

Title (en)

SEE-THROUGH SAFETY ELEMENT WITH MICROSTRUCTURES

Title (de)

DURCHSICHTSSICHERHEITSELEMENT MIT MIKROSTRUKTUREN

Title (fr)

ÉLÉMENT DE SÉCURITÉ TRANSPARENT À MICROSTRUCTURES

Publication

**EP 2939845 B1 20180502 (DE)**

Application

**EP 15001325 A 20071016**

Priority

- DE 102006050047 A 20061024
- EP 07819023 A 20071016

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 25/21** (2014.01); **B42D 25/29** (2014.01); **B42D 25/351** (2014.01)

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);  
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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;  
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