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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
26 February 2004 (26.02.2004)

PCT

(10) International Publication Number
WO 2004/017168 A3

(51) International Patent Classification[7]: G06F 17/60

(21) International Application Number:
PCT/US2003/025324

(22) International Filing Date: 12 August 2003 (12.08.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/218,696 14 August 2002 (14.08.2002) US

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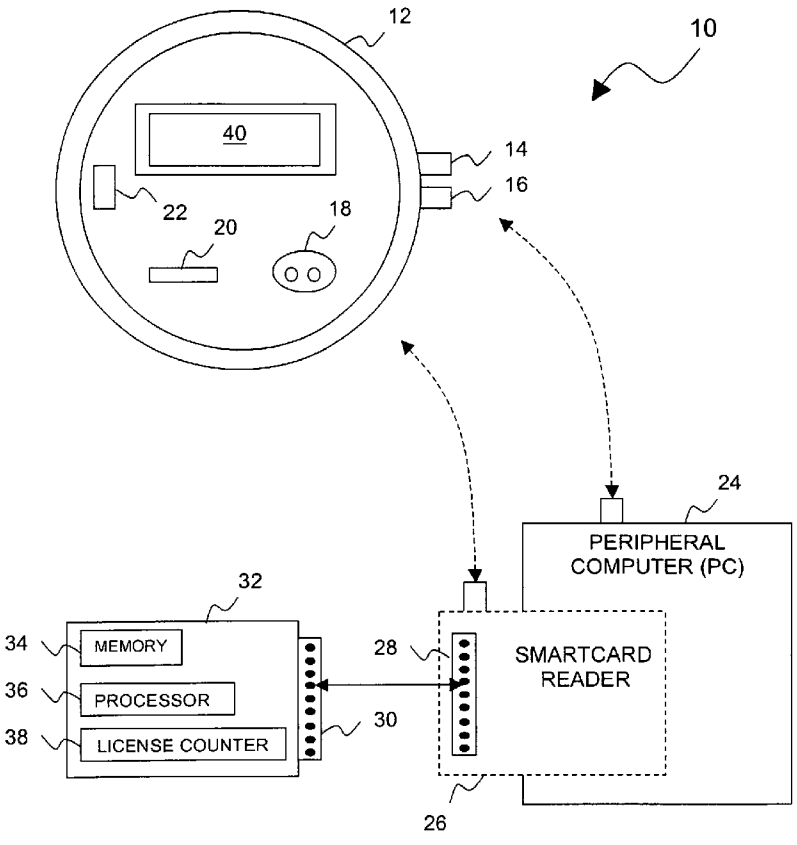
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(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, 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.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, 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, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: TRANSFERABLE METER LICENSES USING SMARTCARD TECHNOLOGY



(57) Abstract: A metering system is provided including a smartcard reader and peripheral computer in communication with a metering apparatus. A smartcard with memory, microprocessor, and license counter may then be engaged with a smartcard reader in the metering system to effect meter license transactions. The license transactions may be purchased by a user either to enable enhanced functional meter features via a meter upgrade process or to disable functional meter features via a meter downgrade process. Such features are typically enabled or disabled by respectively either providing or restricting access to selected portions of the meter firmware. Since both upgrades and downgrades can be effected at a utility meter, the smartcards provide transferable meter licenses. Advantages of the disclosed smartcard technology facilitate secure and reliable license transactions. Such advantages more particularly result from data encryption techniques when communicating with a smartcard and a random communication protocol implemented between smartcard and utility meter modules.

WO 2004/017168 A3

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:
27 May 2004

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.