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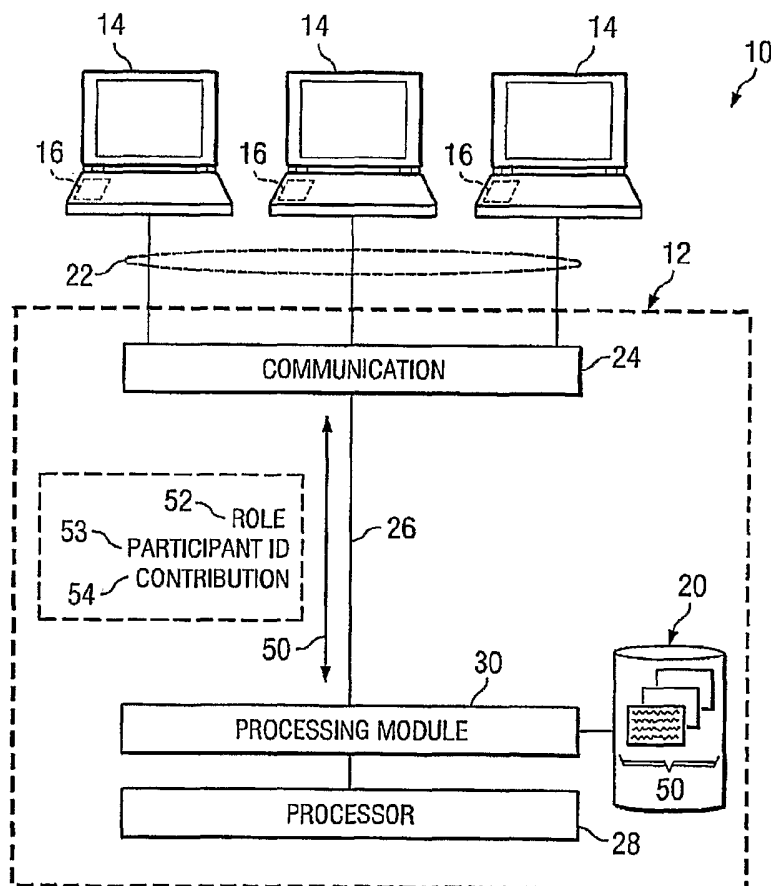
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[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR ELECTRONIC DOCUMENT SECURITY



(57) Abstract: A method for providing document-level security for electronic documents (20) comprises identifying a plurality of roles for the electronic document, the plurality of roles comprising at least one role (52) associated with a first participant ID (53) of a first client. The roles are dynamically stored in the electronic document. One or more participant IDs are dynamically stored in the electronic document, including at least the first participant ID, wherein each participant ID is associated with at least one role. A second participant ID of a second client is determined and the second client's ability to access the electronic document is automatically determined based, at least in part, on the second participant ID and the stored roles and participant IDs.



SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Declarations under Rule 4.17:**

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations* AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for the following designations* AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID,

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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/15989

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC(7) : H04L 9/00; US CL : 713/165, 175, 176; 726/27 According to International Patent Classification (IPC) or to both national classification and IPC																				
<b>B. FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) U.S. : 713/165, 175, 176; 726/27 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)																				
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b> <table border="1"> <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 --- Y</td> <td>US 6,088,679 (BARKLEY) 11 July 2000 (11.07.2000); Abstract; Figure 2; column 2, lines 51- 67; column 3, lines 1-40; column 3, lines 50-67; column 4, line 1-30; column 6, lines 23-62</td> <td>1, 3-7, 9-10, 14-18, 20-21, 23 ----- 2, 8, 11, 13, 19, 22</td> </tr> <tr> <td>X --- Y</td> <td>US 2002/0129056 A1 (CONANT et al.) 12 September 2002 (12.09.2002), page 3, paragraph 0027; page 5, paragraph 0040; page 7, paragraph 0056</td> <td>1, 3-7, 9-10, 14-18, 20-21, 23 ----- 2, 8, 11, 13, 19, 22</td> </tr> <tr> <td>X</td> <td>US 2002/0152086 A1 (SMITH et al.) 17 October 2002 (17.10.2002), Figure 2, page 2, paragraph 0024; page 3, paragraph 0026; page 7, paragraph 0050</td> <td>1-23</td> </tr> <tr> <td>X</td> <td>US 2002/0184517 A1 (TADAYON et al.) 05 December 2002 (05.12.2002), Figure 2; page 2, paragraph 0027; page 3, paragraph 0028; page 3, paragraph 0034; page 5, paragraph 0052</td> <td>1-23</td> </tr> <tr> <td>X</td> <td>US 2003/0023623 A1 (HORVITZ et al.) 30 January 2003 (30.01.2003); Abstract; page 1, paragraph 0008; page 3, paragraph 0029, page 4, paragraph 0031</td> <td>1-23</td> </tr> </tbody> </table>			Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	X --- Y	US 6,088,679 (BARKLEY) 11 July 2000 (11.07.2000); Abstract; Figure 2; column 2, lines 51- 67; column 3, lines 1-40; column 3, lines 50-67; column 4, line 1-30; column 6, lines 23-62	1, 3-7, 9-10, 14-18, 20-21, 23 ----- 2, 8, 11, 13, 19, 22	X --- Y	US 2002/0129056 A1 (CONANT et al.) 12 September 2002 (12.09.2002), page 3, paragraph 0027; page 5, paragraph 0040; page 7, paragraph 0056	1, 3-7, 9-10, 14-18, 20-21, 23 ----- 2, 8, 11, 13, 19, 22	X	US 2002/0152086 A1 (SMITH et al.) 17 October 2002 (17.10.2002), Figure 2, page 2, paragraph 0024; page 3, paragraph 0026; page 7, paragraph 0050	1-23	X	US 2002/0184517 A1 (TADAYON et al.) 05 December 2002 (05.12.2002), Figure 2; page 2, paragraph 0027; page 3, paragraph 0028; page 3, paragraph 0034; page 5, paragraph 0052	1-23	X	US 2003/0023623 A1 (HORVITZ et al.) 30 January 2003 (30.01.2003); Abstract; page 1, paragraph 0008; page 3, paragraph 0029, page 4, paragraph 0031	1-23
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<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.																				
* Special categories of cited documents: <table border="0"> <tr> <td>"A" document defining the general state of the art which is not considered to be of particular relevance</td> <td>"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</td> </tr> <tr> <td>"E" earlier application or patent published on or after the international filing date</td> <td>"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</td> </tr> <tr> <td>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</td> <td>"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</td> </tr> <tr> <td>"O" document referring to an oral disclosure, use, exhibition or other means</td> <td>"&amp;" document member of the same patent family</td> </tr> <tr> <td>"P" document published prior to the international filing date but later than the priority date claimed</td> <td></td> </tr> </table>			"A" document defining the general state of the art which is not considered to be of particular relevance	"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	"E" earlier application or patent published on or after the international filing date	"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	"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"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	"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family	"P" document published prior to the international filing date but later than the priority date claimed									
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