

Title (en)

FUEL INJECTION NOZZLE FOR INTERNAL COMBUSTION ENGINE, NOZZLE BLANK AND MANUFACTURING METHOD THEREOF

Title (de)

BRENNSTOFFINJEKTIONSDÜSE FÜR EINEN VERBRENNUNGSMOTOR, DÜSENROHLING UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

BUSE D'INJECTION DE CARBURANT POUR MOTEUR À COMBUSTION INTERNE, ÉBAUCHE DE BUSE ET SON PROCÉDÉ DE FABRICATION

Publication

EP 2450557 A4 20140611 (EN)

Application

EP 10794146 A 20100629

Priority

- JP 2010061054 W 20100629
- JP 2009155823 A 20090630

Abstract (en)

[origin: EP2450557A1] Provided are a fuel injection nozzle for an internal combustion engine, a nozzle blank, and a manufacturing method for the nozzle blank, wherein the production processes are simple, the productivity is high, and the production can be performed at a low cost and with a high precision. A fuel injection nozzle for an internal combustion engine has a two layer structure of different materials, comprised of a nozzle body and a nozzle tip outer surface member which is arranged to cover a tip outer surface side of the nozzle body. The nozzle body is formed of a mold which has been molded into a predetermined shape by a metal powder injection molding method and which has been subjected to degreasing to obtain a degreased body forming the nozzle body. Likewise, separately, the nozzle tip outer surface member is formed of a mold which has been molded into a predetermined shape by a metal powder injection molding method and which has been subjected to degreasing to obtain a degreased body forming the nozzle tip outer surface member. The degreased body forming the nozzle tip outer surface member is superimposed on the degreased body forming the nozzle body to cover the tip outer surface side of the degreased body forming the nozzle body and is subjected to diffusion sintering to thereby integrally unite them. It is preferable that a hot isostatic pressing operation be performed after the diffusion sintering.

IPC 8 full level

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CPC (source: EP KR)

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Citation (search report)

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