

Title (en)

ELECTRICALLY CONTROLLABLE DEVICE HAVING VARIABLE DIFFUSION BY LIQUID CRYSTALS, AND METHOD FOR SAME

Title (de)

ELEKTRISCH STEUERBARE VORRICHTUNG MIT VARIABLER DIFFUSION DURCH FLÜSSIGKRISTALLE UND VERFAHREN DAFÜR

Title (fr)

DISPOSITIF ELECTROCOMMANDABLE A DIFFUSION VARIABLE PAR CRISTAUX LIQUIDES ET SON PROCEDE

Publication

EP 4127828 A1 20230208 (FR)

Application

EP 21720800 A 20210326

Priority

- FR 2003244 A 20200401
- FR 2021050530 W 20210326

Abstract (en)

[origin: WO2021198596A1] The invention relates to a device having variable diffusion by liquid crystals (100), comprising a stack with a first electrode (2), an electroactive layer (3) with liquid crystals stabilised by the polymer network, and a second electrode (2'). The material has, from a temperature referred to as T1, a mesophase referred to as P. At a temperature T' greater than or equal to T1, the stack is capable of having at least three stable and reversible diffusion states in the visible range and a variable colour. The invention also relates to the manufacture of this device.

IPC 8 full level

G02F 1/137 (2006.01)

CPC (source: CN EP US)

G02F 1/13345 (2021.01 - CN US); **G02F 1/134309** (2013.01 - CN US); **G02F 1/13737** (2013.01 - EP); **G02F 1/13756** (2021.01 - US); **G02F 1/13775** (2021.01 - US); **G02F 1/133531** (2021.01 - US); **G02F 1/13775** (2021.01 - EP); **G02F 1/13787** (2021.01 - EP); **G02F 2202/04** (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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

FR 3108990 A1 20211008; CN 113767325 A 20211207; EP 4127828 A1 20230208; US 12001111 B2 20240604; US 2023152649 A1 20230518; WO 2021198596 A1 20211007

DOCDB simple family (application)

FR 2003244 A 20200401; CN 202180002528 A 20210326; EP 21720800 A 20210326; FR 2021050530 W 20210326; US 202117916449 A 20210326