

Title (en)

FUEL INJECTION DEVICE, ESPECIALLY INJECTOR, FOR INTERNAL COMBUSTION ENGINES

Title (de)

KRAFTSTOFF-EINSPRITZVORRICHTUNG, INSBESONDERE INJEKTOR, FÜR BRENNKRAFTMASCHINEN

Title (fr)

DISPOSITIF D'INJECTION DE CARBURANT, NOTAMMENT INJECTEUR, POUR MOTEURS A COMBUSTION INTERNE

Publication

EP 1373713 B2 20130703 (DE)

Application

EP 02726070 A 20020322

Priority

- DE 0201040 W 20020322
- DE 10115325 A 20010328

Abstract (en)

[origin: DE10115325A1] The fuel injector (10), for an internal combustion motor, has a clamping system (48) for the injector housing (14). The clamp has at least one clamping nut (16) with a ring web (32), and a ring shoulder (40) at the housing, to exert an axial clamping action on the housing and the injector base body (12). The injector has a fuel inflow (24) and at least one valve element (22). The clamping system has at least one ring surface towards the ring web of the clamping nut with a convex curvature, in the shape of a ball segment surface (41).

IPC 8 full level

F02M 61/16 (2006.01); **F02M 61/10** (2006.01)

CPC (source: EP US)

F02M 61/16 (2013.01 - EP US); **F02M 61/168** (2013.01 - EP US)

Citation (opposition)

Opponent :

- DE 490743 C 19300131 - OVE PETERSEN
- GB 669110 A 19520326 - BURMEISTER & WAINS MOT MASK
- CH 296118 A 19540131 - SAURER AG ADOLPH [CH]
- DE 2032005 A1 19720105
- DE 19608574 A1 19970911 - BOSCH GMBH ROBERT [DE]
- EP 0969203 A1 20000105 - MAGNETI MARELLI SPA [IT]
- DE 19600403 C2 19990114 - ZEXEL CORP [JP]
- US 5954343 A 19990921 - SUMIDA MAMORU [JP], et al
- DE 1776012 A1 19701001 - GILLETT TOOL CO

Cited by

WO2022179812A1

Designated contracting state (EPC)

DE FR IT

DOCDB simple family (publication)

DE 10115325 A1 20021017; DE 50213647 D1 20090813; EP 1373713 A1 20040102; EP 1373713 B1 20090701; EP 1373713 B2 20130703; JP 2004518888 A 20040624; JP 4210522 B2 20090121; US 2003173427 A1 20030918; US 6994280 B2 20060207; WO 02077443 A1 20021003

DOCDB simple family (application)

DE 10115325 A 20010328; DE 0201040 W 20020322; DE 50213647 T 20020322; EP 02726070 A 20020322; JP 2002575465 A 20020322; US 29670503 A 20030519