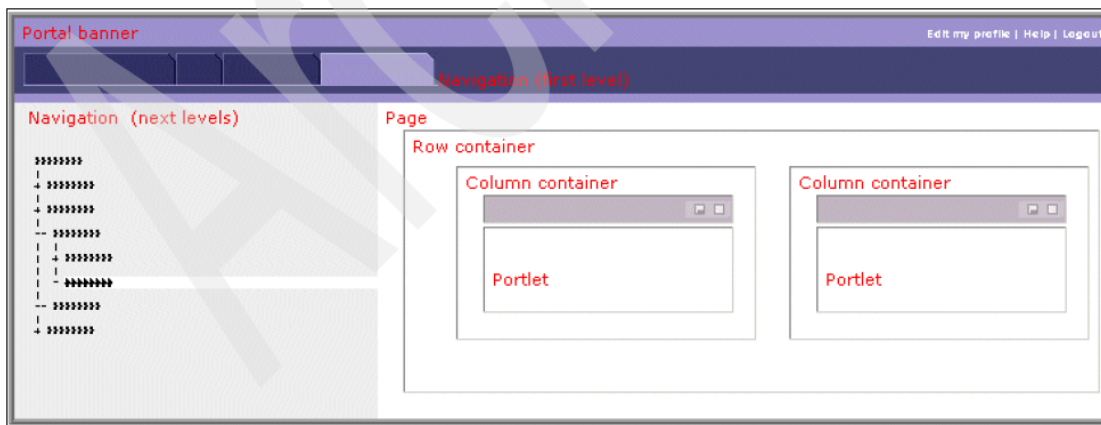


Figure 1-9 Portal page layout

A portal page is made up of the following elements.

EX1004, 28. EX1003, ¶159.

#### 10. Claim 10

10. The apparatus of claim 1, wherein the channel grid framework includes a matrix of square elements respectively constituting the user-selectable items.

WebSphere-Combination teaches this element at least because WebSphere-Portal suggests that Portal's customizable layout includes a matrix of square elements constituting user-selectable items. *See* element [1.5]; EX1003, ¶160.

A POSITA would have found it obvious to arrange Portal's channel grid framework into a matrix of square elements respectively constituting the user-selectable items. *Supra* Section IV.B.1. EX1003, ¶161.

#### 11. Claim 11

11. The apparatus of claim 1, wherein the channel grid framework includes a three-by-four matrix of the user-selectable items.

WebSphere-Combination teaches this element at least because WebSphere-Portal discloses that Portal's customizable layout would allow a three-by-four matrix of user-selectable items. *See* element [1.5]; claim 2. EX1003, ¶162.

A POSITA would have found it obvious to arrange Portal's channel grid framework into three-by-four matrix of the user-selectable items. *Supra* Section IV.B.1. EX1003, ¶163.

## 12. Claim 13

13. The apparatus of claim 1, wherein: the plurality of authorized channels includes 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 plurality of user-selectable items includes a first user-selectable item representing the first channel; and A) comprises controlling the display device so as to render the first user-selectable item in the channel grid framework as one of: a graphic representative of the first channel information; a picture representative of the first channel information; and a dynamic window including at least one of: content from an executing computer application constituting the first channel information; ...; streaming data, audio or video constituting at least a portion of the first channel information; and polled data derived from the first channel information.

WebSphere-Combination teaches this element because at least WebSphere-Portal discloses that Portal includes authorized channels (portlets) through which users receive and/or interact with channel information constituting a portion of secure user-centric information. EX1004, 630 ("Portlets running on WebSphere Portal may need to access remote applications that require some form of

authentication by using appropriate credentials.”). As discussed for element [1.5], Portal displays user-selectable items representing channels (portlets). EX1003, ¶164.

WebSphere-Portal discloses controlling the display device to render the user-selectable items in the channel grid framework as at least one of a graphic representation of channel information; a picture representation of channel information; and a dynamic representation of content from an executing computer application, as portlets are applications. For example, WebSphere-Combination shows dynamic information in the stock tickers and picture / graphic information in the weather graphics which show content from an executing computer application (stocks and weather application). EX1006, 43; EX1003, ¶165.

