

Title (en)

SENSOR AND METHOD FOR CHECKING VALUE DOCUMENTS, IN PARTICULAR BANK NOTES, AND VALUE DOCUMENT PROCESSING APPARATUS

Title (de)

SENSOR UND VERFAHREN ZUR PRÜFUNG VON WERTDOKUMENTEN, INSbesondere BANKNOTEN, SOWIE WERTDOKUMENTBEARBEITUNGSVORRICHTUNG

Title (fr)

CAPTEUR ET PROCÉDÉ DE VÉRIFICATION DE DOCUMENTS DE VALEUR, EN PARTICULIER DE BILLETS DE BANQUE, ET APPAREIL DE TRAITEMENT DE DOCUMENTS DE VALEUR

Publication

**EP 4186041 A1 20230531 (DE)**

Application

**EP 21740426 A 20210708**

Priority

- DE 102020004470 A 20200723
- EP 2021025251 W 20210708

Abstract (en)

[origin: WO2022017641A1] The invention relates to a sensor and to a method for checking value documents (2), in particular bank notes, each having a luminescent, leaf-like substrate and a luminescent feature applied to a partial surface of the substrate, and to a value document processing apparatus (1). From the spectral vectors obtained for a plurality of measurement points, which spectral vectors characterize the intensity of the luminescence radiation of the value document (2) detected in at least two spectral ranges, substrate intensity values and feature intensity values are determined, on the basis of which a pure substrate mask is determined which contains only those measurement points which reliably lie outside the feature. From the spectral vectors of the measurement points contained in the pure substrate mask, an average substrate vector is determined, on the basis of which corrected substrate intensity values and corrected feature intensity values and/or a spectral signature of the substrate and/or of the feature is determined from the spectral vectors. Alternatively or additionally, a temporal behavior of the luminescence radiation emitted from the substrate and/or feature is determined using measurement points contained in the pure substrate mask.

IPC 8 full level

**G07D 7/1205** (2016.01); **G07D 7/20** (2016.01); **G07D 7/202** (2016.01)

CPC (source: EP US)

**G07D 7/1205** (2017.05 - EP US); **G07D 7/2008** (2013.01 - EP US); **G07D 7/2016** (2013.01 - EP); **G07D 7/205** (2013.01 - EP)

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**DE 102020004470 A1 20220127**; EP 4186041 A1 20230531; EP 4186041 B1 20240417; PL 4186041 T3 20240722;  
US 2023274599 A1 20230831; WO 2022017641 A1 20220127

DOCDB simple family (application)

**DE 102020004470 A 20200723**; EP 2021025251 W 20210708; EP 21740426 A 20210708; PL 21740426 T 20210708;  
US 202118017355 A 20210708