Title (en)

SECURITY ELEMENT FOR A DOCUMENT OF VALUE AND/OR A SECURITY DOCUMENT

Title (de)

SICHERHEITSELEMENT FÜR EIN WERT- UND/ODER SICHERHEITSDOKUMENT

Title (fr)

ÉLÉMENT DE SÉCURITÉ POUR UN DOCUMENT DE VALEUR ET/OU DE SÉCURITÉ

Publication

EP 2920004 B1 20170118 (DE)

Application

EP 13798963 A 20131115

Priority

- DE 102012111054 A 20121116
- EP 2013073970 W 20131115

Abstract (en)

[origin: WO2014076245A1] The present invention relates to a security element for a document of value and/or a security document which is arranged on a transparent layer, for example a film (1, 1'), wherein the security element has a first periodic, optical structure, for example a grid of lines (10, 30, 30') or a grid of points, which forms a first coating on the first side of the transparent layer, and a second periodic, optical structure, for example a grid of lines (20, 40, 40', 40") or a grid of points, which forms a second coating on the second side, opposite from the first side of the transparent layer. In order to achieve better protection against copying, the first optical structure and the second optical structure are preferably arranged as overlapping in such a way that, when seen by an outside observer from a certain, predetermined viewing angle (α) or lighting angle, they show a colour-changing effect, wherein the first coating has a first colour and the second coating has at least one second colour that is different from the first colour.

IPC 8 full level

B42D 25/342 (2014.01); **B42D 25/351** (2014.01); **B42D 25/378** (2014.01); **B42D 25/387** (2014.01)

CPC (source: EP US)

B42D 25/29 (2014.10 - US); **B42D 25/342** (2014.10 - EP US); **B42D 25/351** (2014.10 - EP US); **B42D 25/378** (2014.10 - EP US); **B42D 25/387** (2014.10 - 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)

WO 2014076245 A1 20140522; AU 2013346725 A1 20150507; AU 2013346725 B2 20170727; BR 112015009648 A2 20170704; BR 112015009648 B1 20210615; CN 104781088 A 20150715; CN 104781088 B 20180417; DE 102012111054 A1 20140605; DE 102012111054 B4 20231019; EP 2920004 A1 20150923; EP 2920004 B1 20170118; ES 2622368 T3 20170706; PL 2920004 T3 20170731; US 2016303889 A1 20161020

DOCDB simple family (application)

EP 2013073970 W 20131115; AU 2013346725 A 20131115; BR 112015009648 A 20131115; CN 201380059206 A 20131115; DE 102012111054 A 20121116; EP 13798963 A 20131115; ES 13798963 T 20131115; PL 13798963 T 20131115; US 201314442183 A 20131115