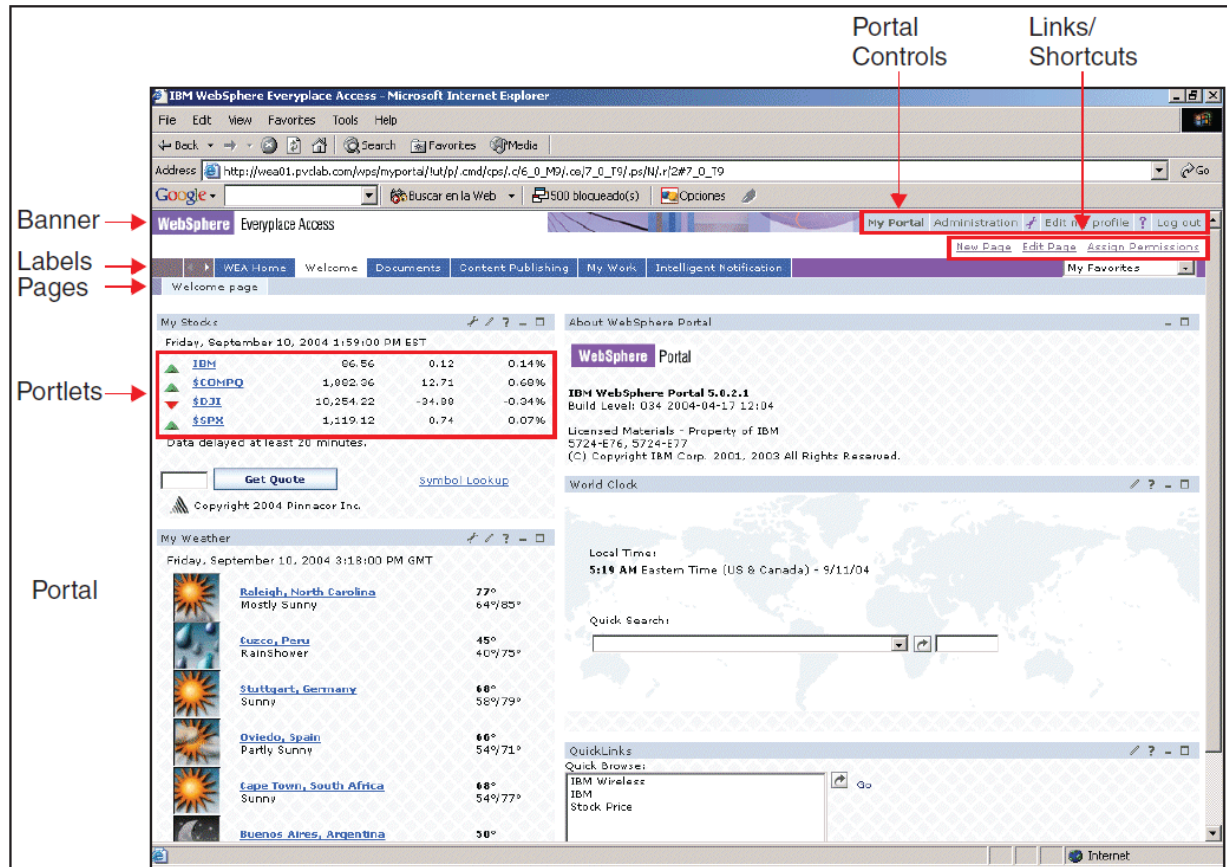


Figure 3-1 Welcome page example

EX1006, 43. EX1003, ¶165.

Ben-Natan provides an example of the display device rendering a user-selectable item representing an authorized channel in the channel grid framework as a dynamic window showing polled data. EX1005, 275.

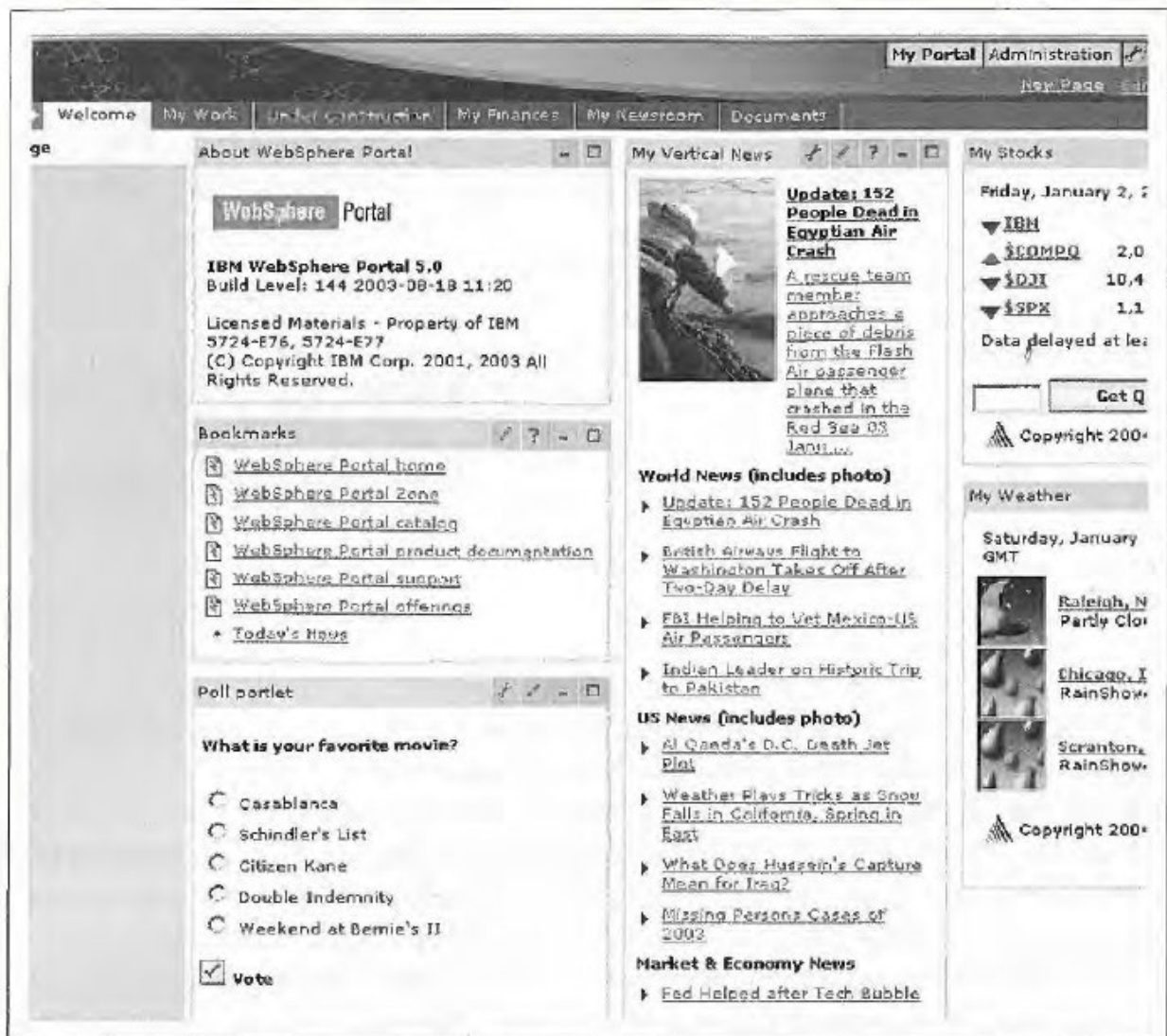


Figure 15-1 · Portal page with poll portlet.

