

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
3 April 2003 (03.04.2003)

PCT

(10) International Publication Number
WO 03/028361 A3

(51) International Patent Classification⁷: G06K 9/00

Avenue, Barrington, IL 60010 (US). **MENNIE, Douglas, U.**; 229 Wood Street, Barrington, IL 60010 (US). **JONES, Paul, A.**; 1618 Meadow Lane, Glenview, IL 60025 (US).

(21) International Application Number: PCT/US02/30157

(22) International Filing Date:
23 September 2002 (23.09.2002)

(74) Agents: **RUDISILL, Stephen, G.** et al.; Jenkens & Gilchrist, 225 West Washington Street, Suite 2600, Chicago, IL 60606 (US).

(25) Filing Language: English

(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, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.

(26) Publication Language: English

(30) Priority Data:
09/965,428 27 September 2001 (27.09.2001) US

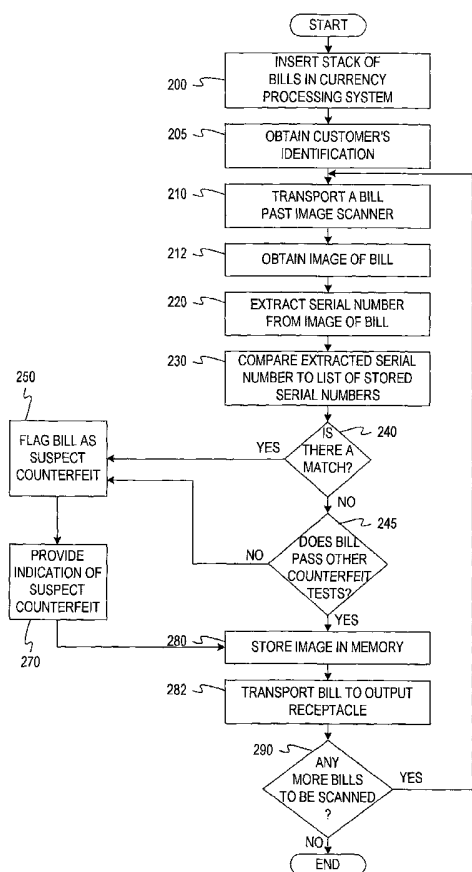
(71) Applicant: **CUMMINS-ALLISON CORP.** [US/US];
891 Feehanville Drive, Mount Prospect, IL 60056 (US).

(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),

(72) Inventors: **JONES, John, E.**; 43 Long Meadow, Winnetka, IL 60043 (US). **JONES, William, J.**; 280 Potect

[Continued on next page]

(54) Title: DOCUMENT PROCESSING SYSTEM USING FULL IMAGE SCANNING



(57) Abstract: A system for tracking currency bills (fig. 3a. elements 200, 210, and 212) comprises a currency scanning device. (fig. 3a element 210). The scanning device includes a sensor that retrieves currency identification characteristic information of each bill processed. The currency identification characteristic information permits the unique identification of each bill processed. The system further comprises a customer identification means (fig. 3a element 205) and means for associating each processed bill with the customer depositing the bill. Means for identifying the customer (or customer account) associated with a particular processed bill after the deposit transaction has been completed is also included in the system.



WO 03/028361 A3



European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

Declaration under Rule 4.17:

— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations*

Published:

— *with international search report*

(88) Date of publication of the international search report:

12 June 2003

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.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/30157

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06K 9/00
 US CL : 382/140

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. : 382/140,135-139

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y,P --- X,P	US 6,363,164 B1 (JONES et al.)26 March 2002 (26.03.2002), figs. 1a,1f, and 1j; col. 1 lines 55-67;col. 2 lines 1-5; col. 5 lines 45-52, nd 60-67, col. 6 lines 1-20,32-45, and 50-60;col. 7 lines 20-31and 35-37;col. 12 lines 26-32 and 60-65; col. 13 lines 22-34,37-40, and 50-67; col. 14 lines 39-65; col. 15 lines 5-21 and 41-65; col. 16 lines 23-27,47-52, and 65-67;col. 17 lines 1-3; col. 18 lines 7-23; col. 20 lines 27-33 and 60-67; col. 21 lines 15-25 and 35-56; col. 27 lines 57-61; col. 28	1-59, and 61 ----- 60 and 62-67
Y	US 6,415,983 B1 (ULVR et al.) 09 July 2002 (09.06.2002), figs 3-6; col. 3 lines 1-5,13-23, and 28-36; col. 5 lines 25-28; col. 6 lines 42-46,55-58, and 63-67; col. 7 lines 29-47; col. 9 lines 55-65; col. 10 lines 12-30	1-59, and 61
Y	US 6,119,946 (TEICHER) 19 September, 2000 (19.09.2000), fig. 2; col. 2 lines 45-50, col. 7 lines 5-11,	1,10,13,45,49-51, and 61
Y	US 6,141,438 (BLANCHESTER) 31 October, 2000 (31.10.2000) col. 2 lines 1-15 and 43-55	1,10,13,45,49-51, and 61

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:	"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
"A" document defining the general state of the art which is not considered to be of particular relevance	"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
"E" earlier application or patent published on or after the international filing date	"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
"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)	"&"	document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means		
"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

20 February 2003 (20.02.2003)

Date of mailing of the international search report

14 APR 2003

Name and mailing address of the ISA/US
 Commissioner of Patents and Trademarks
 Box PCT
 Washington, D.C. 20231

Facsimile No. (703)305-3230

Authorized officer

Amelia Au
 Amelia Au

Telephone No. 703-305-4700