

Title (en)

Impact protection, in particular in the form of a crash buffer

Title (de)

Stoßsicherung, insbesondere in Gestalt eines Crashpuffers

Title (fr)

Sécurité anti-chocs, en particulier sous forme d'un tampon de crash

Publication

**EP 2687417 B1 20150304 (DE)**

Application

**EP 13176476 A 20130715**

Priority

- EP 12176549 A 20120716
- EP 13176476 A 20130715

Abstract (en)

[origin: EP2687416A1] The protection unit (1) has a deformation pipe (23) clamped between an end region (22a) of a clamping sleeve (22) and an end region (21a) of a guide sleeve (21). A connection between another end region (22b) of the clamping sleeve and the end region of the guide sleeve when exceeding a defined critical impact force introduced over a bumper plate (12) into the protection unit. The clamping sleeve together with the deformation pipe is displaced under simultaneous plastic deformation of the deformation pipe relative to the guide sleeve in a direction to the guide sleeve.

IPC 8 full level

**B61G 11/06** (2006.01); **B61G 11/00** (2006.01)

CPC (source: EP)

**B61G 11/06** (2013.01); **B61G 11/08** (2013.01); **B61G 11/16** (2013.01)

Cited by

CN114775514A; CN109974527A; CN112148156A; CN113445452A; US2022242463A1; EP3771610A1

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 RS SE SI SK SM TR

DOCDB simple family (publication)

**EP 2687416 A1 20140122**; **EP 2687416 B1 20140903**; CN 203727625 U 20140723; EP 2687417 A1 20140122; EP 2687417 B1 20150304; PL 2687416 T3 20150227; PL 2687417 T3 20150831

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