Title (en)

SECURITY ELEMENT HAVING A MICROMIRROR ARRANGEMENT FOR PRODUCING AN OPTICALLY VARIABLE EFFECT AND PRODUCTION METHOD FOR THE SECURITY ELEMENT

Title (de)

SICHERHEITSELEMENT MIT MIKROSPIEGELANORDNUNG ZUR ERZEUGUNG EINES OPTISCH VARIABLEN EFFEKTS UND HERSTELLVERFAHREN FÜR DAS SICHERHEITSELEMENT

Title (fr)

ÉLÉMENT DE SÉCURITÉ COMPRENANT UN ENSEMBLE DE MICRO-MIROIRS PERMETTANT DE PRODUIRE UN EFFET OPTIQUEMENT VARIABLE ET PROCÉDÉ DE FABRICATION DE L'ÉLÉMENT DE SÉCURITÉ

Publication

EP 3621819 A1 20200318 (DE)

Application

EP 18725397 A 20180509

Priority

- DE 102017004586 A 20170512
- EP 2018000249 W 20180509

Abstract (en)

[origin: WO2018206148A1] The invention relates to a security element for a security paper, valuable document or the like, wherein a plurality of micromirrors is arranged in a distribution on a substrate, wherein each micromirror illuminates at a specific illumination at a specified angle of observation, which is dependent on an alignment of the respective micromirror to a surface normal of the substrate, and the security element presents a light/dark theme having a local resolution and shows, as a motion effect for the theme, different views of the theme depending on the angle of observation, in that a subset of the micromirrors illuminates in each view, wherein the subsets are nested into each other in the distribution in respect of the position of the micromirrors thereof. The nesting is such that, at locations of the distribution at which, in one view, a light point of a first view is located and a dark point of a second view is simultaneously located, only one micromirror in a subset is provided for the first view, but not for the second view.

IPC 8 full level

B42D 25/324 (2014.01)

CPC (source: EP)

B42D 25/324 (2014.10)

Citation (search report)

See references of WO 2018206148A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

DE 102017004586 A1 20181115; CN 110636946 A 20191231; CN 110636946 B 20220419; EP 3621819 A1 20200318; WO 2018206148 A1 20181115

DOCDB simple family (application)

DE 102017004586 A 20170512; CN 201880031531 A 20180509; EP 18725397 A 20180509; EP 2018000249 W 20180509