

Title (en)

LAYER SYSTEM OF A TRANSPARENT SUBSTRATE AND METHOD FOR PRODUCING A LAYER SYSTEM

Title (de)

SCHICHTSYSTEM EINES TRANSPARENTEN SUBSTRATS SOWIE VERFAHREN ZUR HERSTELLUNG EINES SCHICHTSYSTEMS

Title (fr)

SYSTÈME DE COUCHES D'UN SUBSTRAT TRANSPARENT ET PROCÉDÉ DE PRODUCTION D'UN SYSTÈME DE COUCHES

Publication

EP 3027573 A2 20160608 (DE)

Application

EP 14749743 A 20140729

Priority

- DE 102013012571 A 20130730
- DE 102014002965 A 20140306
- EP 2014066307 W 20140729

Abstract (en)

[origin: WO2015014854A2] The invention relates to a layer system of a transparent substrate (100) reflecting an infrared radiation, comprising, arranged in this order: a first dielectric layer (D1) arranged on the transparent substrate (100); a second dielectric layer (D2) arranged on the first dielectric layer (D1); a first metal layer system (MS1) comprising, in this order: a first metal layer (M1), preferably made of or comprising Ag; a first blocking layer (B1). A dielectric barrier cover layer system (BDS) is provided. The first dielectric layer (D1) is made of or comprises SiO₂, and the second dielectric layer (D2) is made of or comprises TiO₂ or Al₂O₃, or the first dielectric layer (D1) is made of or comprises Al₂O₃ and the second dielectric layer (D2) is made of or comprises TiO₂. In the method for producing an infrared reflective layer system on a provided transparent substrate (100) according to the invention, at least one of the applied individual layers is applied by sputtering a ceramic target or by reactive sputtering.

IPC 8 full level

C03C 17/36 (2006.01)

CPC (source: EP)

C03C 17/3618 (2013.01); **C03C 17/3626** (2013.01); **C03C 17/3639** (2013.01); **C03C 17/3644** (2013.01); **C03C 17/3652** (2013.01); **C03C 17/366** (2013.01); **C03C 17/3681** (2013.01)

Citation (search report)

See references of WO 2015014854A2

Citation (examination)

- CN 102503174 A 20120620 - TORCH BRANCH OF ZHONGSHAN GLAND IND CO LTD
- US 2003165693 A1 20030904 - HARTIG KLAUS [US], et al

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 2015014854 A2 20150205; WO 2015014854 A3 20150507; BR 112016002161 A2 20170801; BR 112016002161 A8 20200128; CN 105745177 A 20160706; DE 102014002965 A1 20150205; EA 030367 B1 20180731; EA 201690298 A1 20160729; EP 3027573 A2 20160608; MX 2016001469 A 20170105; TW 201522678 A 20150616; TW I583807 B 20170521

DOCDB simple family (application)

EP 2014066307 W 20140729; BR 112016002161 A 20140729; CN 201480053953 A 20140729; DE 102014002965 A 20140306; EA 201690298 A 20140729; EP 14749743 A 20140729; MX 2016001469 A 20140729; TW 103125984 A 20140730