

Title (en)  
OPTICALLY VARIABLE SECURITY ELEMENT

Title (de)  
OPTISCH VARIABLES SICHERHEITSELEMENT

Title (fr)  
ÉLÉMENT DE SÉCURITÉ OPTIQUE VARIABLE

Publication  
**EP 3475096 B1 20220907 (DE)**

Application  
**EP 17732031 A 20170622**

Priority  
• DE 102016007784 A 20160624  
• EP 2017000725 W 20170622

Abstract (en)  
[origin: WO2017220204A1] The invention relates to an optically variable security element (20) for protecting objects of value, comprising a one- or two-dimensional relief pattern (30) formed by a plurality of pattern elements (34) and having a first pattern width p below 500 µm in at least one spatial direction, and wherein the pattern elements (34) are each formed by at least two relief elements (36) reflecting in different directions, and comprising at least one dot and/or line pattern (50) arranged vertically above or below the relief pattern (30), and having a second pattern width q in said spatial direction, wherein the second pattern width q only differs slightly from the first pattern width p, in particular by less than a fifth, and/or the first pattern width p and/or the second pattern width q is modulated in a position-dependent manner such that, a movement effect occurs via the cooperation of the relief pattern (30) and the dot and/or line pattern (50) with the tilting of the security element (20), and wherein the vertical distance (h) of the relief pattern (30) and the dot and/or line pattern (50) is less than half the pattern width p.

IPC 8 full level  
**B42D 25/29** (2014.01); **B42D 25/324** (2014.01); **B42D 25/342** (2014.01)

CPC (source: EP)  
**B42D 25/29** (2014.10); **B42D 25/324** (2014.10); **B42D 25/342** (2014.10)

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 102016007784 A1 20171228**; AU 2017282959 A1 20190103; AU 2017282959 B2 20211202; CN 109153280 A 20190104; CN 109153280 B 20210226; EP 3475096 A1 20190501; EP 3475096 B1 20220907; WO 2017220204 A1 20171228

DOCDB simple family (application)  
**DE 102016007784 A 20160624**; AU 2017282959 A 20170622; CN 201780028266 A 20170622; EP 17732031 A 20170622; EP 2017000725 W 20170622