

Title (en)

Security element with colour-switching effect, use of same and method for producing same

Title (de)

Sicherheitselement mit Farbkippeffekt, Verfahren zu dessen Herstellung und dessen Verwendung

Title (fr)

Élément de sécurité ayant un effet de bascule colorée, son procédé de fabrication et son utilisation

Publication

**EP 2578414 B1 20131211 (DE)**

Application

**EP 11007998 A 20111004**

Priority

EP 11007998 A 20111004

Abstract (en)

[origin: EP2578414A1] The security element has a coating layer (2) made of a material having an optically variable effect e.g. color shift effect, a support substrate (8) and a partial structure with recess (10). The partial structure is formed of an opaque coating for exhibiting light-absorbing properties, on the side that faces the coating layer. The partial structure is formed of metallic coloration on the side that faces away from the coating layer. The partial structure is provided with a light-absorbing metallic layer (4) and a reflective metallic layer (5). Independent claims are included for the following: (1) method for manufacturing security element; and (2) use of the security element.

IPC 8 full level

**B42D 15/10** (2006.01); **B42D 15/00** (2006.01)

CPC (source: EP US)

**B42D 25/29** (2014.10 - EP US); **B42D 25/324** (2014.10 - EP); **B42D 25/328** (2014.10 - EP); **B42D 25/351** (2014.10 - EP US); **B42D 25/355** (2014.10 - EP US); **B42D 25/36** (2014.10 - EP); **B42D 25/364** (2014.10 - EP US); **B42D 25/369** (2014.10 - EP US); **B42D 25/373** (2014.10 - EP US); **B42D 25/378** (2014.10 - EP US); **B42D 25/382** (2014.10 - EP US); **B42D 25/387** (2014.10 - EP US); **B42D 25/445** (2014.10 - EP US); **B42D 25/45** (2014.10 - EP US); **B42D 25/47** (2014.10 - EP)

Cited by

EP3290225A1; EP4000942A1; DE102018004054A1; DE102016000592A1; EP3939802A1; US11059643B2; WO2022033653A1; EP3738785A1; US11932044B2; WO2022069486A1; WO2020229271A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

**EP 2578414 A1 20130410**; **EP 2578414 B1 20131211**; CA 2847297 A1 20130411; ES 2441352 T3 20140204; KR 102014562 B1 20190826; KR 20140085481 A 20140707; PL 2578414 T3 20140530; RU 2014117705 A 20151110; RU 2600088 C2 20161020; SI 2578414 T1 20140829; US 2014342105 A1 20141120; US 9387718 B2 20160712; WO 2013050140 A1 20130411

DOCDB simple family (application)

**EP 11007998 A 20111004**; CA 2847297 A 20121003; EP 2012004141 W 20121003; ES 11007998 T 20111004; KR 20147011808 A 20121003; PL 11007998 T 20111004; RU 2014117705 A 20121003; SI 201130128 T 20111004; US 201214344076 A 20121003