

Title (en)

METHOD OF APPLYING AN ANTI-FREEZE FILM TO A TRANSPARENT SUBSTRATE

Title (de)

VERFAHREN ZUM AUFBRINGEN EINER FROSTSCHUTZFOLIE AUF EIN TRANSPARENTES SUBSTRAT

Title (fr)

POSE DE FILM ANTIGIVRE SUR SUBSTRAT TRANSPARENT

Publication

**EP 1843895 A2 20071017 (FR)**

Application

**EP 06709457 A 20060130**

Priority

- FR 2006050073 W 20060130
- FR 0550271 A 20050131

Abstract (en)

[origin: FR2881422A1] Method of adhering a flexible film (I) to a substrate, comprises disposing a liquid between the film and the substrate without any bubbles trapped between (I) and the substrate on application of (I) to the substrate with the aid of a scraper, where the liquid does not freeze at a substrate temperature of less than 0[deg]C. Independent claims are also included for: (1) the substrate and (I) in mutual adhesion obtained with interposition of a sufficient quantity of liquid in the absence of any imprisoned bubble, with the persistent absence of hoar frost in the event of displacement of the substrate and (I) in an atmosphere, where the temperature will be lower than 0[deg]C, from an atmosphere at a temperature at least equal to 0[deg]C and residual moisture of at least 25%; and (2) a glazing comprising a substrate and (I), and other transparent sheets to which they are connected by intercalated adhesive layers or gas gap.

IPC 8 full level

**B32B 17/06** (2006.01); **B32B 33/00** (2006.01); **C03C 17/32** (2006.01); **C09K 3/18** (2006.01)

CPC (source: EP KR US)

**B29C 63/0047** (2013.01 - EP US); **B32B 7/12** (2013.01 - EP US); **B32B 17/06** (2013.01 - EP KR US); **B32B 17/10321** (2013.01 - EP US); **B32B 27/06** (2013.01 - EP US); **B32B 33/00** (2013.01 - KR); **B32B 37/0038** (2013.01 - EP US); **C03C 17/3405** (2013.01 - EP US); **C09K 3/18** (2013.01 - KR); **B29C 63/02** (2013.01 - EP US); **B29C 2063/483** (2013.01 - EP US); **B32B 37/003** (2013.01 - EP US); **B32B 2307/406** (2013.01 - EP US); **B32B 2307/412** (2013.01 - EP US); **B32B 2405/00** (2013.01 - EP US); **C03C 2218/355** (2013.01 - EP US); **Y10T 156/10** (2015.01 - EP US); **Y10T 428/249995** (2015.04 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**FR 2881422 A1 20060804**; **FR 2881422 B1 20070316**; BR PI0607050 A2 20091201; CA 2595977 A1 20060803; CA 2595977 C 20130319; CN 101111369 A 20080123; EP 1843895 A2 20071017; JP 2008528329 A 20080731; JP 5160900 B2 20130313; KR 101362793 B1 20140221; KR 101364041 B1 20140226; KR 101364233 B1 20140214; KR 20070102692 A 20071019; KR 20120128170 A 20121126; KR 20120140259 A 20121228; MX 2007008994 A 20070918; US 2008138603 A1 20080612; US 2010116416 A1 20100513; US 8057615 B2 20111115; WO 2006079763 A2 20060803; WO 2006079763 A3 20061019

DOCDB simple family (application)

**FR 0550271 A 20050131**; BR PI0607050 A 20060130; CA 2595977 A 20060130; CN 200680003647 A 20060130; EP 06709457 A 20060130; FR 2006050073 W 20060130; JP 2007552704 A 20060130; KR 20077017455 A 20060130; KR 20127029728 A 20060130; KR 20127029734 A 20060130; MX 2007008994 A 20060130; US 69096710 A 20100121; US 81504906 A 20060130