11) Publication number:

**0 334 390** A3

(12)

## **EUROPEAN PATENT APPLICATION**

(21) Application number: 89107409.8

(51) Int. Cl.5: **B42D** 15/00

22 Date of filing: 24.04.85

3 Priority: 27.04.84 GB 8410918

Date of publication of application: 27.09.89 Bulletin 89/39

© Publication number of the earlier application in accordance with Art.76 EPC: 0 160 504

Designated Contracting States:
 CH DE FR GB IT LI SE

Date of deferred publication of the search report: 05.09.90 Bulletin 90/36 ① Applicant: THOMAS DE LA RUE & COMPANY LIMITED

De La Rue House 3/5 Burlington Gardens GB-London W1A 1DL(GB)

2 Inventor: Whitehead, Colin John

16 Willowside

Woodley Reading Berks. RG5 4HJ(GB)

Inventor: Haslop, John Martin

22 Radcott Close

Woodley Reading Berks.(GB)

Inventor: Bratchley, Robin

30 Bingley Grove

Woodley Reading Berks. RG5 4TT(GB)

(4) Representative: Skone James, Robert Edmund et al

**GILL JENNINGS & EVERY 53-64 Chancery** 

Lane

London WC2A 1HN(GB)

## Mumbered documents.

(57) This invention relates to documents, such as banknotes, which are produced and used in large numbers and which, for a given series, are identical one with another except for a unique multi-digit number upon each individual document, the number thus uniquely identifying that document within the series. According to the present invention, to render qunauthorised reproduction of the document more difficult, on each document the numerical or alphabetical characters in the identifying number are provided one above the other. In addition, at least two characters in the identifying number may differ from each other (in addition to any differences in the letters or digits which they represent) in one or more visible characteristics. Thus the differing characters may have different heights or widths or be in different styles of type. Preferably, the identifying number appears twice on each document, in diagonally opposite corners, and preferably the variation of physical characteristics of the characters along the

length of one of the numbers is reversed in direction in the other of the numbers.

