

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
12.01.2000 Bulletin 2000/02

(51) Int Cl.7: G07D 7/00

(43) Date of publication A2:
20.01.1999 Bulletin 1999/03

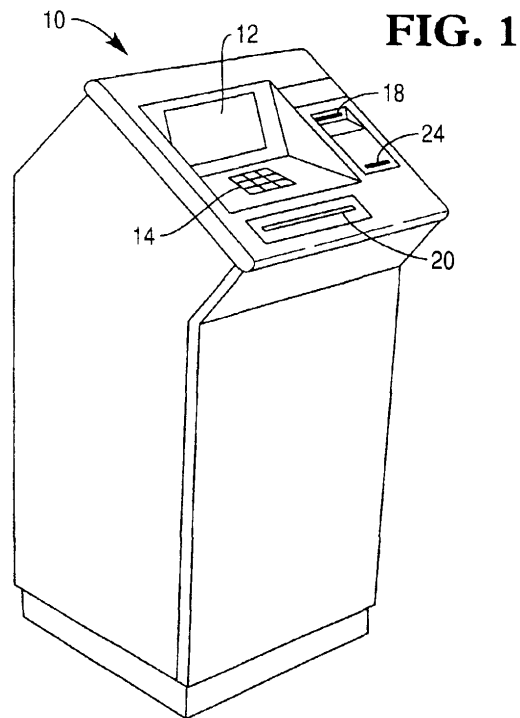
(21) Application number: 98305397.6

(22) Date of filing: 07.07.1998

(84) Designated Contracting States: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE Designated Extension States: AL LT LV MK RO SI (30) Priority: 18.07.1997 GB 9715084 (71) Applicant: NCR INTERNATIONAL INC. Dayton, Ohio 45479 (US)	(72) Inventor: Leong, Liem H. Angus, Dundee DD5 3SF (GB) (74) Representative: Irish, Vivien Elizabeth et al International IP Department, NCR Limited, 206 Marylebone Road London NW1 6LY (GB)
--	---

(54) An apparatus for validating sheets

(57) A self-service deposit terminal (10) is arranged to validate deposited bank notes. Each note (38) is individually transported past an interferometer (36) which is connected to a control unit (46). The output of the control unit (46) is input into a data processing means (26) which generates a value indicative of the surface roughness of the bank note. The value of roughness is compared with at least one stored reference value for genuine notes. The data processing means determines either solely on this comparison, or in conjunction with the output from a further validation means, whether the tested note is invalid.





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 98 30 5397

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
Y	US 4 367 951 A (HAMMON FRITZ) 11 January 1983 (1983-01-11)	1-6	G07D7/00
A	* claim 1; figures 2,3 * ---	7-9	
Y	US 4 837 840 A (GOLDMAN ROBERT N) 6 June 1989 (1989-06-06)	1-6	
A	* claim 1; figure 1 * ---	7-9	
A	EP 0 257 749 A (DE LA RUE SYST) 2 March 1988 (1988-03-02)	1-9	
	* claim 1; figure 1 * ---		
A	US 4 883 183 A (GOTO MASAO ET AL) 28 November 1989 (1989-11-28)	7-9	
	* claim 1; figure 1 * -----		
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			G07D
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		23 November 1999	Kirsten, K
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03 82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 98 30 5397

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

23-11-1999

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 4367951 A		11-01-1983	DE	3001881 A	06-08-1981
			EP	0032710 A	29-07-1981
			JP	1056683 B	01-12-1989
			JP	1569787 C	10-07-1990
			JP	56106106 A	24-08-1981

US 4837840 A		06-06-1989	NONE		

EP 0257749 A		02-03-1988	GB	2193803 A	17-02-1988
			DE	3778453 A	27-05-1992
			WO	8800338 A	14-01-1988
			JP	1500616 T	01-03-1989
			NO	880943 A	03-05-1988
			US	4988206 A	29-01-1991

US 4883183 A		28-11-1989	JP	1843786 C	12-05-1994
			JP	5052993 B	06-08-1993
			JP	63095595 A	26-04-1988
			CN	1020974 B	26-05-1993
