

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
21 February 2008 (21.02.2008)

PCT

(10) International Publication Number  
**WO 2008/021159 A3**

(51) International Patent Classification:  
*G06F 9/00* (2006.01)

(74) Agent: GLASGOW, JiNan; PO Box 28539, Raleigh,  
North Carolina 27611-8539 (US).

(21) International Application Number:  
PCT/US2007/017686

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(22) International Filing Date: 9 August 2007 (09.08.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/837,410 11 August 2006 (11.08.2006) US  
11/649,336 3 January 2007 (03.01.2007) US  
11/880,890 23 July 2007 (23.07.2007) US

(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, LV, MC, MT, 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).

(71) Applicant (*for all designated States except US*): CIPHEROPTICS, INC. [US/US]; 701 Corporate Center Drive, Raleigh, North Carolina 27607 (US).

(71) Applicants and

(72) Inventors: STARRETT, Charles R. [US/US]; 701 Corporate Center Drive, Raleigh, North Carolina 27607 (US). WILLIS, Ronald B. [US/US]; 701 Corporate Center Drive, Raleigh, North Carolina 27607 (US). MCALISTER, Donald K. [US/US]; 701 Corporate Center Drive, Raleigh, North Carolina 27607 (US). HOFF, Brandon L. [US/US]; 701 Corporate Center Drive, Raleigh, North Carolina 27607 (US).

Published:  
— *with international search report*

(88) Date of publication of the international search report:  
16 October 2008



WO 2008/021159 A3

(54) Title: ENFORCING SECURITY GROUPS IN NETWORK OF DATA PROCESSORS

(57) Abstract: A technique for securing message traffic in a data network using various methods for distributing security policies and keys, where policy definition is determined in a Management and Policy (MAP) functional layer that is responsible for policy distribution; a separate Key Authority Point (KAP) that is responsible for key generation, key distribution, and policy distribution; and a separate Policy Enforcement Point (PEP) which is responsible for enforcing the policies and applying the keys.

**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/US07/17686

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC: G06F 9/00(2006.01)  
 USPC: 726/14  
 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. : 726/14  
 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	U.S. 2005/0102514 A1 (BERGENWALL et al) 12 May 2005 (12.05.2005), whole document.	1-27
Y	U.S. 2003/0012205 A1 (FOTI et al) 16 January 2003 (16.01.2003), Pages 2-3.	1-27
Y	US 2004/0205342 A1 (ROEGNER) 14 October 2004 (14.10.2004), Page 1, Sec 13 and Page 3, Sec 39.	7, 20
Y	US 2002/0069356 A1 (KIM) 6 June 2002 (06.06.2002), Page 4, Sec 59-60.	10, 23
Y	US 2003/0233576 A1 (MAUFER et al) 18 December 2003 (18.12.2003), Page 3, Sec 24.	11, 24

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

Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"I" 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	

Date of the actual completion of the international search 21 May 2008 (21.05.2008)	Date of mailing of the international search report <b>02 JUN 2008</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 Nasser Moazzami Telephone No. (571) 273-8300 

**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/US07/17686

Continuation of B. FIELDS SEARCHED Item 3:

EAST

search terms: security, policy, server,