



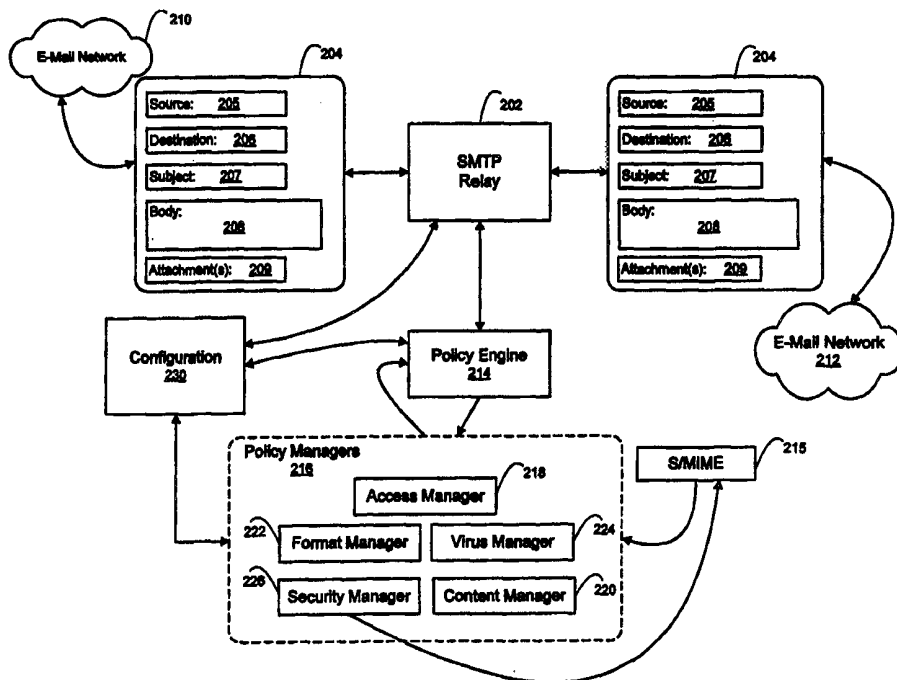
## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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(21) International Application Number: PCT/US98/15552 (22) International Filing Date: 23 July 1998 (23.07.98) (30) Priority Data: 60/053,668 24 July 1997 (24.07.97) US (71) Applicant (for all designated States except US): WORLD TALK CORPORATION [US/US]; 5155 Old Ironsides Drive, Santa Clara, CA 95054 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): DICKINSON, Robert, D., III [US/US]; 23621 N.E. 45th Place, Redmond, WA 98053 (US). KRISHNAMURTHY, Sathvik [US/US]; 5931 Killarney Circle, San Jose, CA 95138 (US). (74) Agents: PRASAD, Sanjay et al.; Fenwick & West LLP, Two Palo Alto Square, Palo Alto, CA 94306 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments. (88) Date of publication of the international search report: 22 April 1999 (22.04.99)	

## (54) Title: E-MAIL FIREWALL WITH STORED KEY ENCRYPTION/DECRYPTION

## (57) Abstract

An e-mail firewall (105) applies policies to e-mail messages (204) between a first site and a plurality of second sites in accordance with a plurality of administrator selectable policies (216). The firewall comprises a simple mail transfer protocol (SMTP) relay (202) for causing the e-mail messages (204) to be transmitted between the first site and selected ones of the second sites. A plurality of policy managers (216) enforce administrator selectable policies. The policies, such as encryption and decryption policies, comprise at least a first source/destination policy (218), at least a first content policy (220) and at least a first virus policy (224). The policies are characterized by a plurality of administrator selectable criteria (310), a plurality of administrator selectable exceptions (312) to the criteria and a plurality of administrator selectable actions (314, 316, 322) associated with the criteria and exceptions. The policy managers comprise an access manager (218) for restricting transmission of e-mail messages (204) between the first site and the second sites in accordance with the source/destination policy (218). The policy managers (216) further comprise a content manager (220) for restricting transmission of e-mail messages (204) between the first site and the second sites in accordance with the content policy (220), and a virus manager (224) for restriction transmission of e-mail messages (204) between the first site and the second sites in accordance with the virus policy (224).



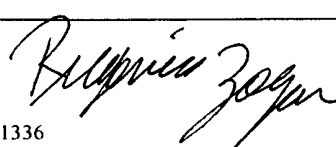
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## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US98/15552

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC(6) : H04K 1/00 US CL : 380/25 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. : 380/25 395/all 380/all 364/all Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched EPO File, JPO File Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) IETF Website: Archive		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,416,842 A (AZIZ) 16 May 1995 AB col. 5, lines 50-55, 59-61, 40-48 col. 11, lines 20-23	1-8, 10-19
Y	US 5,748,884 A (ROYCE et al.) 05 May 1998 col. 3, lines 39-42	7-8
Y	US 5,627,764 A (SCHUTZMAN et al.) 06 May 1997 col. 1, lines 36-54 col. 8, lines 6-10 col. 6, lines 28-33	2-8, 10-19
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
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Date of the actual completion of the international search 27 JANUARY 1999		Date of mailing of the international search report <b>08 MAR 1999</b>
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Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EPO 0 680 187 A2 (GOVER ET AL) 02 November 1995, see entire document	1-19
X	EPO 0 420 779 A2 (DAWSON et al) 03 April 1991 col. 5, lines 15-23 col. 4, lines 14-18 col. 6, lines 2-8 col. 8, lines 2-8	2-8,9,10-19
Y	US 5,606,668 A (SHWED) 25 February 1997 col. 2, all col. 5, all col. 4, all	2-8, 10-19
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Y	US 5,577,202 A (PADGETT) 19 November 1996 col. 4, all	2-8,11-19
X	US 5,632,011 A (LANDFIELD et al.) 20 May 1997 Fig. 2A, 2B col. 4, all col. 2, all	1-8,9,10-19
Y	US 5,802,253 A (GROSS et al.) 01 September 1998 col. 1, all	2-8
A	US 5,555,346 A (GROSS et al.) 10 September 1996, see entire document	1-19
A	US 5,283,856 A (GROSS et al.) 01 February 1994, see entire document	1-19
A	US 5,331,543 A (YAJIMA et al.) 19 July 1994, see entire document	1-19
A	US 5,369,707 A (FOLLENDRE, III) 29 November 1994, see entire document	1-19
A	US 5,530,758 A (MARINO, Jr. et al.) 25 June 1996, see entire document	1-19

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International application No.  
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A	US 5,414,833 A (HERSHEY et al.) 09 May 1995, see entire document	1-19
A	US 5,778,174 A (CAIN) 07 July 1998, see entire document	1-19
A	US 5,828,893 A (WIED et al.) 27 October 1998, see entire document	1-19
A	US 5,278,984 A (BATCHELOR) 11 January 1994, see entire document	1-19