

Title (en)

VALUABLE DOCUMENT WITH AN OPTICALLY VARIABLE STRUCTURE (VARIANTS)

Title (de)

WERTDOKUMENT MIT EINER OPTISCH VARIABLEN STRUKTUR (VARIANTEN)

Title (fr)

DOCUMENT PRÉCIEUX À STRUCTURE OPTIQUEMENT VARIABLE (ET VARIANTES)

Publication

EP 2727741 A4 20150527 (EN)

Application

EP 12803793 A 20120622

Priority

- RU 2011126649 A 20110630
- RU 2012000492 W 20120622

Abstract (en)

[origin: EP2727741A2] Valuable document comprises a coating in the form of a printed raster that is made up of at least one colour which is different from the colour of the document base. The document also comprises a three-dimensional raster arranged relative to the coating so that the three-dimensional raster is at least partially disposed on the coating, is oriented substantially parallel to lines of the printed raster and together with the coating forms a latent image which is not discernible when the document is viewed at right angle. At least a portion of lines of the three-dimensional raster has an asymmetric cross-section profile with an aspect ratio of not less than 1:1.25, as a result of which the latent image becomes visible in the form of coloured elements or a single-colour region when the viewing angle changes. Changing the viewing direction by 180 degrees without any change in the viewing angle results in a change in the optical density or colour gamut of at least a part of the latent image. The invention enhances the counterfeit protection of a valuable document with an optically variable image and makes it possible for an untrained user to carry out a visual authenticity check.

IPC 8 full level

B41M 3/14 (2006.01); **B42D 25/00** (2014.01); **B42D 25/29** (2014.01); **B42D 25/324** (2014.01); **B42D 25/342** (2014.01); **B42D 25/355** (2014.01); **G07D 7/00** (2006.01); **G07D 7/12** (2006.01)

CPC (source: EP)

B41M 3/148 (2013.01); **B42D 25/324** (2014.10); **B42D 25/328** (2014.10); **B42D 25/342** (2014.10); **B42D 25/382** (2014.10); **B42D 25/387** (2014.10); **G07D 7/003** (2017.04); **G07D 7/0032** (2017.04)

Citation (search report)

- [Y] CA 2421101 A1 20030304 - GIESECKE & DEVRIENT GMBH [DE]
- [Y] US 4025673 A 19770524 - REINNAGEL RICHARD E
- [A] WO 2009013000 A2 20090129 - GIESECKE & DEVRIENT GMBH [DE], et al
- See references of WO 2013002680A2

Cited by

JP2018012194A; JP2017024258A

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)

EP 2727741 A2 20140507; **EP 2727741 A4 20150527**; **EP 2727741 B1 20180328**; CN 103764403 A 20140430; CN 103764403 B 20160203; CO 6920269 A2 20140410; RU 2467879 C1 20121127; WO 2013002680 A2 20130103; WO 2013002680 A3 20130314

DOCDB simple family (application)

EP 12803793 A 20120622; CN 201280032028 A 20120622; CO 14018363 A 20140129; RU 2011126649 A 20110630; RU 2012000492 W 20120622