

Title (en)  
Foil element

Title (de)  
Folienelement

Title (fr)  
Élément en forme de feuille

Publication  
**EP 1453027 B1 20130911 (DE)**

Application  
**EP 04100472 A 20040209**

Priority  
DE 10307250 A 20030220

Abstract (en)  
[origin: EP1453027A2] Foil element for absorbing tensile forces (F) comprises in at least one region at risk of tearing under loading at least one weakened zone (6a) reducing local tension peaks under loading and extending in the contact direction of the tensile forces. The weakened zone is defined on both sides by non-weakened material (7) in at least one direction perpendicular to the contact direction of the tensile forces. Preferred Features: The foil element has at least two foil layers at least partly glued, welded or sealed together. At least one weakened zone is a slit passing through only one foil layer.

IPC 8 full level  
**B65D 23/00** (2006.01); **G09F 3/02** (2006.01); **G09F 3/00** (2006.01)

CPC (source: EP US)  
**B65D 23/005** (2013.01 - EP US); **G09F 3/02** (2013.01 - EP US); **G09F 2003/027** (2013.01 - EP US); **Y10T 428/14** (2015.01 - EP US); **Y10T 428/15** (2015.01 - EP US); **Y10T 428/24314** (2015.01 - EP US); **Y10T 428/24826** (2015.01 - EP US)

Cited by  
DE102014218117A1; EP1686555A1; WO2022233593A1; WO2006081904A3

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

DOCDB simple family (publication)  
**EP 1453027 A2 20040901**; **EP 1453027 A3 20070808**; **EP 1453027 B1 20130911**; CA 2457831 A1 20040820; CA 2457831 C 20081028; DE 10307250 A1 20040909; DE 10307250 B4 20070516; JP 2004252463 A 20040909; JP 2011070183 A 20110407; JP 4634052 B2 20110216; US 2004209043 A1 20041021; US 7211312 B2 20070501

DOCDB simple family (application)  
**EP 04100472 A 20040209**; CA 2457831 A 20040217; DE 10307250 A 20030220; JP 2004042814 A 20040219; JP 2010194273 A 20100831; US 78341404 A 20040220