

Title (en)

PRODUCTION OF A SECURITY ELEMENT PROVIDED WITH COLORED MICRO-DEPRESSIONS

Title (de)

HERSTELLUNG EINES MIT GEFÄRBTEN MIKROVERTIEFUNGEN VERSEHENEN SICHERHEITSELEMENTES

Title (fr)

FABRICATION D'UN ÉLÉMENT DE SÉCURITÉ DOTÉ DE MICROCAVITÉS TEINTÉES

Publication

EP 2498999 B1 20160302 (DE)

Application

EP 10779240 A 20101104

Priority

- DE 102009052538 A 20091111
- EP 2010006730 W 20101104

Abstract (en)

[origin: WO2011057739A1] The invention relates to a method for producing a security element provided with micro-depressions (8) for security papers, documents of value or the like, the micro-depressions (8) being colored with a specific ink and the method comprising the following steps: a) coating an upper surface (5) of a substrate (4) with a layer that can be embossed (7), b1) molding micro-depressions (8) in the layer that can be embossed (7) in order to form an embossed layer (7), c) applying the specific ink to the upper surface (5), so that the ink (14) remains in the micro-depressions (8), characterized by b2) applying a structured protective layer (11; 10, 22), e.g. a washable ink or a resist lacquer, to the coated upper surface (5) wherein the structured protective layer (11; 10, 22) does not cover the micro-depressions (8) which are intended to be colored with the specific ink, after step b1) and before step c), d) removing the structured protective layer (11; 10, 22) and therefore any coloring (16) after step c).

IPC 8 full level

B42D 25/324 (2014.01); **B42D 25/42** (2014.01); **B42D 25/425** (2014.01); **B42D 25/43** (2014.01)

CPC (source: EP US)

B42D 25/29 (2014.10 - EP US); **B42D 25/328** (2014.10 - EP US); **B42D 25/373** (2014.10 - EP); **B42D 25/42** (2014.10 - EP US); **B42D 25/425** (2014.10 - EP US); **B42D 25/43** (2014.10 - EP US); **B42D 25/324** (2014.10 - EP US); **B42D 25/373** (2014.10 - US); **B42D 25/378** (2014.10 - US); **B42D 25/47** (2014.10 - EP US); **B42D 2033/10** (2022.01 - EP); **B42D 2033/20** (2022.01 - EP); **B42D 2035/24** (2022.01 - EP); **B42D 2035/44** (2022.01 - 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

DOCDB simple family (publication)

DE 102009052538 A1 20110512; CN 102639331 A 20120815; CN 102639331 B 20150408; EP 2498999 A1 20120919; EP 2498999 B1 20160302; HK 1173706 A1 20130524; US 2012223050 A1 20120906; US 8920663 B2 20141230; WO 2011057739 A1 20110519

DOCDB simple family (application)

DE 102009052538 A 20091111; CN 201080051121 A 20101104; EP 10779240 A 20101104; EP 2010006730 W 20101104; HK 13100293 A 20130109; US 201013509071 A 20101104