EX1005, 276 (Poll portlet in lower left corner). Upon voting, the results are provided:

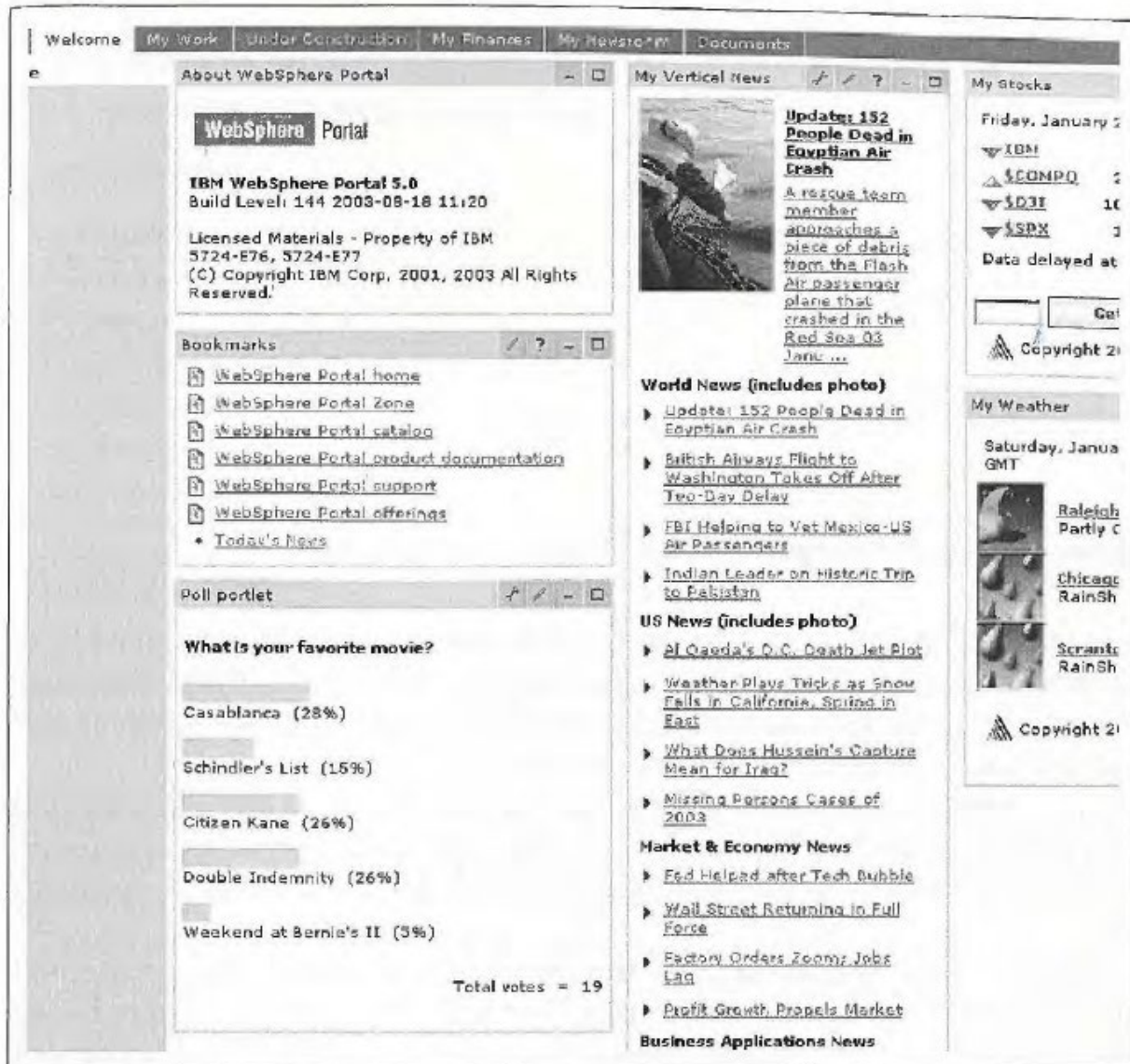


Figure 15-2 The Poll portlet.

EX1005, 277 (Poll portlet results in lower left corner). EX1003, ¶166.

### 13. Claim 16

16. The apparatus of claim 1, wherein each user-selectable item of the plurality of user-selectable items included in the channel grid framework is implemented by execution of the processor-executable instructions as a channel container having a unique name and a unique location in the channel grid framework.

WebSphere-Combination teaches this element at least because WebSphere-Portal discloses that each user-selectable item in the channel grid framework is implemented by the execution of processor-executable instructions as a channel container having a unique name and location. EX1004, 28 (“A page contains components such as row or column containers that contain other components or portlets.”):

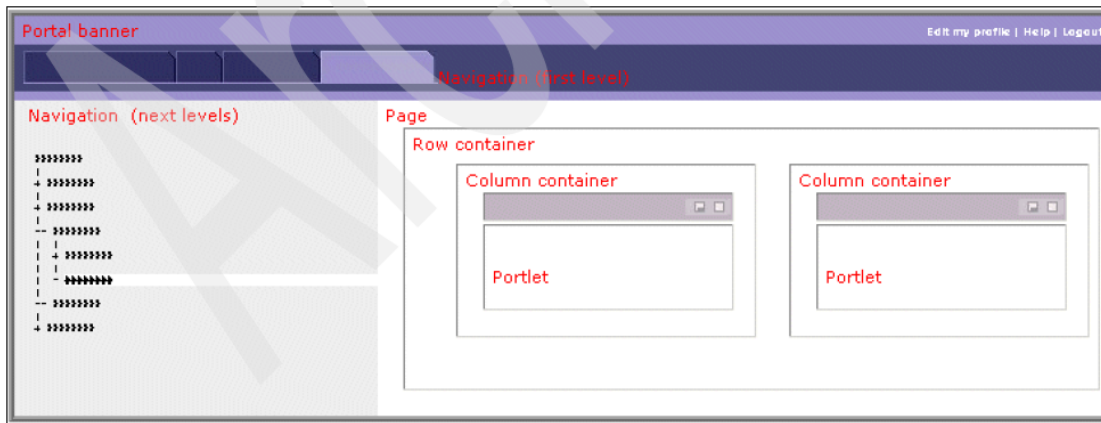


Figure 1-9 Portal page layout

A portal page is made up of the following elements.

*Id.*, 28. EX1003, ¶167.

