

Title (en)

OPTICALLY VARIABLE ELEMENT, SECURITY DOCUMENT, METHOD FOR PRODUCING AN OPTICALLY VARIABLE ELEMENT, METHOD FOR PRODUCING A SECURITY DOCUMENT

Title (de)

OPTISCH VARIABLES ELEMENT, SICHERHEITSDOKUMENT, VERFAHREN ZUR HERSTELLUNG EINES OPTISCH VARIABLEN ELEMENTS, VERFAHREN ZUR HERSTELLUNG EINES SICHERHEITSDOKUMENTS

Title (fr)

ÉLÉMENT OPTIQUEMENT VARIABLE, DOCUMENT DE SÉCURITÉ, PROCÉDÉ DE FABRICATION D'UN ÉLÉMENT OPTIQUEMENT VARIABLE, PROCÉDÉ DE FABRICATION D'UN DOCUMENT DE SÉCURITÉ

Publication

**EP 3856534 A1 20210804 (DE)**

Application

**EP 19773814 A 20190923**

Priority

- DE 102018123482 A 20180924
- DE 102018132974 A 20181219
- EP 2019075546 W 20190923

Abstract (en)

[origin: WO2020078664A1] The invention relates to an optically variable element (1a), in particular a security element (1b) and/or a decorative element (1c), preferably for security documents (1d), wherein the optically variable element (1a) comprises at least one pixel array (2) comprising two or more pixels (2aa-2dd, 2e-2f), wherein one or more pixels of the two or more pixels (2aa-2dd, 2e-2f) have one or more structures (3aa-3dd, 3e-3f), and wherein one or more structures of the one or more structures (3aa-3dd, 3e-3f) image, diffract and/or scatter incident electromagnetic radiation (6) into one or more spatial angles. The invention also relates to a security document (1d), in particular comprising one or more optically variable elements (1a), to a method for producing an optically variable element (1a), preferably a security element (1b) and/or a decorative element (1c), preferably for security documents (1d), and to a method for producing a security document (1d), preferably comprising one or more layers, preferably comprising one or more optically variable elements (1a).

IPC 8 full level

**B42D 25/324** (2014.01); **B42D 25/328** (2014.01)

CPC (source: EP US)

**B42D 25/324** (2014.10 - EP); **B42D 25/328** (2014.10 - EP US); **B42D 25/351** (2014.10 - US); **B42D 25/355** (2014.10 - US); **G02B 3/08** (2013.01 - US)

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)

**WO 2020078664 A1 20200423**; AU 2019363013 A1 20210429; AU 2019363013 B2 20230622; BR 112021004582 A2 20210608; CA 3112507 A1 20200423; CN 113056376 A 20210629; CN 113056376 B 20220916; EP 3856534 A1 20210804; EP 4434762 A1 20240925; JP 2022502283 A 20220111; TW 202023847 A 20200701; TW I815976 B 20230921; US 2022111676 A1 20220414; US 2024181798 A1 20240606

DOCDB simple family (application)

**EP 2019075546 W 20190923**; AU 2019363013 A 20190923; BR 112021004582 A 20190923; CA 3112507 A 20190923; CN 201980075773 A 20190923; EP 19773814 A 20190923; EP 24173126 A 20190923; JP 2021516579 A 20190923; TW 108134458 A 20190924; US 201917278986 A 20190923; US 202418434990 A 20240207