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71 Applicant: **MARS INCORPORATED**
6885 Elm Street
McLean Virginia 22101-3883(US)

72 Inventor: **Heiman, Frederic P.**
1 Bayview, No. 5
Los Gatos California 95030(US)

74 Representative: **Burke, Steven David et al,**
R.G.C. Jenkins & Co. 12-15, Fetter Lane
London EC4A 1PL(GB)

54 **Self tuning coin recognition system.**

57 A self-tuning coin testing apparatus (10) having a coin sensor circuit (21, 22) which produces an output signal indicative of a parameter characteristic of the coins which are tested by the coin sensor and a programmed microprocessor (35) which stores an initial acceptance limit, determines whether the output signal from the coin sensor is indicative of a valid coin, stores a signal based on the output signal for each valid coin, calculates a statistical function based on the stored signal, and finally computes and stores a new acceptance limit based on the stored signals for a predetermined number of previously accepted coins. The statistical function, is preferably weighted so that it is based upon values for only a predetermined number of the most recently accepted coins so that a recent average is maintained.

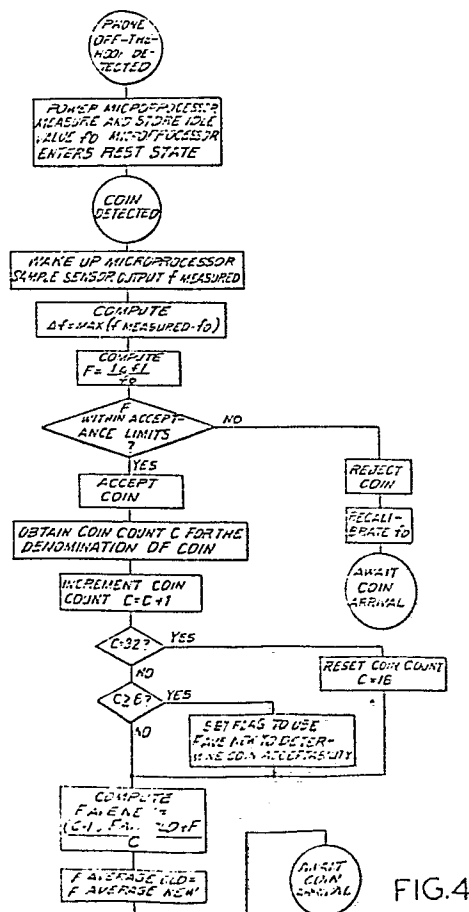


FIG.4



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. 4)
Y	DE-A-3 103 371 (GÜNTER WULFF-APPARATEBAU) * Whole document *	1-9, 13, 14	G 07 F 3/02 G 06 K 9/66 G 07 D 5/08
A		10-12	
Y	GB-A-2 087 548 (OMRON TATEISI ELECTRONICS) * Abstract; figures; page 1, line 95 - page 2, line 53 *	1-9, 13, 14	
A	EP-A-0 072 189 (AERONAUTICAL AND GENERAL INSTRUMENTS)		
A	EP-A-0 101 276 (K.K. UNIVERSAL)		
A	GB-A-2 038 062 (HAJIME INDUSTRIES)		
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int. Cl. 4) G 07 F G 07 D G 06 K
Place of search THE HAGUE		Date of completion of the search 06-10-1986	Examiner DAVID J.Y.H.
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	