

Title (en)

GONIOLUMINESCENT SECURITY ELEMENT AND METHOD FOR PRODUCING IT

Title (de)

GONIOLUMINESZENTES SICHERHEITSELEMENT UND VERFAHREN ZU DESSEN HERSTELLUNG

Title (fr)

ÉLÉMENT DE SÉCURITÉ GONIO-LUMINESCENT, ET SON PROCÉDÉ DE FABRICATION

Publication

**EP 2307206 A1 20110413 (DE)**

Application

**EP 09777715 A 20090731**

Priority

- EP 2009005718 W 20090731
- DE 102008036402 A 20080801

Abstract (en)

[origin: WO2010012508A1] The invention relates to a gonioluminescent security element (1) and to a method for producing such a security element, which is preferably embodied as a security document. The security element (1) comprises a first element (3) and a second element (5), which at least partly overlaps the first element (3), wherein the second element (5) faces an observation side (4) of the security element (1), wherein the first element (3) comprises first luminescence means and the second element (5) comprises at least one optical interference structure which has an orientation-dependent transmittance (11, 12) and/or reflectance (11, 12) in a distinguished wavelength range (14) wherein the first element (3) and the second element (5) are coordinated with one another in such a way that an optical change can be perceived in the case of observation during excitation of luminescence of the luminescence means depending on an orientation of the observation and/or a direction of incident radiation of excitation light through the second element (5), wherein the at least one interference structure changes its transmittance and/or reflectance in the distinguished wavelength range for precisely one orientation or in a delimited orientation range.

IPC 8 full level

**B42D 15/10** (2006.01)

CPC (source: EP US)

**B42D 25/29** (2014.10 - EP); **B42D 25/30** (2014.10 - US); **B42D 25/40** (2014.10 - US); **B42D 25/382** (2014.10 - EP); **B42D 25/387** (2014.10 - EP); **B42D 2035/24** (2022.01 - EP)

Citation (search report)

See references of WO 2010012508A1

Designated contracting state (EPC)

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 SE SI SK SM TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

**DE 102008036402 B3 20090917**; AT E539899 T1 20120115; CN 102083633 A 20110601; CN 102083633 B 20150520;  
EP 2307206 A1 20110413; EP 2307206 B1 20120104; PL 2307206 T3 20120531; RU 2011107349 A 20120910; RU 2493969 C2 20130927;  
WO 2010012508 A1 20100204; WO 2010012508 A8 20110303

DOCDB simple family (application)

**DE 102008036402 A 20080801**; AT 09777715 T 20090731; CN 200980126345 A 20090731; EP 09777715 A 20090731;  
EP 2009005718 W 20090731; PL 09777715 T 20090731; RU 2011107349 A 20090731