

Title (en)
FUEL INJECTOR

Title (de)
KRAFTSTOFFEINSPRITZER

Title (fr)
INJECTEUR DE CARBURANT

Publication
EP 3377753 A1 20180926 (EN)

Application
EP 16801991 A 20161116

Priority
• GB 201520206 A 20151117
• EP 2016077857 W 20161116

Abstract (en)
[origin: WO2017085124A1] A direct acting fuel injector (10) for use in an internal combustion engine, the injector comprising an actuator (20); a hydraulic amplifier chamber (31) for fuel; a valve needle (14) movable within a bore (16) provided in an injector housing having a lower housing region (18a) of a first, reduced diameter (Dnoz) and an upper housing region (18b, 18c) of a second, greater diameter, wherein the upper housing region (18b, 18c) is received within a cap nut (54) of the injector, the valve needle (14) having a surface (14c) with a needle diameter (Dnoz) exposed to fuel within the hydraulic amplifier chamber (31); and a plunger (30) having a plunger diameter (Dpc) exposed to fuel within the hydraulic amplifier chamber (31), the plunger (30) being actuatable by means of the actuator (20) to provide a force to the valve needle (14) with an amplification factor determined by the ratio of the plunger diameter (Dpc) to the needle diameter (Dnoz). The hydraulic amplifier chamber (31) is defined within a region of the lower housing region (18a) external to the cap nut (54).

IPC 8 full level
F02M 47/02 (2006.01); **F02M 61/12** (2006.01)

CPC (source: EP)
F02M 47/027 (2013.01); **F02M 61/12** (2013.01); **F02M 2200/703** (2013.01)

Citation (search report)
See references of WO 2017085124A1

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