

Title (en)

Glass-to-fixing-material seal and use thereof as well as airbag and seat-belt tensioner with an initiator

Title (de)

Metall-Fixiermaterial-Durchführung und Verwendung einer derartigen Durchführung sowie Airbag und Gurtspanner mit einer Zündeinrichtung

Title (fr)

Traversée métal - matériau de fixation et utilisation de celle-ci ainsi qu'airbag et tensionneur de ceinture avec initiateur

Publication

**EP 2187162 B1 20150429 (DE)**

Application

**EP 10002045 A 20061017**

Priority

- EP 06021694 A 20061017
- DE 102006004036 A 20060127

Abstract (en)

[origin: EP1813906A1] Bushing for the igniter of an air bag or seat belt tensioner, comprising a metal pin (4) mounted in a fixing material (6) in a hole (11) stamped in a base body (3), where the hole has a stop (35) to prevent rearward movement of the fixing material, comprises a base body whose thickness is 0.5-2.5 times the maximum diameter of the hole. Independent claims are also included for a gas generator, air bag and seat belt tensioner having an igniter comprising bushing as above.

IPC 8 full level

**F42B 3/103** (2006.01); **F42B 3/198** (2006.01)

CPC (source: EP US)

**F42B 3/103** (2013.01 - EP US); **F42B 3/198** (2013.01 - EP US)

Citation (opposition)

Opponent : Electrovac Hacht & Huber GmbH,

- EP 1455160 A1 20040908 - SCHOTT GLAS [DE], et al
- US 6274252 B1 20010814 - NAUGLER ROBERT E [US], et al
- DE 102005009644 A1 20060907 - SCHOTT AG [DE]
- DE 10133223 A1 20021017 - TRW AIRBAG SYS GMBH & CO KG [DE]
- US 2002174792 A1 20021128 - KUBOZUKA SATOSHI [JP], et al
- DE 10348944 A1 20040506 - SCHOTT GLAS [DE]
- US 2002069781 A1 20020613 - AVETISIAN VAHAN [US], et al
- "DIN 6932", DIN-TASCHENBUCH 67 STANZTEILE, March 1994 (1994-03-01), pages 61 - 65, XP055269501
- HAACK J. ET AL: "Feinschneiden - Handbuch für die Praxis", 1977, pages: 22 - 31, XP055269502
- BEITZ W. ET AL: "Dubbel - Taschenbuch für den Maschinenbau", 1997, Berlin, pages: G27 - G30, XP055269503

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EP2431703A3; EP3537093A1; US8733250B2; US9651345B2; US8127681B2; US10684102B2

Designated contracting state (EPC)

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**EP 1813906 A1 20070801; EP 1813906 B1 20110420**; AT E506593 T1 20110515; DE 102006004036 A1 20070809; DE 502006009342 D1 20110601; EP 2187162 A2 20100519; EP 2187162 A3 20100908; EP 2187162 B1 20150429; EP 2270417 A2 20110105; EP 2270417 A3 20111116; EP 2270417 B1 20161130; EP 3104114 A1 20161214; EP 3104114 B1 20180314; ES 2617504 T3 20170619; HU E032923 T2 20171128; JP 2007198724 A 20070809; JP 4521000 B2 20100811; MX PA06013611 A 20081024; PL 2270417 T3 20170630; US 2007187934 A1 20070816; US 8127681 B2 20120306

DOCDB simple family (application)

**EP 06021694 A 20061017**; AT 06021694 T 20061017; DE 102006004036 A 20060127; DE 502006009342 T 20061017; EP 10002045 A 20061017; EP 10009062 A 20061017; EP 16178996 A 20061017; ES 10009062 T 20061017; HU E10009062 A 20061017; JP 2007008769 A 20070118; MX PA06013611 A 20061123; PL 10009062 T 20061017; US 62717307 A 20070125