Abstract: An integrated messaging system (10) for performing various types of messaging across different types of networks, including integrated user interfaces and administrator interfaces. Embodiments include a communication server (11) that couples among networks of different types, and an interface module (120) that couples to the communication server (110). The interface module (120) may be hosted on a messaging server (140) of a network. The interface module (120) pulls various user information from the messaging server (140), including information relevant to at least the network that includes the messaging server (140). A cache (130) couples to the communication server (110) to the interface module (120) to hold information from the communication server (110) and/or the user information pulled from messaging server (140). The interface module (120) directs a message from the messaging server (140) and/or the cache (110) to at least one device on the networks using the user information.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published: with international search report

(88) Date of publication of the international search report: 8 February 2007

For two-letter codes and other abbreviations, refer to the “Guidance Notes on Codes and Abbreviations” appearing at the beginning of each regular issue of the PCT Gazette.
**INTERNATIONAL SEARCH REPORT**

A. **CLASSIFICATION OF SUBJECT MATTER**
   
   **IPC:** H04M 1/64(2006.01)

   **USPC:** 379/88.22,88.17

   According to International Patent Classification (IPC) or to both national classification and IPC

B. **FIELDS SEARCHED**

   Minimum documentation searched (classification system followed by classification symbols)
   
   U.S.: 379/88.22,88.17,88.16,88.18,67.1,709/206

   Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

   Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

   EAST

C. **DOCUMENTS CONSIDERED TO BE RELEVANT**

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>US 20020032752 A (GOLD et al) 14 March 2002 (14.03.2002), paragraphs 39,56-61</td>
<td>1-33</td>
</tr>
<tr>
<td>A</td>
<td>US 20040109544 A (Diicock et al) 10 June 2004 (10.06.2004), all</td>
<td>1-33</td>
</tr>
</tbody>
</table>

   * Further documents are listed in the continuation of Box C.
   
   See patent family annex.

   * Document categories:
     - "T": later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
     - "X": document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
     - "Y": document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
     - "&": document member of the same patent family

   **Date of the actual completion of the international search**
   
   29 September 2006 (29.09.2006)

   **Date of mailing of the international search report**
   
   30 OCT 2006

   **Name and mailing address of the ISA/US**
   
   Mail Stop PCT, Attn: ISA/US
   Commissioner for Patents
   P.O. Box 1450
   Alexandria, Virginia 22313-1450
   Facsimile No. (571) 273-3201

   **Authorized officer**
   Ovidio Escalante

   **Telephone No.** 571-272-2600

   **Form PCT/ISA/210 (second sheet) (April 2005)**
INTERNATIONAL SEARCH REPORT

Box No. II  Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
   because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
   because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos.:
   because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III  Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:
Please See Continuation Sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of any additional fees.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-33

Remark on Protest ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.

☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.

☐ No protest accompanied the payment of additional search fees.

Form PCT/ISA/210 (continuation of first sheet(2)) (April 2005)
BOX III. OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING

1. This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I, claim(s) 1-33, drawn to a system and device comprising a messaging server, form-based user interface and transferring the forms to a client device.

Group II, claim(s) 34-76, drawn to a system, device and method comprising an integrated messaging system with an interface module which pulls user information and cache store that holds the information.

Group III, claim(s) 77-108, drawn to a method for transferring messages of different types via couplings.

Group IV, claim(s) 109-135, drawn to a system, method and device for detecting states of messaging server or a device.

Group V, claim(s) 136-256 drawn to a device, system and method comprising a protocol system with local cache system and transferring messages between protocol systems and communication systems.

Group VI, claim(s) 257-275, drawn to a method and system for converting voice messages to e-mail messages.

Group VII, claim(s) 276-281, drawn to a message comprising message headers and information corresponding to rights and protection of messages.

Group VIII, claim(s) 282-320, drawn to a method, message and system for handling voicemail messages and email containing formatting and data adapted with features of voicemail systems.

Group IX, claim(s) 321-351, drawn to a method, diagnostic tool and interface module for providing diagnostics information on a target system.

Group X, claim(s) 352-378, drawn to a messaging communication server and method for providing services and configuration information for voice messaging.

Group XI claim(s) 379-399 drawn to a method and apparatus for setting up a member of an enterprise to be a user of voice applications, voicemail and email systems.

Group XII, claim(s) 400-405, drawn to a messaging server and method for requesting code for services related to voice messaging.

2. The inventions listed as Groups I-XI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Form PCT/ISA/210 (extra sheet) (April 2005)
Group I has the special technical feature of proving a form-based user interface and transferring the forms to client devices.

Group II has the special technical feature of pulling user information from cache stores in an integrated messaging system.

Group III has the special technical feature of transferring different types of messages such as email and voice mail message via couplings.

Group IV has the special technical feature of detecting states of messaging devices.

Group V has the special technical feature of protocol systems with local cache system and transferring message between protocol systems and communication system.

Group VI has the special technical feature of converting voice messages to e-mail messages.

Group VII has the special technical feature of message headers and information corresponding to rights and protection of messages.

Group VIII has the special technical feature of handling voicemail messages and email containing formatting and data adapted with features of voicemail systems.

Group IX has the special technical feature of providing diagnostics information on a target system.

Group X has the special technical feature of providing services and configuration information.

Group XI has the special technical feature of setting up a user of an enterprise to be a user of a voice mail and email system.

Group XI has the special technical feature of providing codes for services related to voice messaging.