

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
14 July 2005 (14.07.2005)

PCT

(10) International Publication Number
WO 2005/062904 A3

- (51) International Patent Classification:
G06K 19/06 (2006.01)
- (21) International Application Number:
PCT/US2004/043185
- (22) International Filing Date:
22 December 2004 (22.12.2004)
- (25) Filing Language:
English
- (26) Publication Language:
English
- (30) Priority Data:
60/532,393 24 December 2003 (24.12.2003) US
11/009,820 10 December 2004 (10.12.2004) 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, SM, 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, IS, IT, LT, 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).

- (71) Applicant and
- (72) Inventor: ARNOUSE, Michael [US/US]; 15 Hickory Drive, Old Brookville, NY 11545 (US).
- (74) Agents: TAUFER, Paul, A. et al.; Piper Rudnick LLP, 1650 Market Street, Suite 4900, Philadelphia, PA 19103 (US).

Published:
— with international search report

(88) Date of publication of the international search report:
2 April 2009

(54) Title: DUAL-SIDED SMART CARD READER

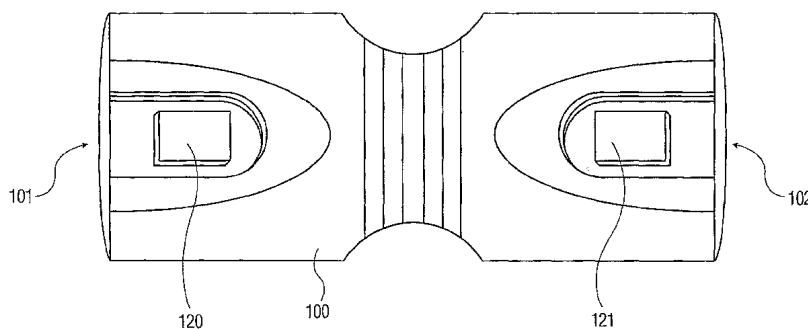


FIG. 1

(57) Abstract: A dual-sided smart card reader (100), and method for operating the same, is disclosed. The dual-sided smart card reader (100) permit the simultaneous insertion of at least two different smart cards from opposing sides. The dual -sided smart card reader (100) may additionally include a biometric verification device, such as fingerprint scanner (120, 121), for comparing biometric information from an operator of the reader (100) to biometric information stored on a smart card (150, 160). Also, the dual-sided smart card reader (10 may additionally include a pulse monitor, such as a sensor, to detect a pulse of an operator of the reader (100).



WO 2005/062904 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/43185

A. CLASSIFICATION OF SUBJECT MATTER

IPC: G06K 19/06(2006.01)

USPC: 235/451

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. : 235/375, 380, 382, 382.5, 439-441, 451; 705/16-18

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)
EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 5,763,862 (JACHIMOWICZ et al.) 09 June 1998 (09.06.1998), column 4, lines 17-21, column 9, lines 20-32, figures 1 and 2.	1-3, 5-8, 10, 11, 20, 21, 25, 27, 28 ----- 4, 9, 12-19, 22-24, 26, 29-36
Y	US 5,719,950 (OSTEN et al) 17 February 1998 (17.02.1998), column 6, lines 56-65.	4, 9, 12-14, 16-19, 22-24, 26, 30-36
Y	US 6,502,748 (BERG et al) 07 January 2003 (07.01.2003), column 7, lines 26-40.	15-17, 19, 24, 29, 30, 35
A	US 5,629,508 A (FINDLEY, JR. et al) 13 May 1997 (13.05.1997), see entire document.	1-36

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	"T"	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

10 May 2008 (10.05.2008)

Date of mailing of the international search report

19 MAY 2008

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

JAMARA A. FRANKLIN

Telephone No. (703) 308-0956