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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
28 April 2005 (28.04.2005)

PCT

(10) International Publication Number
WO 2005/038641 A3

(51) International Patent Classification[7]: G06F 3/06

(21) International Application Number:
PCT/US2004/033068

(22) International Filing Date: 6 October 2004 (06.10.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/686,410 14 October 2003 (14.10.2003) US

(71) Applicant *(for all designated States except US)*: **INTEL CORPORATION** [US/US]; 2200 Mission College Boulevard, Santa Clara, CA 95052 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **KOMARLA, Eshwari** [IN/IN]; 746 14th Cross JP Nagar 2nd Phase, Bangalore 560078, Karnataka (IN). **ZIMMER, Vincent** [US/US]; 1937 South 369th Street, Federal Way, WA 98003 (US). **BULUSU, Mallik** [IN/IN]; 1100 Fern Street SW, #33-101, Olympia, WA 98502 (US).

(74) Agents: **VINCENT, Lester, J.** et al.; Blakely Sokoloff Taylor & Zafman, 12400 Wilshire Boulevard, 7th Floor, Los Angeles, CA 90025 (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, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

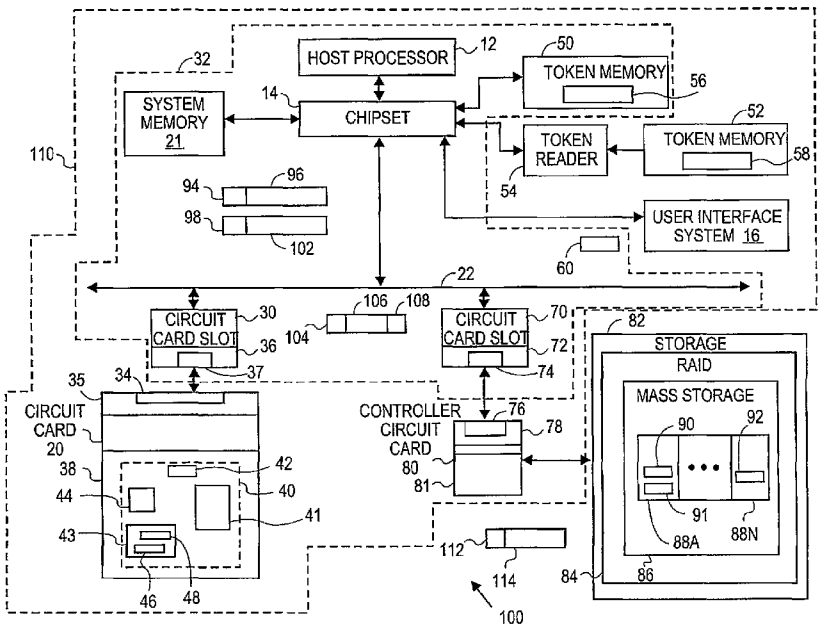
(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, 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).

Published:
— *with international search report*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:
5 January 2006

[Continued on next page]

(54) Title: DATA SECURITY



(57) Abstract: In one embodiment, a method is provided that may include encrypting, based least in part upon at least one key, one or more respective portions of input data to generate one or more respective portions of output data to be stored in one or more locations in storage. The method of this embodiment also may include generating, based at least in part upon the one or more respective portions of the output data, check data to be stored in the storage, and/or selecting the one or more locations in the storage so as to permit the one or more respective portions of the output data to be distributed among two or more storage devices comprised in the storage. Many modifications, variations, and alternatives are possible without departing from this embodiment.

WO 2005/038641 A3

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.