Ben-Natan explains that Portal’s user-selectable items (portlets) are implemented in channel containers. EX1005, 134 (“you can insert portlets into each of the containers. In our case we have two containers, and each can have several portlets. ...”). Ben-Natan explains that titles and descriptions for each locale on a page can be set. *Id.*, 137. Ben-Natan provides an example of portlets in containers with unique names and locations:

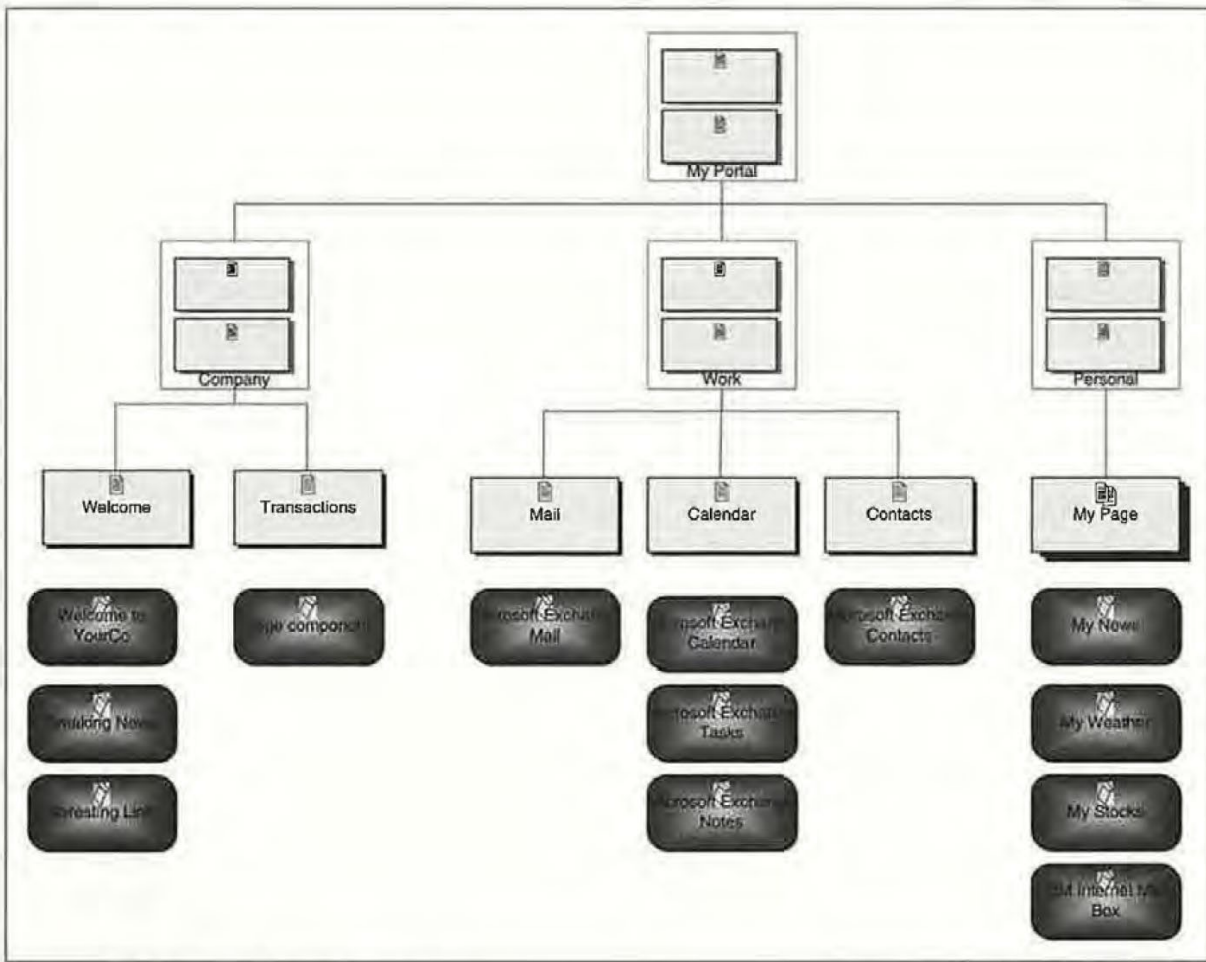


**Figure 7-11** New Portal structure.

EX1005, 141 (showing company container with welcome and transactions; work container with mail, calendar, and contacts; personal with my page). Ben-Natan explains that the Title field can be edited. *Id.*, 140. EX1003, ¶168.

#### 14. Claim 18

18. The apparatus of claim 1, wherein the at least one processor further manages display of and interaction with the secure user-centric information by: C) controlling the at least one communication interface so as to receive from at least one external computing device first channel information relating to at least one authorized channel of the plurality of authorized channels, based at least in

part on the information access rights and/or security protocols respectively associated with the corresponding plurality of authorized channels, the user, and the user platform.

WebSphere-Combination teaches this element at least because WebSphere-Portal discloses that the at least one processor manages display of and interaction with secure user-centric information by controlling the at least one communications interface to receive first channel information relating to that authorized channel from an external device, based in part on information access rights and/or security protocols associated with the authorized channel, user, and platform. *See* elements [1.5]-[1.9]. EX1003, ¶169.

WebSphere-Portal provides an example of model-view-controller architecture showing a communication interface receiving from an external device first channel information relating to an authorized channel (portlet) based in part on information access rights and/or security protocols associated with the channels, user, and user platform. EX1004, 23-26.

