

Title (en)

METHOD FOR PRODUCING AN OPTICALLY VARIABLE SECURITY ELEMENT

Title (de)

VERFAHREN ZUM HERSTELLEN EINES OPTISCH VARIABLEN SICHERHEITSELEMENTS

Title (fr)

PROCÉDÉ DE FABRICATION D'UN ÉLÉMENT DE SÉCURITÉ OPTIQUEMENT VARIABLE

Publication

**EP 3980274 A1 20220413 (DE)**

Application

**EP 20731792 A 20200529**

Priority

- DE 102019003947 A 20190606
- EP 2020025253 W 20200529

Abstract (en)

[origin: WO2020244806A1] The invention relates to a method for producing an optically variable security element (12, 62), in which a support (18) is provided, the areal extent of which defines a Z-axis standing perpendicular thereto, - a first embossing lacquer coat (22) is applied to the support in an area, - a first relief structure (24) is embossed into the first embossing lacquer coat (22), - a second, coloured embossing lacquer coat (32) is applied to the first embossing lacquer coat (22), wherein a colour effect of the second embossing lacquer coat (32) differs from a colour effect of the first embossing lacquer coat (22), and wherein the first relief structure (24) is partially covered by the second, coloured embossing lacquer coat (32) and partially not covered, - a second relief structure (34), differing from the first relief structure, is embossed into the second embossing lacquer coat (32) so that the first relief structure (24) and the second relief structure (34) are arranged at different height levels in the z-direction relative to the support (18), and - a coating (26) is applied to the non-covered portion (52; 64) of the first relief structure (24) and to the second relief structure (34) so that a first colour impression is generated for an observer of the security element by the combination at least of the colour effects of the first embossing lacquer coat (22) and the coating (26), and a second, different colour impression is generated by the combination of the colour effects of at least the first embossing lacquer coat (22), the second embossing lacquer coat (32) and the coating (26).

IPC 8 full level

**B42D 25/324** (2014.01); **B42D 25/373** (2014.01); **B42D 25/425** (2014.01); **B42D 25/43** (2014.01); **B42D 25/445** (2014.01)

CPC (source: CN EP US)

**B42D 25/324** (2014.10 - CN EP US); **B42D 25/328** (2014.10 - CN); **B42D 25/373** (2014.10 - CN EP US); **B42D 25/425** (2014.10 - CN EP US); **B42D 25/43** (2014.10 - CN EP); **B42D 25/445** (2014.10 - CN 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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**WO 2020244806 A1 20201210**; CN 113950415 A 20220118; CN 113950415 B 20231121; DE 102019003947 A1 20201210; EP 3980274 A1 20220413; US 11807029 B2 20231107; US 2022314681 A1 20221006

DOCDB simple family (application)

**EP 2020025253 W 20200529**; CN 202080040877 A 20200529; DE 102019003947 A 20190606; EP 20731792 A 20200529; US 202017615796 A 20200529