

Title (en)

USE OF A PAINT COMPOSITION THAT CAN BE CURED BY RADIATION, METHOD FOR PRODUCING MICRO-OPTICAL OR NANO-OPTICAL STRUCTURES, MICRO-OPTICAL OR NANO-OPTICAL STRUCTURE AND DATA CARRIER

Title (de)

VERWENDUNG EINER DURCH STRAHLUNG HÄRTBAREN LACKZUSAMMENSETZUNG, VERFAHREN ZUR HERSTELLUNG VON MIKROOPTISCHEN BZW. NANOOPTISCHEN STRUKTUREN, MIKROOPTISCHE BZW. NANOOPTISCHE STRUKTUR UND DATENTRÄGER

Title (fr)

UTILISATION D'UNE COMPOSITION DE PEINTURE DURCISSEABLE PAR IRRADIATION, PROCÉDÉ DE PRODUCTION DE STRUCTURES MICRO-OPTIQUES OU NANO-OPTIQUES, STRUCTURE MICRO-OPTIQUE OU NANO-OPTIQUE ET SUPPORT DE DONNÉES

Publication

**EP 3827056 A1 20210602 (DE)**

Application

**EP 19749582 A 20190725**

Priority

- DE 102018005872 A 20180725
- EP 2019000228 W 20190725

Abstract (en)

[origin: WO2020020479A1] The invention relates to the use of a paint composition that can be cured by radiation for producing micro-optical structures, said paint composition containing i) at least one compound that can be cured by radiation, ii) at least one chain transfer reagent and iii) at least one reactive diluent, selected from dipropylene glycol diacrylate, tricyclodecane dimethanol diacrylate, tricyclodecane dimethanol dimethacrylate, esterdiol diacrylate, polyethylene glycol diacrylate, tetraethylene glycol diacrylate, 3-methyl-1,5-pentanediol diacrylate, decanediol diacrylate, 1,6-hexanediol diacrylate, trimethylolpropane triacrylate, tripropylene glycol diacrylate, and ethoxylated derivatives of the aforementioned reactive diluents, wherein the viscosity of the paint composition that can be cured by radiation is less than 1000 mPa·s at a temperature of 20°C, measured in accordance with EN ISO 3219:1994, for producing micro-optical or nano-optical structures.

IPC 8 full level

**C09D 5/33** (2006.01); **B41M 7/00** (2006.01); **B42D 25/324** (2014.01); **C09D 4/00** (2006.01); **G03H 1/02** (2006.01)

CPC (source: EP)

**B42D 25/324** (2014.10); **B42D 25/36** (2014.10); **B42D 25/41** (2014.10); **B42D 25/425** (2014.10); **C09D 4/00** (2013.01); **C09D 5/004** (2013.01); **G03H 1/0011** (2013.01); **G03H 1/0244** (2013.01); **B41M 3/003** (2013.01)

Citation (search report)

See references of WO 2020020479A1

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 2020020479 A1 20200130**; CN 112368344 A 20210212; CN 112368344 B 20220823; DE 102018005872 A1 20200130;  
EP 3827056 A1 20210602

DOCDB simple family (application)

**EP 2019000228 W 20190725**; CN 201980045315 A 20190725; DE 102018005872 A 20180725; EP 19749582 A 20190725