

Title (en)
Security element with identification marks

Title (de)
Sicherheitselement mit Kennzeichnung

Title (fr)
Élément de sécurité doté de marques

Publication
EP 2465701 B1 20160413 (DE)

Application
EP 11009883 A 20111215

Priority
DE 102010054853 A 20101217

Abstract (en)
[origin: EP2465701A2] The element (12) has an optically non-variable color layer (32) covered in a covering region of an optically variable effect layer (40) and provided with a partial region (34) with fixed color impression and another partial region (36) with a different color impression. Individualized identification (14) is produced at the covering region and the color layer to display the color impressions in the former partial region. The partial regions are aligned with each other such that variable color impression of the effect layer below a preset viewing angle corresponds to the fixed color impression. The individualized identification is provided by infrared laser such as carbon dioxide laser, neodymium-doped yttrium aluminum garnet-laser or neodymium doped yttrium orthovanadat-laser. An independent claim is also included for a method for manufacturing a safety element for securing valuable articles.

IPC 8 full level
B42D 25/00 (2014.01)

CPC (source: EP US)
B42D 25/29 (2014.10 - EP US); **B42D 25/30** (2014.10 - US); **B42D 25/328** (2014.10 - EP); **B42D 25/36** (2014.10 - EP); **B42D 25/364** (2014.10 - EP); **B42D 25/378** (2014.10 - EP); **B42D 25/382** (2014.10 - EP); **B42D 25/41** (2014.10 - EP US); **B42D 2035/08** (2022.01 - EP); **B42D 2035/24** (2022.01 - EP)

Cited by
US9701152B2; EP2965920A1; DE102016006931A1; EP4328043A1; FR3022183A1; EP4303028A1; US2015314629A1; EP2890847A4; EP3079916A4; US2015258837A1; CN105658439A; EP2882597A4; CN105637147A; RU2634772C1; US10357990B2; US10166808B2; CN106660385A; RU2676011C2; WO2014032238A1; WO2015189404A1; US10023000B2; US9844969B2; US10155407B2; WO2024008364A1; WO2016005158A1; WO2015051523A1; US10166810B2; EP2772145B1

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 2465701 A2 20120620; EP 2465701 A3 20130424; EP 2465701 B1 20160413; DE 102010054853 A1 20120621; ES 2582010 T3 20160908; PL 2465701 T3 20161031

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