

Title (en)  
SECURITY ELEMENT HAVING A MICROSTRUCTURE

Title (de)  
SICHERHEITSELEMENT MIT MIKROSTRUKTUR

Title (fr)  
ÉLÉMENT DE SÛRETÉ À MICROSTRUCTURE

Publication  
**EP 2501553 A1 20120926 (DE)**

Application  
**EP 10779718 A 20101115**

Priority  
• DE 102009053925 A 20091119  
• EP 2010006943 W 20101115

Abstract (en)  
[origin: WO2011060910A1] The invention relates to a security element (12) for security papers, value documents and the like, having at least one microstructure (22, 24), which comprises a viewing angle-dependent visual image when looking through the document. The at least one microstructure (22, 24) is formed by an arrangement of a plurality of structural elements (25) having a characteristic structure distance of 1 µm or more. According to the invention, the security element (12) comprises at least one motif image (30), which is visible when looking through the document from certain viewing angles (B) because of the viewing angle-dependent visual image of the microstructure (22, 24) and is not visible from other viewing angles (C). The microstructure (22, 24) and the motif image (30) have a combined thickness of 50 µm or less.

IPC 8 full level  
**B42D 25/324** (2014.01); **B42D 25/351** (2014.01)

CPC (source: EP US)  
**B42D 25/29** (2014.10 - EP US); **B42D 25/324** (2014.10 - EP US); **B42D 25/351** (2014.10 - EP US); **B42D 25/36** (2014.10 - EP);  
**B42D 25/373** (2014.10 - EP US); **B42D 2035/36** (2022.01 - EP)

Citation (search report)  
See references of WO 2011060910A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**DE 102009053925 A1 20110526**; EP 2501553 A1 20120926; EP 2501553 B1 20160504; EP 3075562 A1 20161005; EP 3075562 B1 20180509;  
US 2012228860 A1 20120913; US 9016726 B2 20150428; WO 2011060910 A1 20110526

DOCDB simple family (application)  
**DE 102009053925 A 20091119**; EP 10779718 A 20101115; EP 16000611 A 20101115; EP 2010006943 W 20101115;  
US 201013510714 A 20101115