

Title (en)
FUEL INJECTOR FOR AN INTERNAL COMBUSTION ENGINE

Title (de)
BRENNSTOFFEINSPRITZVORRICHTUNG FÜR EINEN VERBRENNUNGSMOTOR

Title (fr)
INJECTEUR DE CARBURANT POUR MOTEUR À COMBUSTION INTERNE

Publication
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Application
EP 07858098 A 20071221

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- EP 07858098 A 20071221

Abstract (en)
[origin: WO2008077953A1] A fuel injector comprising an injector body (10) having a spray aperture (12); a pintle (14) extending within the injector body for axial movement between a closed position and an open position; said pintle head (16) comprising a tapered portion (18) engageable against the valve seat of the spray aperture and a cylindrical portion (22) upstream of said tapered portion, an annular channel (26) being provided defining a first part of a flow passage upstream of the spray aperture (12), wherein a discontinuity (30, 50) is provided downstream of the annular channel (26) and upstream of the spray aperture to generate cavitation when the pintle stroke exceeds a predetermined limit to thereby generate a virtual channel of constant cross section downstream of the annular channel (26) whereby the flow rate of the fuel flowing through said spray aperture is substantially independent of the stroke of the pintle when the pintle is in its open position.

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