

Title (en)

A method and device for characterising the state of use of banknotes, and their classification as fit and unfit for circulation

Title (de)

Verfahren und Vorrichtung zur Charakterisierung des Verwendungszustands von Banknoten und ihre Klassifizierung als geeignet und ungeeignet für die Zirkulation

Title (fr)

Procédé et dispositif servant à caractériser l'état d'utilisation de billets de banque, et leur classification en tant qu'adaptés ou non adaptés à la circulation

Publication

EP 2911123 A1 20150826 (EN)

Application

EP 15155865 A 20150220

Priority

ES 201430239 A 20140221

Abstract (en)

A method and device for characterising the state of use of banknotes and their classification as fit and unfit for circulation, which avoids errors in said classification, thus preventing unfit notes from being put back into circulation, and fit notes from being mistakenly and prematurely destroyed. The method comprises capturing (1) at least one image of at least one of the face of a note to be analysed and analysing (4) the captured image in the spatial domain. Furthermore, the captured image is analysed (5) in the frequency domain and both analyses (4, 5) are combined (13), via a mathematical algorithm, in order to obtain a single value referred to as FV. Lastly, the FV is compared (15) to a fixed FV threshold (14) and depending on whether said calculated FV is lower or higher than the FV threshold, the note is classified as fit or unfit for circulation.

IPC 8 full level

G07D 7/182 (2016.01); **G07D 7/187** (2016.01)

CPC (source: EP ES)

G07D 7/12 (2013.01 - EP); **G07D 7/1205** (2017.04 - ES); **G07D 7/187** (2013.01 - EP ES)

Citation (applicant)

WO 2012165959 A1 20121206 - NL BANK NV [NL], et al

Citation (search report)

- [A] US 2003031340 A1 20030213 - ALATTAR ADNAN M [US], et al
- [A] US 5175775 A 19921229 - IWAKI TADAO [JP], et al
- [A] EP 0691632 A1 19960110 - AT & T GLOBAL INF SOLUTION [US]
- [A] WO 2008014090 A2 20080131 - 3M INNOVATIVE PROPERTIES CO [US]
- [A] EP 1011079 A1 20000621 - TOSHIBA KK [JP]

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2911123 A1 20150826; **EP 2911123 B1 20160706**; ES 2549461 A2 20151028; ES 2549461 B1 20161007; ES 2549461 R1 20151201;
ES 2591228 T3 20161125

DOCDB simple family (application)

EP 15155865 A 20150220; ES 15155865 T 20150220; ES 201430239 A 20140221