

Title (en)

PRESTRESSABLE LOW-E LAYER SYSTEMS FOR WINDOW PANES

Title (de)

VORSPANNUNGFÄHIGES SCHICHTSYSTEM MIT NIEDRIGER EMISSIVITÄT FÜR FENSTERSCHEIBEN

Title (fr)

SYSTEMES DE COUCHES A E FAIBLE, CAPABLE DE PRECONTRAINTE, POUR VITRES DE FEN TRE

Publication

EP 1366001 A2 20031203 (FR)

Application

EP 02700382 A 20020123

Priority

- DE 10105199 A 20010206
- FR 0200275 W 20020123

Abstract (en)

[origin: DE10105199C1] Thermally loaded low emissivity layer system comprises a silver functional layer, a metal nitride layer, a sacrificial metal layer, a dielectric reflection-reducing base layer and a reflection-reducing covering layer. Preferred Features: The metal nitride layer has a thickness of 0.5-5 mm and has an approximate stoichiometric composition. The metal nitride layer is made from Si₃N₄ or AlN. The sacrificial metal layer is made from Cr, Ni, Al, Ti, Mg, Si, Zn, Cu or their alloys. The silver layer is deposited on a partially crystalline ZnO: Al layer.

IPC 1-7

C03C 17/36

IPC 8 full level

C03C 17/36 (2006.01)

CPC (source: EP KR US)

C03C 17/36 (2013.01 - EP KR US); **C03C 17/3626** (2013.01 - EP US); **C03C 17/3644** (2013.01 - EP US); **C03C 17/3652** (2013.01 - EP US); **C03C 17/3657** (2013.01 - EP US)

Citation (search report)

See references of WO 02062713A2

Cited by

WO2010063973A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

DE 10105199 C1 20020620; AU 2002233460 A1 20020819; BR 0206938 A 20040203; CA 2435811 A1 20020815; CN 1289428 C 20061213; CN 1501896 A 20040602; CZ 20032116 A3 20040915; EP 1366001 A2 20031203; JP 2004526650 A 20040902; KR 20030075170 A 20030922; PL 369996 A1 20050516; TR 200301214 T2 20041221; US 2004126591 A1 20040701; US 7211328 B2 20070501; WO 02062713 A2 20020815; WO 02062713 A3 20021212

DOCDB simple family (application)

DE 10105199 A 20010206; AU 2002233460 A 20020123; BR 0206938 A 20020123; CA 2435811 A 20020123; CN 02804650 A 20020123; CZ 20032116 A 20020123; EP 02700382 A 20020123; FR 0200275 W 20020123; JP 2002562679 A 20020123; KR 20037010084 A 20030730; PL 36999602 A 20020123; TR 200301214 T 20020123; US 46652304 A 20040212