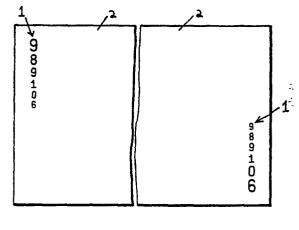


Fig. 1



## EUROPEAN SEARCH REPORT

EP 89 10 7409

FR-A-1177718 (YATTA)  * the whole document *  US-A-2085023 (REID)  * page 1, right-hand column, lines 1 - 29; figure 1 *  DE-C-74923 (DUPONT)  * page 2, left-hand column, lines 8 - 39; figures 1-3 *  US-A-2850819 (PAYNE)  TECHNICAL FIELDS SEARCHED (Int. Cl.4)  B42D A63F B41F B41K B41B G09F  The present search report has been drawn up for all claims  Place of sourch THE HAGUE  CATEGORY OF CITED DOCUMENTS T; theory or principle underlying the invention E; carific patent document of the same category T; particularly relevant if solate alone T; theory or principle underlying the invention E; carific patent document, but published on, or after the filling date T; the continuity relevant if solate alone T; the continuity relevant is solated a	Category	Citation of document with indication, w of relevant passages	here appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)	
* the whole document *  US-A-2085023 (REID)  * page 1, right-hand column, lines 1 - 29; figure 1 *  DE-C-74923 (DUPONT)  * page 2, left-hand column, lines 8 - 39; figures 1-3 *  US-A-2850819 (PAYNE)  The present search report has been drawn up for all claims  Plus of search THE HAGUE  CATEGORY OF CITED DOCUMENTS  X: particularly relevant if takes since  Y: partic						
US-A-2085023 (REID)  * page 1, right-hand column, lines 1 - 29; figure 1 *  DE-C-74923 (DUPONT)  * page 2, left-hand column, lines 8 - 39; figures 1-3 *  US-A-2850819 (PAYNE)  TRECHNICAL FIELDS SEARCHED (Int. Cl.4)  B42D A63F B41F B41B G09F  The present search report has been drawn up for all claims  Place of search THE HAGUE  CATEGORY OF CITED DOCUMENTS  X: particularly relevant if taken sines Y: particularly relevant if cambined with another document of the same category after the filling fairs. Y: particularly relevant if cambined with another document of the same category. I column to left for the reasons.	Y	• •		1, 2, 10	B42D15/00	
* page 1, right-hand column, lines 1 - 29; figure 1 *  DE-C-74923 (DUPONT)  * page 2, left-hand column, lines 8 - 39; figures 1-3 *  US-A-2850819 (PAYNE)  TECHNICAL FIELDS SEARCHED (Int. Ct.4)  B42D A63F B41F B41K B41B G09F  The present search report has been drawn up for all claims  Place of search THE HAGUE  CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if tombined with another document of the same category L decument (eld for other resons	Ì	* the whole document *				
* page 1, right-hand column, lines 1 - 29; figure 1 *  DE-C-74923 (DUPONT)  * page 2, left-hand column, lines 8 - 39; figures 1-3 *  US-A-2850819 (PAYNE)  TECHNICAL FIELDS SEARCHED (Int. Ct.4)  B42D A63F B41F B41K B41B G09F  The present search report has been drawn up for all claims  Place of search THE HAGUE  CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if tombined with another document of the same category L decument (eld for other resons	Υ	US-A-2085023 (REID)		1-5. 9.		
Figure 1 *  DE-C-74923 (DUPONT)  * page 2, left-hand column, lines 8 - 39; figures 1-3 *  US-A-2850819 (PAYNE)  TECHNICAL FIELDS SEARCHED (Int. Cl.4)  B42D A63F B41F B41K B41B G09F  The present search report has been drawn up for all claims  Fixe of search THE HAGUE  CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if taken alone CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y:			nes 1 - 29:			
* page 2, left-hand column, lines 8 - 39; figures 1-3 *  US-A-2850819 (PAYNE)  TECHNICAL FIELDS SEARCHED (Int. Ct.4)  B42D A63F B41F B41K B41B G09F  The present search report has been drawn up for all claims  Place of search THE HAGUE  The HAGUE  To JUNE 1990  LONCKE J.W.  CATEGORY OF CITED DOCUMENTS  X; particularly relevant if taken alone Y; particularly relevant if combined with another document of the same cited for other reasons.			,			
* page 2, left-hand column, lines 8 - 39; figures 1-3 *  US-A-2850819 (PAYNE)  TECHNICAL FIELDS SEARCHED (Int. Ct.4)  B42D A63F B41F B41K B41B G09F  The present search report has been drawn up for all claims  Place of search THE HAGUE  The HAGUE  To JUNE 1990  LONCKE J.W.  CATEGORY OF CITED DOCUMENTS  X; particularly relevant if taken alone Y; particularly relevant if combined with another document of the same cited for other reasons.	γ	 DE-C-74923 (DIIPONT)		3-5 0		
The present search report has been drawn up for all claims  The present search report has been drawn up for all claims  Place of search THE HAGUE  CATEGORY OF CITED DOCUMENTS  X; particularly relevant if taken alone Y; particularly relevant if combined with another document of the same category  The content of the same category  The combined with another of the same category  LONCKE J.W.	1	, ,	es 8 - 39·			
The present search report has been drawn up for all claims  The present search report has been drawn up for all claims  Place of search THE HAGUE  CATEGORY OF CITED DOCUMENTS  X: particularly relevant if taken alone Y: particularly relevant if on whinded with another document of the same category  D: document cited in the application of the same category  D: document cited in the application of the same category  D: document cited in the application of the same category  D: document cited in the application  D: document cited in the application  D: document cited in the application  D: document cited in the reversions			as o os,			
The present search report has been drawn up for all claims  The present search report has been drawn up for all claims  Place of search THE HAGUE  CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if taken alone T: theory or principle underlying the invention after the filling date D: document of the same category L: cocument cited in the application L: document cited in the application L: document cited for the reasons	.	US-A-2850819 (PAYNE)				
The present search report has been drawn up for all claims  The present search report has been drawn up for all claims  Place of search THE HAGUE  CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if taken alone T: theory or principle underlying the invention after the filling date D: document of the same category L: cocument cited in the application L: document cited in the application L: document cited for the reasons	Ì	***************************************				
The present search report has been drawn up for all claims  The present search report has been drawn up for all claims  Place of search THE HAGUE  CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if taken alone T: theory or principle underlying the invention after the filling date D: document of the same category L: cocument cited in the application L: document cited in the application L: document cited for the reasons						
