

Title (en)  
SECURITY ELEMENT, AND METHOD FOR THE PRODUCTION THEREOF

Title (de)  
SICHERHEITSELEMENT UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)  
ÉLÉMENT DE SÉCURITÉ ET PROCÉDÉ DE FABRICATION

Publication  
**EP 2225108 B1 20170621 (DE)**

Application  
**EP 08863945 A 20081217**

Priority  
• EP 2008010742 W 20081217  
• DE 102007061828 A 20071220

Abstract (en)  
[origin: WO2009080263A2] The invention relates to a security element (12) for protecting objects of value, comprising a thin-film element (22) that has a color flipping effect, and a semi-transparent ink layer (34) which is disposed over the thin-film element (22) in first zones (30). The color impression of the thin-film element (22) is adjusted to the color impression of at least one subarea of the semi-transparent ink layer (34) when viewed in predetermined viewing conditions. The security element (12) further comprises a transparent phase delaying layer (36) which is disposed over the thin-film element (22) in second zones (38) and forms a phase-shifting layer for light in the visible wavelength range.

IPC 8 full level  
**B42D 25/00** (2014.01); **B42D 25/23** (2014.01); **B42D 25/29** (2014.01); **B42D 25/351** (2014.01); **B42D 25/391** (2014.01)

CPC (source: EP US)  
**B42D 25/00** (2014.10 - EP US); **B42D 25/23** (2014.10 - US); **B42D 25/29** (2014.10 - EP US); **B42D 25/351** (2014.10 - US); **B42D 25/391** (2014.10 - EP US); **B42D 2033/26** (2022.01 - EP); **B42D 2035/24** (2022.01 - EP)

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 MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**DE 102007061828 A1 20090625**; EP 2225108 A2 20100908; EP 2225108 B1 20170621; US 2010308570 A1 20101209; US 8733797 B2 20140527; WO 2009080263 A2 20090702; WO 2009080263 A3 20090917

DOCDB simple family (application)  
**DE 102007061828 A 20071220**; EP 08863945 A 20081217; EP 2008010742 W 20081217; US 80873308 A 20081217