

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
21 July 2005 (21.07.2005)

PCT

(10) International Publication Number  
**WO 2005/065358 A3**

- (51) International Patent Classification:  
*H04L 9/00* (2006.01)
- (21) International Application Number:  
PCT/US2004/043874
- (22) International Filing Date:  
28 December 2004 (28.12.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
10/749,911 30 December 2003 (30.12.2003) US
- (71) Applicant (for all designated States except US): **FIRST INFORMATION SYSTEMS, LLC** [US/US]; 2200 Mar East, Tiburon, CA 94920-1924 (US).

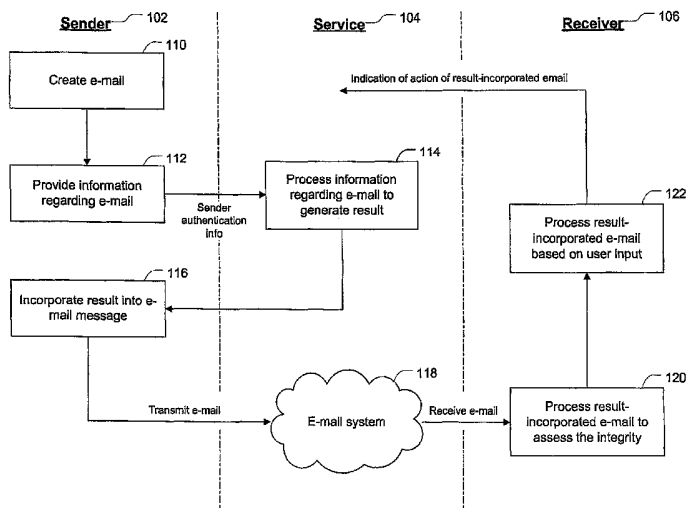
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, 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, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (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, LT, LU, 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).

- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **AVRITCH, Peter, S.** [US/US]; 6104 Bryndale Avenue, Oak Park, CA 91377 (US). **CLAY, Bruce, M.** [US/US]; 4642 Nannyberry Court, Moorpark, CA 93021 (US). **DU MOLIN, James, R.** [US/US]; 2200 Mar East, Tiburon, CA 94920 (US).
- (74) Agent: **HODES, Alan, S.**; Beyer Weaver & Thomas, LLP, P.O. Box 70250, Oakland, CA 94612-0250 (US).

- Published:  
— with international search report
- (88) Date of publication of the international search report:  
5 October 2006

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.

(54) Title: E-MAIL CERTIFICATION SERVICE



(57) Abstract: A method is provided to handle an electronic mail message such that the receiver (106) of the e-mail message can verify the integrity of the message. A request (112) is provided from a sender's side (102) to a service. The request (112) includes information regarding the e-mail message. The service (104) processes at least a portion of the request (112) to generate a result (114). For example, the service (104) may encrypt the portion of the request (112), according to a public/private key encryption scheme, to generate a digital signature as the result (114). The service (104) provides the result (114) to the sender's side (102). At the sender's side (102), the result (114) is incorporated into the e-mail message (116) and the result-incorporated message is transmitted via an e-mail system (118). At the receiver's side (106), the result-incorporated e-mail message is processed (120) to access the integrity of the received e-mail message.

WO 2005/065358 A3

**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/US04/43874

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC: **H04L 9/00**( 2006.01)

USPC: 713/176

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. : 713/176

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)  
Please See Continuation Sheet

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 20020144122 ( HAUGHAN et al. ) 03 October 2002 (03.10.2002), the entire document.	1,85-87
X, P	US 6,775,382 B1 ( AL-SALQAN) 10 August 2004 (1008.2004), the entire document.	2-84,88-141
Y	US 6,192,130 B1 ( OTWAY) 20 February 2001 (20.02.2001), the entire document.	1, 85-87
A	US 2001/0037453 A1 (MITTY et al.) 01 November 2001 (01.11.2001), the entire document.	1, 85, 109
A	US 2002/0059144 A1 (MEFFERT et al.) 16 May 2002 (16.005.2002), the entire document.	1, 85, 109

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

* Special categories of cited documents:	"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
"A" document defining the general state of the art which is not considered to be of particular relevance	"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
"E" earlier application or patent published on or after the international filing date	"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
"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)	"&"	document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means		
"P" document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search 12 May 2006 (12.05.2006)	Date of mailing of the international search report <b>10 JUL 2006</b>
---	--

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 <i>Taghi T. Arani</i> Taghi T. Arani Telephone No. (571) 272-3787
---	---

**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/US04/43874

Continuation of B. FIELDS SEARCHED Item 3:

West. Search terms: e adh mail or electronic adj mail or electronic adj message same receipt same guarantee same intermediary or intermediate and certify and certifying adj authority or public adj notary