

Title (en)

FIRE-RESISTANT OPENING SEAL

Title (de)

FEUERWIDERSTANDSFÄHIGER ÖFFNUNGSVERSCHLUSS

Title (fr)

OBTURATION D'OUVERTURE A L'EPREUVE DU FEU

Publication

**EP 0960251 B1 20030402 (DE)**

Application

**EP 98908030 A 19980131**

Priority

- DE 19704833 A 19970208
- EP 9800517 W 19980131

Abstract (en)

[origin: US6544445B1] A fire-resistant composite substrate for use in making structural openings fire-resistant, the substrate containing: (a) elastically compressible particles; (b) at least one heat-activated expanding agent; (c) at least one heat-activated binder; and (d) a diisocyanate adhesive.

IPC 1-7

**E06B 5/16; E04B 1/94**

IPC 8 full level

**A62C 3/16** (2006.01); **E04B 1/94** (2006.01); **E06B 5/16** (2006.01)

CPC (source: EP US)

**A62C 3/16** (2013.01 - EP US); **Y10S 428/913** (2013.01 - EP US); **Y10S 428/92** (2013.01 - EP US); **Y10S 428/921** (2013.01 - EP US);  
**Y10T 442/696** (2015.04 - EP US); **Y10T 442/699** (2015.04 - EP US)

Designated contracting state (EPC)

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

DOCDB simple family (publication)

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DE 59807738 D1 20030508; DK 0960251 T3 20030728; EP 0960251 A1 19991201; EP 0960251 B1 20030402; WO 9835122 A1 19980813

DOCDB simple family (application)

**US 36709299 A 19990806**; AT 98908030 T 19980131; AU 6618298 A 19980131; DE 19704833 A 19970208; DE 59807738 T 19980131;  
DK 98908030 T 19980131; EP 9800517 W 19980131; EP 98908030 A 19980131