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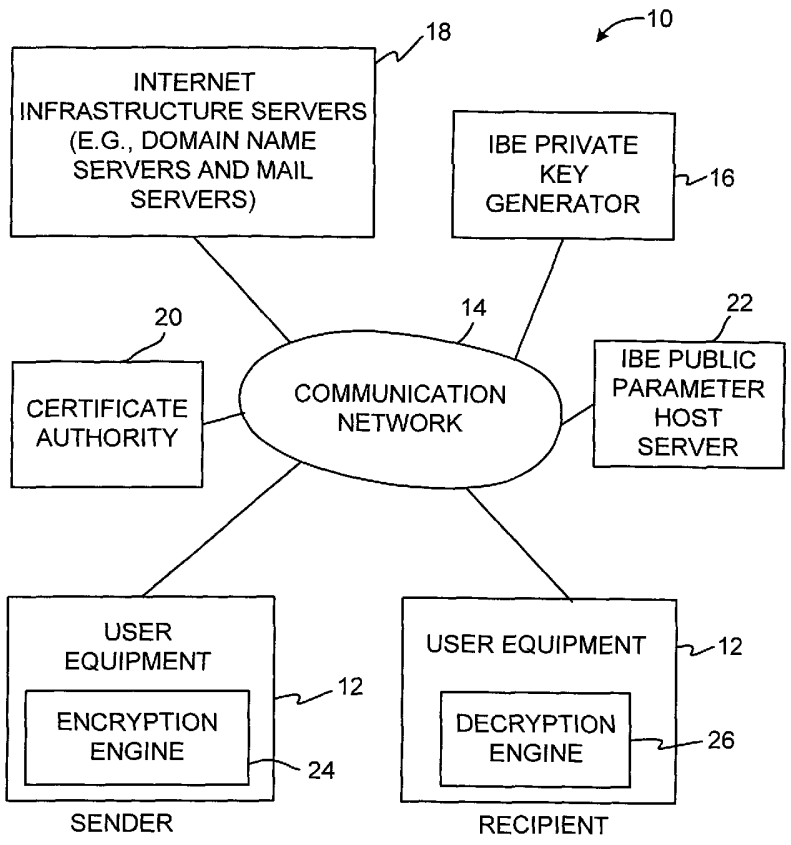
[Continued on next page]

(54) Title: ENCRYPTION SYSTEM WITH PUBLIC PARAMETER HOST SERVERS



(57) Abstract: A system is provided that uses identity-based encryption (IBE) to support secure communications. Messages from a sender may be encrypted using an IBE public key and IBE public parameter information associated with a recipient. The recipient may decrypt IBE-encrypted messages from the sender using an IBE private key. A host having a service name may be used to store the IBE public parameter information. The sender may use a service name generation rule to generate the service name based on the IBE public key of the recipient. The sender may use the service name to obtain the IBE public parameter information from the host.

WO 2005/001629 A3

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.

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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 all designations*

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
IPC(7) : H04L 9/00
US CL : 713/200
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. : 713/200 713/156,175;380/21,49,277;709/206,225,238

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	THE HP TIME VAULT SERVICE: INNOVATING THE WAY CONFIDENTIAL INFORMATION IS DISCLOSED, AT THE RIGHT TIME (Marco Casassa Mont) 04 September 2002, see entire document.	1-24
Y	US 6,061,448 A (Smith) 09 May 2000, see entire document.	1-24
Y	US 2002/0188690 A1 (Lee) 12 December 2002, see entire document.	1-24
Y	US 2003/0081785 A1 (Boneh et al.) 01 May 2003, see entire document.	4
Y,P	US 2003/0163567 A1 (McMorris) 28 August 2003, see entire document.	10
Y,P	US 2003/0198348 A1 (Mont. et al.) 23 October 2003, see entire document.	18
Y	US 2002/0169857 A1 (Martija) 14 November 2002, see entire document.	23
A,P	US 2003/0182554 A1 (Gentry et al.) 25 September 2003.	1-24

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C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A,P	US 2003/0179885 A1 (Gentry et al.) 25 September 2003.	1-24
A,P	US 2003/0120733 A1 (Forman) 26 June 2003.	1-24
A	US 6,396,830 B2 (Aravamudan et al.) 28 May 2002.	1-24

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US04/18048

Continuation of B. FIELDS SEARCHED Item 3:
USPAT;US-PGPUB;EPO;JPO;DERWENT
host,authority,asymmetric,public,compute,identity,address,name,parameter