

Title (en)  
Highly pressurized common rail for internal combustion engine

Title (de)  
Hochdruck-Common-Rail für eine Brennkraftmaschine

Title (fr)  
Common rail à haute pression pour moteur à combustion interne

Publication  
**EP 1416151 B1 20080123 (EN)**

Application  
**EP 03025053 A 20031030**

Priority  
JP 2002317565 A 20021031

Abstract (en)  
[origin: EP1416151A2] In a highly pressurized fuel piping for an internal combustion engine, a piping main body has an outer peripheral wall, a partitioning wall (111) is formed integrally with the outer peripheral wall at least two of first and second fuel flow passages (101,102), divided with the partitioning wall (111) of the piping main body, are formed within an inner space of the piping main body and extended mutually approximately in parallel to each other, a fuel introduction portion (103) is formed to communicate with at least one of the first and second flow passages (101,102), a plurality of inserting portions (104a-104d) are formed to communicate with at least one of the first and second flow passages (101,102), through each of which a corresponding one of the fuel injection device is insertable and a plurality of communication portions (105a-105d) are formed through which the first and second fuel flow passages (101,102) are mutually communicated. <IMAGE>  
[origin: EP1416151A2] A partitioning wall (111) divides the inner space of the piping main body into fuel flow passages (101,102) that communicate through communication portions (105-105d). A fuel introduction portion leads to the fuel flow passage (101). Fuel injection devices are inserted into inserting sections (104a-104d) that are formed to communicate with at least one of the fuel flow passages. An independent claim is also included for a method applicable to a highly pressurized fuel piping for an internal combustion engine.

IPC 8 full level  
**F02M 55/02** (2006.01); **F02M 55/04** (2006.01); **F16L 41/03** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP KR)  
**F02M 55/02** (2013.01 - KR); **F02M 55/025** (2013.01 - EP); **F02M 55/04** (2013.01 - EP); **F02M 2200/315** (2013.01 - EP)

Citation (examination)  
• US 4601275 A 19860722 - WEINAND LOUIS H [US]  
• US 5311850 A 19940517 - MARTIN TIBY M [US]

Cited by  
GB2570114A; CN113931763A; EP2071175A1; EP1705366A1; CN111749825A; DE102018209130A1; EP2657502A1; US7699041B2; WO2019137796A1; WO2015014526A1

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**EP 1416151 A2 20040506; EP 1416151 A3 20050601; EP 1416151 B1 20080123**; CN 100472062 C 20090325; CN 1499072 A 20040526; CN 2718242 Y 20050817; DE 60318799 D1 20080313; DE 60318799 T2 20080605; JP 2004150368 A 20040527; JP 4134681 B2 20080820; KR 100585361 B1 20060601; KR 20040038832 A 20040508

DOCDB simple family (application)  
**EP 03025053 A 20031030**; CN 200310104374 A 20031027; CN 200320103863 U 20031030; DE 60318799 T 20031030; JP 2002317565 A 20021031; KR 20030076292 A 20031030