

Title (en)
Protection system for vehicles and other objects

Title (de)
Schutzsystem für Fahrzeuge und andere Objekte

Title (fr)
Système de protection pour véhicules et autres objets

Publication
EP 2284474 A3 20140409 (DE)

Application
EP 10007604 A 20100722

Priority
DE 102009036956 A 20090811

Abstract (en)
[origin: EP2284474A2] The element has a protective plate (3) embedded in rubber balloons (2) and made from fiber composite material, where the rubber balloons are filled with air. The rubber balloons are connected with each other by projections and grooves, where the projections and the grooves are filled with air. Positive pressure is adjusted to the range of 1 to 2 bars for filling the rubber balloons. The rubber balloons are formed as a housing and made from abrasion-resistant or elastic material.

IPC 8 full level
F41H 5/007 (2006.01); **F41H 5/02** (2006.01); **F41H 5/04** (2006.01); **F41H 5/013** (2006.01)

CPC (source: EP)
F41H 5/007 (2013.01); **F41H 5/013** (2013.01); **F41H 5/023** (2013.01); **F41H 5/04** (2013.01); **F41H 5/0492** (2013.01)

Citation (search report)
• [XI] DE 3804991 C1 19990708 - LFK GMBH [DE]
• [XI] US 2003217638 A1 20031127 - FLEMING TIMOTHY [FR]
• [X] US 1284429 A 19181112 - NICHOLS CHARLES S G [US]
• [X] EP 0276918 A1 19880803 - CUBE OVERSEAS TRADING LTD [GB]
• [A] US 2007006542 A1 20070111 - DUKE LESLIE P [US]
• [A] US 2002053279 A1 20020509 - JUNG TAE SUK [KR], et al

Cited by
EP2702348A4; IT201600083139A1; US9709363B2; US9322621B2

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)
BA ME RS

DOCDB simple family (publication)
EP 2284474 A2 20110216; EP 2284474 A3 20140409; EP 2284474 B1 20180307; DE 102009036956 A1 20110217; DK 2284474 T3 20180606;
NO 2284474 T3 20180804

DOCDB simple family (application)
EP 10007604 A 20100722; DE 102009036956 A 20090811; DK 10007604 T 20100722; NO 10007604 A 20100722