

Title (en)  
High-pressure pipe for fuel injection systems of internal combustion engine

Title (de)  
Hochdruckleitung für Kraftstoffeinspritzsysteme von Brennkraftmaschinen

Title (fr)  
Conduite haute-pressure pour système d'injection de carburant de moteur à combustion interne

Publication  
**EP 1398496 A3 20050420 (DE)**

Application  
**EP 03008432 A 20030411**

Priority  
DE 10241657 A 20020909

Abstract (en)  
[origin: EP1398496A2] The high pressure line (23) has at least one constriction (29) that is produced by shaping the line. The constriction can be produced by rolling or crushing. and is preferably arranged at one end of the high pressure line. The high pressure line is arranged in the high pressure region of a fuel injection system, e.g. between a high pressure fuel pump and a rail.

IPC 1-7  
**F02M 55/02**; **F16L 55/027**

IPC 8 full level  
**F02M 55/02** (2006.01); **F02M 55/04** (2006.01); **F02M 59/06** (2006.01); **F02M 63/02** (2006.01); **F16L 55/04** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP)  
**F02M 55/02** (2013.01); **F02M 55/04** (2013.01); **F02M 59/06** (2013.01); **F02M 63/0225** (2013.01); **F02M 63/0245** (2013.01);  
**F02M 63/025** (2013.01); **F02M 2200/28** (2013.01); **F02M 2200/31** (2013.01); **F02M 2200/315** (2013.01)

Citation (search report)

- [X] DE 4006501 A1 19910905 - BAYERISCHE MOTOREN WERKE AG [DE]
- [X] DE 4131501 A1 19930325 - BOSCH GMBH ROBERT [DE]
- [X] DE 19548610 A1 19970626 - BOSCH GMBH ROBERT [DE]
- [X] US 2002092502 A1 20020718 - HARNDORF HORST [DE]
- [X] EP 1217202 A1 20020626 - RENAULT [FR]
- [A] US 6056263 A 20000502 - STIER HUBERT [DE]

Cited by  
US10746147B2; DE102009045898A1; WO2011047986A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE 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 1398496 A2 20040317**; **EP 1398496 A3 20050420**; DE 10241657 A1 20040325; JP 2004100705 A 20040402

DOCDB simple family (application)  
**EP 03008432 A 20030411**; DE 10241657 A 20020909; JP 2003315456 A 20030908