

Title (en)

METHOD FOR PRODUCING A SECURITY COMPOSITE BODY, AND SECURITY COMPOSITE BODY HAVING TWO REFRACTIVE STRUCTURES

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES SICHERHEITSVERBUNDKÖRPERS UND SICHERHEITSVERBUNDKÖRPER MIT ZWEI OPTISCH BRECHENDEN STRUKTUREN

Title (fr)

PROCÉDÉ DE FABRICATION D'UN CORPS COMPOSITE DE SÉCURITÉ, ET CORPS COMPOSITE DE SÉCURITÉ COMPORTANT DEUX STRUCTURES PROVOQUANT UN EFFET DE RÉFRACTION OPTIQUE

Publication

EP 2828094 B1 20160316 (DE)

Application

EP 13709481 A 20130318

Priority

- DE 102012204343 A 20120319
- EP 2013055588 W 20130318

Abstract (en)

[origin: WO2013139749A1] The invention relates to a security composite body (100) and a method for producing such a security composite body (100), said method comprising the following steps: producing a composite body, forming a surface relief structure (75) on an outer surface of the composite body, introducing an optically verifiable feature (61) into the composite body, wherein the surface relief structure (75) and the feature are formed in exact alignment with each other, wherein the composite body is produced in such a way that, in the interior, a boundary layer between a first plastic material having a first index of refraction n_1 and a second plastic material (11) having a second index of refraction n_2 different from the first index of refraction n_1 is structured with a boundary layer relief structure (5) deviating from a flat surface and is oriented in exact alignment with the feature and the surface relief structure (75), so that a verification of the feature (61) can be verified by means of an optical structure formed from a combination of the surface relief structure (75) and the boundary layer relief structure (5).

IPC 8 full level

B42D 15/00 (2006.01)

CPC (source: EP US)

B42D 25/29 (2014.10 - EP); **B42D 25/324** (2014.10 - US); **B42D 25/41** (2014.10 - EP US); **B42D 25/45** (2014.10 - US); **B42D 2033/22** (2022.01 - EP); **B42D 2035/20** (2022.01 - EP); **B42D 2035/36** (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 102012204343 A1 20130919; CN 104395095 A 20150304; CN 104395095 B 20170308; EP 2828094 A1 20150128; EP 2828094 B1 20160316; WO 2013139749 A1 20130926

DOCDB simple family (application)

DE 102012204343 A 20120319; CN 201380014756 A 20130318; EP 13709481 A 20130318; EP 2013055588 W 20130318