

Title (en)

METHOD FOR MONITORING TRANSPORT PROCESSES FOR CONVEYING BANKNOTES IN A SELF-SERVICE TERMINAL

Title (de)

VERFAHREN ZUM ÜBERWACHEN VON TRANSPORTVORGÄNGEN ZUM BEFÖRDERN VON WERTSCHEINEN IN EINEM SELBSTBEDIENUNGSTERMINAL

Title (fr)

PROCÉDÉ DE SURVEILLANCE DES OPÉRATIONS DE TRANSPORT DESTINÉES AU TRANSPORT DE COUPONS DE VALEUR DANS UN TERMINAL EN LIBRE-SERVICE

Publication

EP 2783354 B1 20210901 (DE)

Application

EP 12801489 A 20121122

Priority

- DE 102011055652 A 20111123
- EP 2012073382 W 20121122

Abstract (en)

[origin: WO2013076206A1] The aim of the invention is a method for monitoring transport processes of banknotes in a self-service terminal, said method ensuring a reliable control of the transport processes even for banknotes which have windows. This is achieved in that each transported banknote (BN) is guided lengthwise through a light barrier, said light barrier having a light-sensitive sensor (S) in order to detect at least one edge of the banknote (BN). In order to prevent the detection of windows (W) and to detect the rear edge (HK) of the banknote (BN), the signal (SO) generated by the sensor (S) is debounced, the debouncing time (dT) being set to a first period of time (dT1) dependent on the length of the banknote (BN), wherein the period of time corresponds to the expected length of the banknote (BN) and can last 60 ms for example. The debouncing time (dT) is set to the first period of time (dT1) as soon as the signal (SO) generated by the sensor (S) indicates the first appearance of an edge of the banknote (BN), in particular the front edge (VK). After the first period of time (dT1) expires, the debouncing time can be set to a second substantially shorter period of time (dT2) of 1 ms for example. The rear edge (HK) of the banknote is thus reliably detected and indicated.

IPC 8 full level

G07D 7/162 (2016.01); **G07D 7/183** (2016.01); **G07D 7/185** (2016.01); **G07F 19/00** (2006.01)

CPC (source: EP US)

G07D 7/162 (2013.01 - EP US); **G07D 7/183** (2017.04 - EP); **G07D 7/185** (2013.01 - EP); **G07D 11/16** (2018.12 - US); **G07F 19/202** (2013.01 - EP US); **G07F 19/203** (2013.01 - EP US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

DE 102011055652 A1 20130523; CN 104094324 A 20141008; CN 104094324 B 20170721; EP 2783354 A1 20141001; EP 2783354 B1 20210901; US 2014326576 A1 20141106; US 9129462 B2 20150908; WO 2013076206 A1 20130530

DOCDB simple family (application)

DE 102011055652 A 20111123; CN 201280057675 A 20121122; EP 12801489 A 20121122; EP 2012073382 W 20121122; US 201214359424 A 20121122