

Title (en)
FUEL INJECTOR NOZZLE AND NEEDLE ARRANGEMENT

Title (de)
KRAFTSTOFFEINSPRITZDÜSE UND NADELANORDNUNG

Title (fr)
ENSEMBLE AIGUILLE ET BUSE D'INJECTEUR DE CARBURANT

Publication
EP 3411589 B1 20191023 (EN)

Application
EP 17700552 A 20170118

Priority
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• EP 2017050961 W 20170118

Abstract (en)
[origin: WO2017133892A1] A nozzle arrangement for a fuel injector including a nozzle body having a longitudinal axis, and including a valve seat located towards the distal end thereof, and housing a needle located within said nozzle body and wherein said nozzle body and said needle define a nozzle body volume at the distal end of said nozzle, said needle adapted to be slidable within said nozzle body along said axis, to a closed position where the tip of the needle is in contact with the valve seat, and an open position where the needle tip is in a position away from said valve seat, characterized wherein said needle comprises a needle main portion and a separate needle tip portion, said needle main portion including a recess located at its distal end for location of said needle tip portion, and having spring means located between main portion and tip portion, said tip portion adapted to move along said axis relative to said needle main portion, wherein the proximal portion of said needle tip and said recess form a pressure chamber, and wherein the distal end of the needle main portion includes at least one orifice or flow channel fluidly connecting said pressure chamber to said nozzle body volume.

IPC 8 full level
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CPC (source: EP)
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