

Title (en)  
FUNCTIONALIZED SECURITY GLAZING

Title (de)  
FUNKTIONALISIERTE SICHERHEITSVERGLASUNG

Title (fr)  
VITRAGE DE SECURITE FONCTIONNALISE

Publication  
**EP 1651433 A2 20060503 (FR)**

Application  
**EP 04767686 A 20040715**

Priority  
• FR 2004001862 W 20040715  
• FR 0308648 A 20030716

Abstract (en)  
[origin: FR2857617A1] A functionalized safety window is made up of: (a) a first rigid substrate (S1); (b) a second rigid substrate (S2); (c) at least one active system (3) incorporating at least one layer and arranged between the rigid substrates, on the inner surface of the first substrate; (d) at least one polymer film (f1) with a function of retaining the splinters in case of breakage of the window and being arranged between the two substrates.

IPC 1-7  
**B32B 17/10**

IPC 8 full level  
**B32B 17/10** (2006.01); **B60R 1/08** (2006.01); **C03C 27/12** (2006.01); **G02F 1/133** (2006.01); **G02F 1/153** (2006.01)

CPC (source: EP KR US)  
**B32B 17/00** (2013.01 - KR); **B32B 17/10036** (2013.01 - EP US); **B32B 17/10174** (2013.01 - EP US); **B32B 17/10302** (2013.01 - EP US); **B32B 17/10513** (2013.01 - EP US); **B32B 17/10761** (2013.01 - EP US); **B32B 17/1077** (2013.01 - EP US); **B60R 1/088** (2013.01 - EP US); **G02F 1/133** (2013.01 - EP US); **G02F 1/153** (2013.01 - EP US); **Y10T 428/24777** (2015.01 - EP US); **Y10T 428/24942** (2015.01 - EP US); **Y10T 428/31504** (2015.04 - EP US)

Citation (search report)  
See references of WO 2005007398A2

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**FR 2857617 A1 20050121**; **FR 2857617 B1 20061027**; AR 045726 A1 20051109; BR PI0412585 A 20060919; CN 1822951 A 20060823; EP 1651433 A2 20060503; JP 2007516147 A 20070621; KR 101154451 B1 20120615; KR 20060089205 A 20060808; MX PA06000604 A 20060411; US 2007020442 A1 20070125; US 8102585 B2 20120124; WO 2005007398 A2 20050127; WO 2005007398 A3 20050324

DOCDB simple family (application)  
**FR 0308648 A 20030716**; AR P040102514 A 20040716; BR PI0412585 A 20040715; CN 200480020512 A 20040715; EP 04767686 A 20040715; FR 2004001862 W 20040715; JP 2006519964 A 20040715; KR 20067000881 A 20040715; MX PA06000604 A 20040715; US 56450104 A 20040715