

Title (en)

Security element

Title (de)

Sicherheitselement

Title (fr)

Élément de sécurité

Publication

EP 1972463 A3 20110622 (DE)

Application

EP 08004395 A 20080310

Priority

DE 102007012042 A 20070313

Abstract (en)

[origin: EP1972463A2] The unit has a characteristic region (12) e.g. imprinted machine readable barcode, selectively influencing a penetrated electromagnetic radiation, and containing a material with a photonic band gap. The characteristic region selectively absorbs the electromagnetic radiation in a narrow spectral range that lies in an ultraviolet spectral range. The characteristic region is colorless at a visible spectral range, and forms an optically variable layer, which is arranged towards an observer under different angle of vision of different color impressions. An independent claim is also included for a method for producing a security feature of a security unit, a security paper, a security foil and a data carrier.

IPC 8 full level

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

CPC (source: EP US)

B42D 25/29 (2014.10 - EP); **B42D 25/41** (2014.10 - US); **B42D 25/382** (2014.10 - EP); **B42D 25/387** (2014.10 - EP);
B42D 2033/12 (2022.01 - EP); **B42D 2033/20** (2022.01 - EP); **B42D 2035/24** (2022.01 - EP)

Citation (search report)

- [E] EP 2054242 A1 20090506 - RUE DE INT LTD [GB]
- [E] WO 2008095481 A2 20080814 - BUNDESDRUCKEREI GMBH [DE], et al
- [X] DE 102004039754 A1 20060223 - MERCK PATENT GMBH [DE]
- [X] US 2003179364 A1 20030925 - STEENBLIK RICHARD A [US], et al

Cited by

US9411074B2; DE102013225517B4; CN114236811A; EP2662806A1; EP3098086A1; DE102010045569A1; US2012139230A1;
WO2010046125A3; WO2010142391A1; DE102009016525A1; WO2010115809A1; DE102009016533A1; WO2010115803A2; EP2818919A1;
DE102010063982A1; US10482361B2; DE102010063982B4; WO2010046125A2; DE102008053099A1

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

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

EP 1972463 A2 20080924; EP 1972463 A3 20110622; EP 1972463 B1 20130814; DE 102007012042 A1 20080918

DOCDB simple family (application)

EP 08004395 A 20080310; DE 102007012042 A 20070313