

Title (en)
SUBSTRATE PROVIDED WITH A STACK HAVING THERMAL PROPERTIES

Title (de)
SUBSTRAT MIT EINEM STAPEL MIT THERMISCHEN EIGENSCHAFTEN

Title (fr)
SUBSTRAT MUNI D'UN EMPILEMENT A PROPRIETES THERMIQUES

Publication
EP 4323319 A1 20240221 (FR)

Application
EP 22721812 A 20220407

Priority
• FR 2103751 A 20210412
• FR 2022050648 W 20220407

Abstract (en)
[origin: WO2022219266A1] The invention relates to a transparent substrate provided with a stack of thin layers comprising successively, from the substrate, an alternating arrangement of at least three functional metal layers and four antireflective coatings, each antireflective coating comprising at least one dielectric layer; the thicknesses and the nature of the different layers being adapted for the production of new solar protection glazing, to be tempered, having high thermal performance (S of approximately 2.1 for LT of the order of 60%) and a neutral colour, the colours thereof being stable at an angle. The invention also relates to glazing in the form of double glazing, laminated glazing, asymmetric glazing or multiple glazing of the double glazing type, comprising such a transparent substrate.

IPC 8 full level
C03C 17/36 (2006.01)

CPC (source: EP US)
C03C 17/36 (2013.01 - EP); **C03C 17/3626** (2013.01 - EP US); **C03C 17/3639** (2013.01 - EP US); **C03C 17/3644** (2013.01 - EP US); **C03C 17/3652** (2013.01 - EP US); **C03C 17/366** (2013.01 - EP US); **C03C 17/3681** (2013.01 - EP US); **C03C 2217/216** (2013.01 - US); **C03C 2217/256** (2013.01 - US); **C03C 2217/281** (2013.01 - US); **C03C 2217/73** (2013.01 - US); **C03C 2217/944** (2013.01 - US); **C03C 2218/156** (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 3121675 A1 20221014; **FR 3121675 B1 20231229**; CO 2023013525 A2 20231110; EP 4323319 A1 20240221; US 2024262740 A1 20240808; WO 2022219266 A1 20221020

DOCDB simple family (application)
FR 2103751 A 20210412; CO 2023013525 A 20231012; EP 22721812 A 20220407; FR 2022050648 W 20220407; US 202218554412 A 20220407