The present search report has been drawn up for all claims  The present search report has been drawn up for all claims  Place of search THE HAGUE  CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if taken alone T: theory or principle underlying the invention after the filling date D: document of the same category L: cocument cited in the application L: document cited in the application L: document cited for the reasons						
The present search report has been drawn up for all claims  The present search report has been drawn up for all claims  Place of search THE HAGUE  CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if taken alone T: theory or principle underlying the invention after the filling date D: document of the same category L: cocument cited in the application L: document cited in the application L: document cited for the reasons						
The present search report has been drawn up for all claims  The present search report has been drawn up for all claims  Place of search THE HAGUE  CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if taken alone T: theory or principle underlying the invention after the filling date D: document of the same category L: cocument cited in the application L: document cited in the application L: document cited for the reasons						
The present search report has been drawn up for all claims  Place of search THE HAGUE  CATEGORY OF CITED DOCUMENTS  X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category  L: document cited in the application  D: document cited in the application  D: document cited for other reasons			-			
The present search report has been drawn up for all claims  Place of search THE HAGUE  CATEGORY OF CITED DOCUMENTS  X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category  LONCKE J. W.  T: theory or principle underlying the invention E: carlier patent document, but published on, or after the filling date D: document cited in the application L: document of the same category						
The present search report has been drawn up for all claims  Place of search THE HAGUE  CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category  Examiner  LONCKE J. W.  T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited for other reasons						
The present search report has been drawn up for all claims  Place of search THE HAGUE  CATEGORY OF CITED DOCUMENTS  X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category  D: document cited in the application L: document cited in the application L: document cited on the reasons				1	A63F	
The present search report has been drawn up for all claims  Place of search THE HAGUE  CATEGORY OF CITED DOCUMENTS  X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category  Date of completion of the search  Examiner  Loncke J.W.  T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filling date D: document cited in the application L: document cited in the application L: document cited or other reasons						
The present search report has been drawn up for all claims  Place of search THE HAGUE  CATEGORY OF CITED DOCUMENTS  X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category  L: document cited in the application L: document cited for other reasons						
The present search report has been drawn up for all claims  Place of search THE HAGUE  CATEGORY OF CITED DOCUMENTS  X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category L: document cited in the application L: document cited in the application L: document cited in the application L: document cited for other reasons						
Place of search THE HAGUE  CATEGORY OF CITED DOCUMENTS  X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category  Date of completion of the search  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					GU9F	
Place of search THE HAGUE  CATEGORY OF CITED DOCUMENTS  X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category  Date of completion of the search  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						
Place of search THE HAGUE  CATEGORY OF CITED DOCUMENTS  X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category  Date of completion of the search  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						
Place of search THE HAGUE  CATEGORY OF CITED DOCUMENTS  X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category  Date of completion of the search  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						
Place of search THE HAGUE  CATEGORY OF CITED DOCUMENTS  X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category  Date of completion of the search  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						
Place of search THE HAGUE  CATEGORY OF CITED DOCUMENTS  X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category  Date of completion of the search  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						
Place of search THE HAGUE  CATEGORY OF CITED DOCUMENTS  X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category  Date of completion of the search  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						
Place of search THE HAGUE  CATEGORY OF CITED DOCUMENTS  X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category  Date of completion of the search  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						
THE HAGUE  27 JUNE 1990  LONCKE J.W.  CATEGORY OF CITED DOCUMENTS  X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category  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	<u> </u>	The present search report has been drawn u	tp for all claims			
CATEGORY OF CITED DOCUMENTS  T: theory or principle underlying the invention E: carlier patent document, but published on, or after the filing date Y: particularly relevant if combined with another document of the same category L: document cited for other reasons		Place of search	Date of completion of the search	1	Examiner	
X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category L: document cited for other reasons	•	THE HAGUE	27 JUNE 1990	LONC	KE J.W.	
X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category L: document cited for other reasons	-	CATEGORY OF CITED DOCUMENTS	T : theory or princip E : carlier patent do	ole underlying the ocument, but publi	invention shed on, or	
a : particularity relevant in combined with another D : nocument cited in the application document of the same category L : document cited for other reasons  A : technological background	<ul> <li>X: particularly relevant if taken alone</li> <li>Y: particularly relevant if combined with another document of the same category</li> <li>A: technological background</li> <li>O: non-written disclosure</li> </ul>		after the filing of	after the filing date		
A: technological background						
O . non-written disclosure  & . member of the same notent family corresponding						