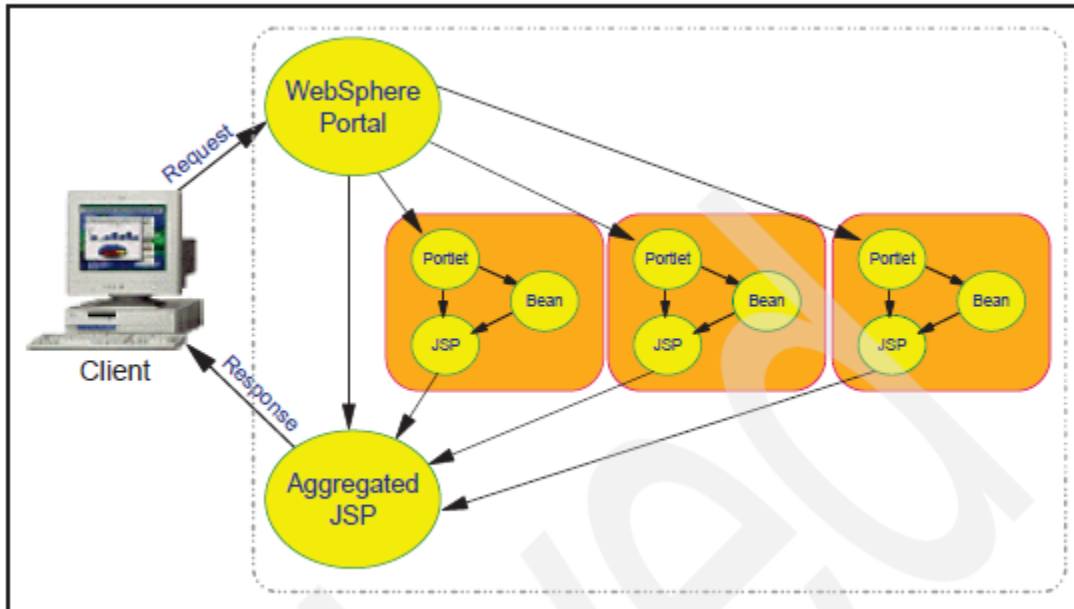


Figure 1-8 Portlet MVC architecture

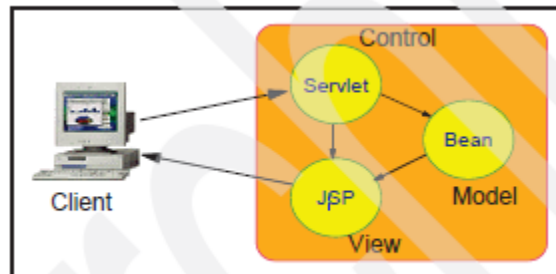


Figure 1-7 Simple MVC architecture

EX1004, 23, 26. EX1003, ¶170.

WebSphere-Combination also teaches this element at least because WebSphere-Combination discloses an authentication directory, e.g., Light Authentication Directory Access Protocol (LDAP), that provides information access rights and/or security protocols, which includes user, device, and application accounts. EX1004, 11 (“The Directory and Security Services provide support for a

directory of users accessible through LDAP. These services are used for authentication and can also control and verify the resource access privileges or permissions granted to users.”), 76 (“Use the Single Sign-On screen to add sample code to support credential vault handling which is used to safely store credentials that are used in portlet authentication. ... A shared credential vault slot shares user credentials among all a user’s portlets. The administrative credential vault slot allows each user to store their confidential information for accessing administrator-defined resources such as Lotus Notes® databases. A system credential vault slot stores system credentials where the actual confidential information is shared among all users and portlets.”); *see also* EX1005, 14 (“User profile information can be supported in an LDAP and/or a database.”), 195, 385-386; EX1017, 310 (LDAP definition). EX1003, ¶¶171-172.

WebSphere-Combination also teaches this element because WebSphere-Everyplace-1 discloses authentication for an external device for at least PIM & e-mail sync and database sync:

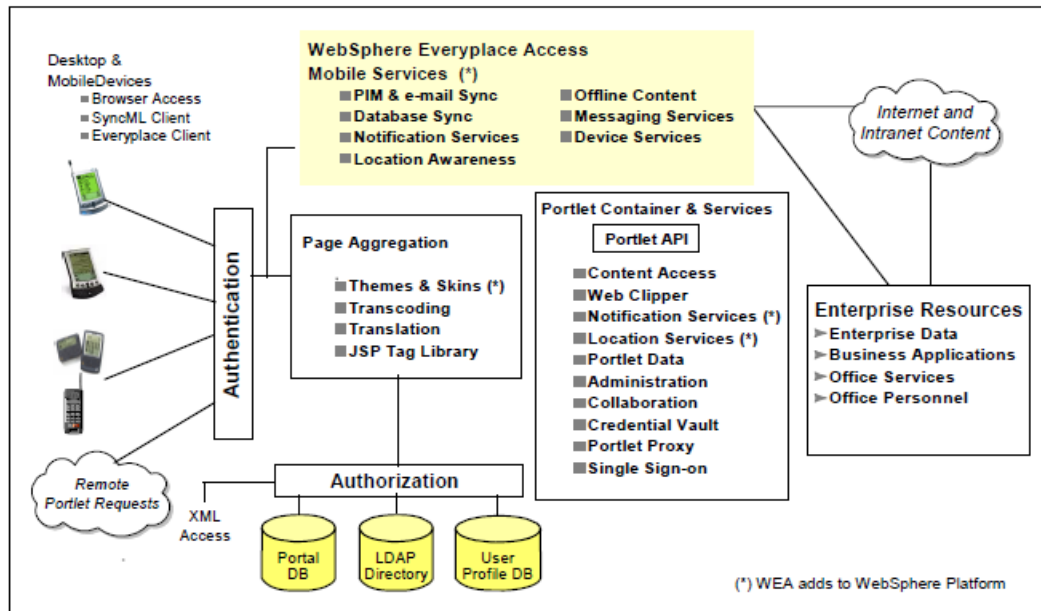


Figure 1-2 WebSphere Everyplace Access server

EX1006, 5. EX1003, ¶173.

WebSphere-Everyplace-3 explains that “it is necessary to create at least one device profile before synchronizing PIM or data.” EX1008, 38. WebSphere-Everyplace-3 explains that the device account is stored on WEA server. *Id.*, 65. A POSITA would have understood that synchronization of a device would mean Portal receives device account information from an external device, and that synchronized information was based in part on access rights and/or security protocols due to the device profile. EX1003, ¶174.

15. **Claim 31**

a) **Elements [31.1]-[31.2]**

[31.1] A method for facilitating display of, and interaction with, secure user-centric information via a user platform operated by a user, the method comprising:

WebSphere-Combination teaches this element at least because WebSphere-Combination discloses an apparatus that performs a method of facilitating display of and interaction with secure user-centric information on a platform operated by a user. *See* element [1.1]. EX1003, ¶175.

