

Title (en)

SEE-THROUGH SECURITY ELEMENT WITH MICROSTRUCTURES

Title (de)

DURCHSICHTSSICHERHEITSELEMENT MIT MIKROSTRUKTUREN

Title (fr)

ÉLÉMENT DE SÉCURITÉ TRANSPARENT DOTÉ DE MICROSTRUCTURES

Publication

EP 2091756 B1 20150513 (DE)

Application

EP 07819023 A 20071016

Priority

- EP 2007008953 W 20071016
- DE 102006050047 A 20061024

Abstract (en)

[origin: DE102006050047A1] The transparent security element (12) has a microstructure having a visual appearance (26,28) that is dependent on the viewing angle upon inspection. The microstructure is formed from an arrangement of multiple structure elements having a characteristic structure spacing of 1 micro meters or more. The transparent security element has a total thickness of 50 micrometers or less. The transparent security element has a transparent or translucent substrate (20) and a marking layer applied on the substrate, which has the micro structure. An independent claim is also included for a method for manufacturing the transparent security element.

IPC 8 full level

B42D 15/00 (2006.01)

CPC (source: EP US)

B42D 25/21 (2014.10 - US); **B42D 25/29** (2014.10 - EP US); **B42D 25/351** (2014.10 - US); **B42D 2033/24** (2022.01 - EP); **Y10T 156/10** (2015.01 - EP US)

Citation (examination)

- DE 4421407 C1 19950601 - KURZ LEONHARD FA [DE]
- DE 3422908 A1 19860102 - KURZ LEONHARD FA [DE]

Designated contracting state (EPC)

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DOCDB simple family (publication)

DE 102006050047 A1 20080430; CN 101528474 A 20090909; CN 101528474 B 20120523; EP 2091756 A2 20090826; EP 2091756 B1 20150513; EP 2939845 A2 20151104; EP 2939845 A3 20160413; EP 2939845 B1 20180502; RU 2009119034 A 20101127; RU 2452627 C2 20120610; US 2010194091 A1 20100805; US 8534708 B2 20130917; WO 2008049533 A2 20080502; WO 2008049533 A3 20090115

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