

Title (en)
SECURITY ELEMENT WITH MICROREFLECTORS

Title (de)
SICHERHEITSELEMENT MIT MIKROREFLEKTOREN

Title (fr)
ÉLÉMENT DE SÉCURITÉ À MICRORÉFLECTEURS

Publication
EP 3793839 B1 20221207 (DE)

Application
EP 19726574 A 20190516

Priority
• DE 102018004062 A 20180518
• EP 2019000149 W 20190516

Abstract (en)
[origin: WO2019219239A1] The invention relates to a flat security element with microreflectors for creating value documents, such as bank notes (B), cheques or the like, wherein the flat security element (S) defines a main plane (H) and the microreflectors (4, 5, 6) are arranged in a microreflector pattern (1, 2, 3) and in a bird's eye view of the flat security element present a first and a third motif (7, 8) when tilted about an axis (Al), wherein the first motif (7) can only be perceived in a first tilt angle range (W1) and the third motif (8) can only be perceived in a third tilt angle range (W3), wherein the first motif (7) appears at a first position (10) which is laterally offset in relation to a second position (11) at which the third motif (8) appears, the tilt angle ranges (W1, W3) are disjoint, so that therebetween at least a part of a second tilt angle range (W2) lies in which neither the first motif (7) nor the third motif (8) can be perceived, and the microreflector pattern (1, 2, 3) presents, in the second tilt angle range (W2), a second motif (9) which, during a tilt movement which goes through the second tilt angle range (W2), shows a motif movement effect which runs in the main plane (H) or parallel thereto.

IPC 8 full level
B42D 25/324 (2014.01)

CPC (source: EP)
B42D 25/324 (2014.10)

Citation (opposition)
Opponent : HUECK FOLIEN GESELLSCHAFT M.B.H.
• WO 2016034274 A1 20160310 - GIESECKE & DEVRIENT GMBH [DE]
• WO 2014121908 A1 20140814 - GIESECKE & DEVRIENT GMBH [DE]
• WO 2007107235 A1 20070927 - GIESECKE & DEVRIENT GMBH [DE], et al
• EP 2522529 A2 20121114 - GIESECKE & DEVRIENT GMBH [DE]

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 102018004062 A1 20191121; CN 111819085 A 20201023; CN 111819085 B 20220426; EP 3793839 A1 20210324;
EP 3793839 B1 20221207; WO 2019219239 A1 20191121

DOCDB simple family (application)
DE 102018004062 A 20180518; CN 201980017731 A 20190516; EP 19726574 A 20190516; EP 2019000149 W 20190516