[31.2] A) displaying a desktop on a display device of the user platform as a channel grid framework including a matrix having a plurality of user-selectable items representing a corresponding plurality of authorized channels through which the user receives and/or interacts with respective portions of the secure user-centric information, and

WebSphere-Combination teaches this element. *See* elements [1.2] (desktop), [1.5] (channel grid). EX1003, ¶176.

b) **Elements [31.3]-[31.8]**

Elements [31.3]-[31.8] are substantively identical to elements [1.6]-[1.11], respectively, and thus elements [31.3]-[31.8] are obvious for the same reasons elements [1.6]-[1.11], respectively, are obvious. *Supra* Section VII.B.1; *see* EX1040; EX1003, ¶¶177-182.

16. Claim 32

a) Elements [32.1]-[32.2]

[32.1] At least one non-transitory computer readable storage medium storing processor-executable instructions that, when executed by at least one processor, perform a method for facilitating display of, and interaction with, secure user-centric information via a user platform operated by a user, the method comprising:

WebSphere-Combination teaches this element at least because WebSphere-Portal discloses that Portal operates on non-transitory computer readable storage media storing processor-executable instructions that perform a method of facilitating display of, and interaction with, secure user-centric information via a user platform operated by a user. *See* element [1.1]; EX1004, 27-28 (Portal “collects information about the user’s choices, the device being used and the selected portlets [channels], then takes that information and combines it to create a display that is appropriate for the device.”); EX1003, ¶183.

WebSphere-Combination discloses an apparatus (one or more servers) with memory and at least one processor (“Pentium 4 processor”) (EX1005, 26, 44; EX1004, 8, 16-18, 102, 107, 1004; EX1006, 24, 237) and that the apparatus (one or more servers) runs the WebSphere software (*e.g.*, EX1004, 155-201; EX1005, 65-103; EX1007, 3-21; EX1009, 79-138) installed on one non-transitory computer readable storage medium storing processor-executable instructions. *See also* EX1013, 502. EX1003, ¶184.

WebSphere-Portal discloses Portal is software installed on non-transitory computer readable storage medium storing processor-executable instructions with a processor: “Portal itself installs as an Enterprise application in WebSphere Application Server.” EX1004, 18. WebSphere-Portal states that Portal “[c]onsists of pre-integrated software ... built on the award-winning WebSphere Application Server 5.1 platform” and “[g]ives users a content publishing and personalization interface ....” *Id.*, 8, 16-18; EX1003, ¶185.

[32.2] A) displaying a desktop on a display device of the user platform as a channel grid framework including a matrix having a plurality of user-selectable items representing a corresponding plurality of authorized channels through which the user receives and/or interacts with respective portions of the secure user-centric information, and

*See* element [1.2] (desktop), [1.5] (channel grid); EX1003, ¶186.

**b) Elements [32.3]-[32.8]**

Elements [32.3]-[32.8] are substantively identical to elements [1.6]-[1.11], respectively, and thus elements [32.3]-[32.8] are obvious for the same reasons elements [1.6]-[1.11], respectively, are obvious. *Supra* Section VII.B.1; *see* EX1040; EX1003, ¶¶187-192.

**17. Claim 33**

**a) Elements [33.1]-[33.5]**

Elements [33.1]-[33.5] are substantively identical to elements [1.1]-[1.5], respectively, and thus elements [33.1]-[33.5] are obvious for the same reasons

elements [1.1]-[1.5], respectively, are obvious. *Supra* Section VII.B.1; *see* EX1040; EX1003, ¶¶193-197.

**b) Elements [33.6]-[33.11]**

[33.6] wherein: the channel grid framework occupies a majority of the desktop;

*See* claim 7.

[33.7] the channel grid framework includes a two-dimensional twelve-item array of identically-sized user-selectable items;

*See* element [1.5] (channel grid), claims 6, 8, 9.

[33.8] the plurality of user-selectable items included in the channel grid framework is based at least in part on information access rights and/or security protocols respectively associated with the corresponding plurality of channels, the user, and the user platform;

*See* elements [1.5] (channel grid), [1.8] (information access rights and/or security protocols).

[33.9] the plurality of authorized channels includes at least a first authorized channel through which the user receives and/or interacts with first authenticated channel information constituting a first portion of the secure user-centric information; the first authenticated channel information is provided by at least one authenticated channel application and/or at least one authenticated service; the plurality of user-selectable items includes at least a first user-selectable item representing the first authorized channel;

*See* claim 2.

[33.10] the at least one processor is further configured to manage display of and interaction with the secure user-centric information by receiving configuration

information from the user and transmitting the configuration information to at least one external computing device,

WebSphere-Combination teaches this element at least because WebSphere-Portal discloses that the processor upon which Portal runs is configured to manage display/interaction with the secure user-centric information by receiving information from the user and transmitting it to an external computing device. *See* elements [1.4], [1.6].

[33.11] wherein the configuration information is configured to cause the at least one external computing device to establish a user profile identifying user preferences, platform identities, and service support instructions that determine how the plurality of authorized channels behave on the user platform,

*See* element [1.6]. EX1003, ¶¶198-203

**c) Elements [33.12]-[33.16]**

Elements [33.12]-[33.16] are substantively identical to elements [1.7]-[1.11], respectively, and thus elements [33.12]-[33.16] are obvious for the same reasons elements [1.7]-[1.11], respectively, are obvious. *Supra* Section VII.B.1; *see* EX1040; EX1003, ¶¶204-208.

**18. Claim 34**

34. The apparatus of claim 1, wherein the one or more of the plurality of authorized channels interrogating the identity management server comprises the one or more of the plurality of authorized channels evaluating content provided by the identity management server and determining if services of the one or more of the plurality of authorized channels are available, and wherein the identity management server and the web services gateway interrogating the one

or more of the plurality of authorized channels comprises the identity management server evaluating content provided by the one or more of the plurality of authorized channels.

