

Title (en)

LOW-E MATCHABLE COATED ARTICLES HAVING ABSORBER FILM AND CORRESPONDING METHODS

Title (de)

ABSTIMMBARE BESCHICHTETE ARTIKEL MIT GERINGER EMISSIVITÄT MIT ADSORBERFILM UND ZUGEHÖRIGES VERFAHREN

Title (fr)

ARTICLES REVÊTUS POUVANT ÊTRE MIS EN CORRESPONDANCE À FAIBLE ÉMISSIVITÉ COMPRENANT UN FILM ABSORBEUR ET PROCÉDÉS CORRESPONDANTS

Publication

EP 4041691 A1 20220817 (EN)

Application

EP 20793476 A 20201008

Priority

- US 201916596632 A 20191008
- IB 2020059478 W 20201008

Abstract (en)

[origin: WO2021070117A1] A low-E coating has good color stability (a low ΔE^* value) upon heat treatment (HT). Thermal stability may be improved by the provision of an as-deposited crystalline or substantially crystalline layer of or including zinc oxide, doped with at least one dopant (e.g., Sn), immediately under an infrared (IR) reflecting layer of or including silver; and/or by the provision of at least one dielectric layer of or including an oxide of zirconium. These have the effect of significantly improving the coating's thermal stability (i.e., lowering the ΔE^* value). An absorber film may be designed to adjust visible transmission and provide desirable coloration, while maintaining durability and/or thermal stability. The dielectric layer (e.g., of or including an oxide of Zr) may be sputter-deposited so as to have a monoclinic phase in order to improve thermal stability.

IPC 8 full level

C03C 17/36 (2006.01); **C03C 23/00** (2006.01)

CPC (source: CN EP US)

C03C 17/3626 (2013.01 - CN US); **C03C 17/3642** (2013.01 - US); **C03C 17/3644** (2013.01 - CN EP US); **C03C 17/3652** (2013.01 - EP); **C03C 17/366** (2013.01 - EP US); **C03C 17/3681** (2013.01 - EP US); **C03C 23/007** (2013.01 - EP); **C03C 2217/216** (2013.01 - US); **C03C 2217/22** (2013.01 - US); **C03C 2217/23** (2013.01 - US); **C03C 2217/24** (2013.01 - US); **C03C 2217/256** (2013.01 - US); **C03C 2217/281** (2013.01 - US); **C03C 2217/70** (2013.01 - CN); **C03C 2217/944** (2013.01 - EP); **C03C 2218/154** (2013.01 - CN); **C03C 2218/156** (2013.01 - US)

Citation (search report)

See references of WO 2021070117A1

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 2021070117 A1 20210415; AU 2020363015 A1 20220526; BR 112022004019 A2 20220531; CN 114430732 A 20220503; CN 114430732 B 20221223; EP 4041691 A1 20220817; JP 2022552109 A 20221215

DOCDB simple family (application)

IB 2020059478 W 20201008; AU 2020363015 A 20201008; BR 112022004019 A 20201008; CN 202080063525 A 20201008; EP 20793476 A 20201008; JP 2022519253 A 20201008