Title (en)

LOW-EMISSIVITY GLAZING AND METHOD OF ITS PRODUCTION

Title (de)

VERGLASUNG MIT GERINGER EMISSIVITÄT UND VERFAHREN ZU IHRER HERSTELLUNG

Title (fr)

VITRAGE À FAIBLE ÉMISSITIVÉ ET PROCÉDÉ DE PRODUCTION ASSOCIÉ

Publication

EP 4139261 A1 20230301 (EN)

Application

EP 21721048 A 20210421

Priority

- SE 2050460 A 20200421
- EP 2021060329 W 20210421

Abstract (en)

[origin: WO2021214110A1] The present document discloses a glazing in the form of a window glass which comprises a transparent glass substrate, and a coating, which comprises, in order outward from the transparent glass substrate, a seed layer and a functional metal Ag alloy layer. The functional metal Ag alloy layer comprises a Ag alloy consisting essentially of Ag with an alloying agent selected from a group consisting of Li, C, Na, Mg, Si, K, Ca, Sc, Ti, V, Cr, Mn, Fe, Ni, Cu, Zn, Ge, Sr, Y, Zr, Nb, Mo, Rh, Pd, In, Sn, Sb, Hf, Ta, W, Pt or Au. An alloying agent content is 0.02-0.50 at.%, preferably 0.06-0.30 at.%, of the Ag alloy, the rest being Ag, and the functional metal Ag alloy layer has a thickness of 5-20 nm, preferably 8-15 nm or more preferably 8-12 nm. The glazing has a solar direct transmittance of at least 30 %, preferably at least 40 %, more preferably at least 50 % as determined according to the European standard EN 410.

IPC 8 full level

C03C 17/36 (2006.01); **C22C 5/00** (2006.01); **C23C 14/00** (2006.01)

CPC (source: EP)

C03C 17/36 (2013.01); **C03C 17/3618** (2013.01); **C03C 17/3647** (2013.01); **C03C 17/366** (2013.01); **C03C 17/3681** (2013.01); **C22C 5/06** (2013.01); **C23C 14/024** (2013.01); **C23C 14/185** (2013.01); **C23C 14/3414** (2013.01); C03C 2217/944 (2013.01)

Citation (search report)

See references of WO 2021214110A1

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)

WO 2021214110 A1 20211028; EP 4139261 A1 20230301

DOCDB simple family (application)

EP 2021060329 W 20210421; EP 21721048 A 20210421