(54) Coin sorting method and apparatus therefor

(57) The present invention provides a method and apparatus that can rapidly and accurately sort genuine from counterfeit coins without using a special high-performance CPU.

The invention relates to a method of sorting genuine and counterfeit coins that are passing through a predetermined pathway, wherein a plurality of type-identifying means 14 and 15 is arranged along the predetermined pathway along which a plurality of types of coins M to be sorted are passing. This method of sorting genuine and counterfeit coins comprises the steps of: setting a plurality of mutually non-overlapping assumed domains 1 to 4, one for each of identification factors of the type-identifying means and corresponding to magnitudes of values thereof; determining whether an output from any of the type-identifying means belongs in any of the plurality of assumed domains; and sorting whether or not outputs from the identification means belong within a closed function domain in coordinates of a plurality of dimensions with axes along which the identification factors are plotted, in order to sort in accordance with each of identification factors of the plurality of types.

The invention also relates to an apparatus for sorting genuine and counterfeit coins that are passing through a predetermined pathway, wherein a plurality of type-identifying means 14 and 15 is arranged along the predetermined pathway along which a plurality of types of coins M to be sorted are passing. This apparatus for sorting genuine and counterfeit coins comprises: an assumed region setting means for setting a plurality of mutually non-overlapping assumed domains, one for each of identification contents of the type-identifying means and corresponding to magnitudes of values thereof; a sorting means for determining whether an out-

put from any of the type-identifying means belongs in any of the plurality of assumed domains; a function domain setting means for setting a closed function domain in coordinates of a plurality of dimensions with axes along which the identification factors are plotted, in order to sort in accordance with each of identification factors of the plurality of types; and a sorting means for sorting whether or not outputs from the identification means belong within the closed function domains; wherein genuine and counterfeit coins are sorted by an output from the sorting means.
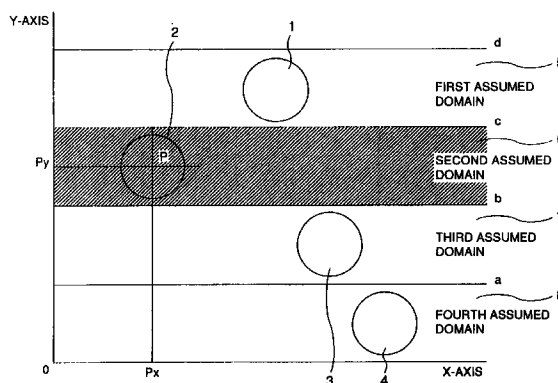
FIG. 1

EP 0 653 731 A3

European Patent Office

EUROPEAN SEARCH REPORT

Application Number

EP 94 11 7224

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)
X	EP-A-0 219 574 (COMPANIA TELEFONICA NACIONAL DE ESPANA)	1,4	G07D5/00
Y	* column 3, line 13 - line 49; figures *	2,3,5,6	G07F3/02 G07F3/00

Y	EP-A-0 505 609 (NIPPON CONLUX)	2,3,5,6	
A	* column 6, line 8 - line 29; figure 4 *	1,4	
	* column 9, line 16 - line 37; figure 12 *		

A	EP-A-0 480 736 (MARS INCORPORATED)	1,4	
	* column 11, line 56 - column 12, line 3 *		
	* column 14, line 57 - column 15, line 3; figures 4,7 *		

TECHNICAL FIELDS
SEARCHED   (Int.Cl.6)

G07F
G07D

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	3 January 1996	Neville, D

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