WebSphere-Combination teaches this element at least because Ben-Natan discloses that authorized channels (portlets) via Portal Engine evaluate content provided by the identity management server (i.e., at least the Authentication Server, LDAP Server and/or Credential Vault service) and the identity management server evaluating contents of the portlet via SSL and certificate exchange. EX1005, 380 (“A method to ensure privacy is to enable WebSphere Application Server and WebSphere Portal to access the LDAP server with SSL enabled. Of course, this assumes that you have also enabled SSL between the Web Browser and your Web server. SSL is a security protocol that supports data encryption, authentication, and data integrity verification. An SSL operation consists of an initiation and a data transfer. At the initiation stage, the client/server and the server try to set up the session and connection state by coming to an agreement on encryption and authentication. Agreement is made once the protocol version is chosen, the encryption algorithm chosen, and both parties have authenticated each other (optional). Upon successful initiation stage, data will be transferred using public-key encryption. Data required for the public key encryption (including keys) is done through certificates. Certificates need to be created for each component and stored on each counterparts’ key database. Certificates can be obtained from a certificate

authority (CA) such as Verisign or they can be self-signed.”). WebSphere-Portal also teaches use of Credential Vault portlets which exchange SSL certificates and keys. EX1004, 630 (“By using Credential Vault portlets, you can provide a single sign-on experience to the user, hiding the login challenge from the user. ... Portlets running on WebSphere Portal may need to access remote applications that require some form of authentication by using appropriate credentials. Examples of credentials are user IDs and passwords, SSL client certificates and private keys.”). *See also* elements [1.10]-[1.11]. EX1003, ¶209.

Ben-Natan teaches how Portal allows access control permissions with portlets with servlet initialization parameters and PortletContext. EX1005, 246 (“Portal provides the infrastructure to associate access control permissions with portlet modes, to provide the Portlet API with mode support, and provides access to portlet settings, portlet application configuration parameters, and servlet initialization parameters.”), 255 (“The PortletContext provides the portlet access to some context information in the portlet container including providing access to portlet services.”). EX1003, ¶210.

WebSphere-Everyplace-1 also explains bi-directional user and server authentication and data encryption for mobile data. EX1006, 24 (“WebSphere Everyplace Connection Manager also protects the data with bi-directional user and

server authentication and data encryption, ensuring that the mobile data is protected and secure.”). EX1003, ¶211.

Additionally, WebSphere-Everyplace-4 disclose bi-directional interrogation between an identity management server and a channel regarding the actual content provided by the computer application on the channel (e.g., stocks, notifications, and subscriptions). EX1009, 2-3, 7, 19-20 (Intelligent Notification Services), 4-6, 43-44 (Subscription Manager), 41-48 (Stock example). Figures from WebSphere-Everyplace-4 are provided below:

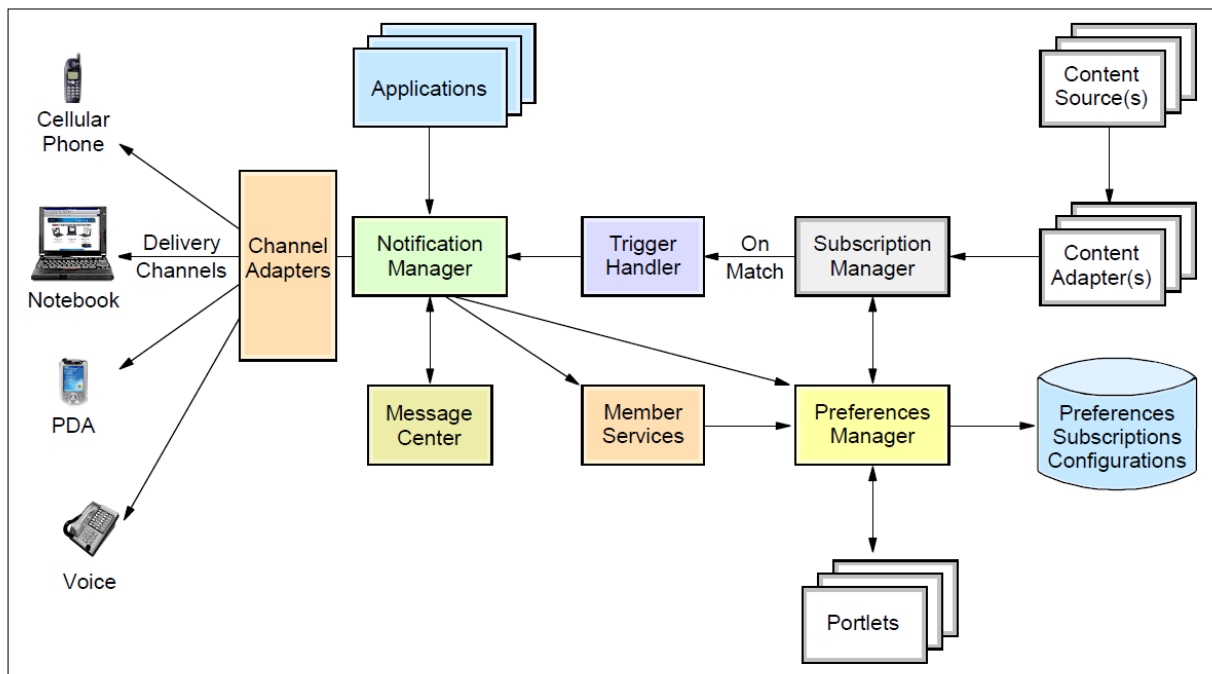


Figure 1-1 Intelligent Notification Services architecture

EX1009, 3.

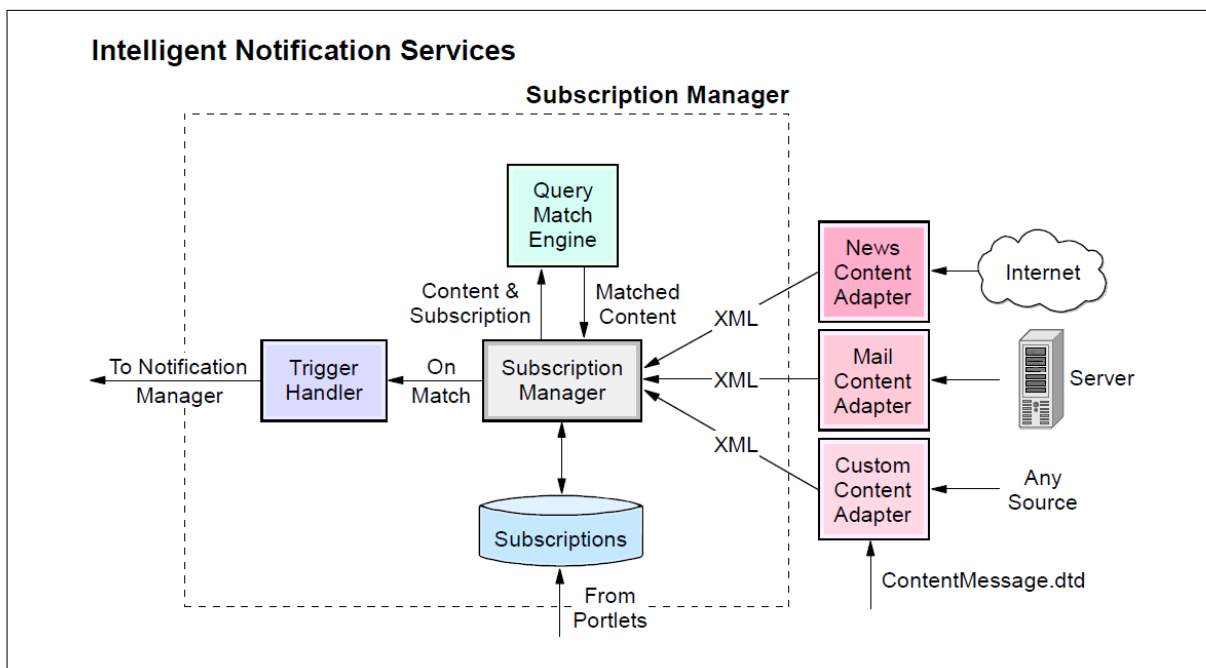


Figure 1-2 Components of Subscription Manager

EX1009, 4.

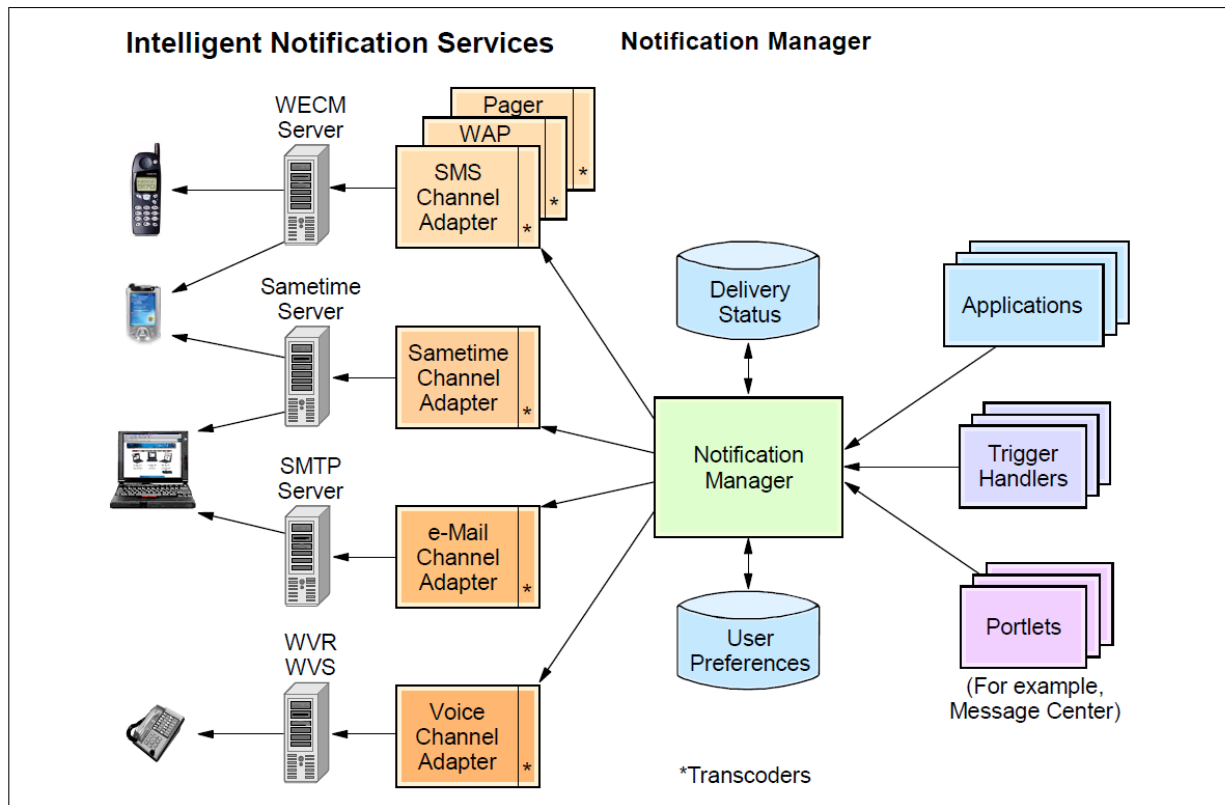


Figure 1-4 Components of the Notification Manager

EX1009, 7. EX1003, ¶212.

## **VIII. 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 (e.g., the IBM references and Austin-Lane). *Novartis AG v. Torrent Pharms. Ltd.*, 853 F.3d 1316, 1331 (Fed. Cir. 2017) (affirming PTAB obviousness decision). EX1003, ¶213.

**IX. CONCLUSION**

Petitioner requests institution for claims 1-11, 13, 16, 18, and 31-34, on the Ground specified in this petition.

Respectfully submitted,

Dated: October 1, 2024

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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).

The brief contains 13,780 words, excluding the parts of the brief exempted by 37 C.F.R. § 42.24(a).

The brief has been prepared in a proportionally spaced typeface using Microsoft Word for O365 in a 14-point Times New Roman font.

Dated: October 1, 2024

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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. 8,595,641 and Exhibits 1001 – 1044** were served on October 1, 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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