

Title (en)
Nozzle for fuel injector

Title (de)
Düsenkopf für eine Brennstoffeinspritzdüse

Title (fr)
Tête d'aiguille d'injecteur de carburant

Publication
EP 1353061 B1 20080305 (DE)

Application
EP 03405171 A 20030312

Priority
• EP 03405171 A 20030312
• EP 02405289 A 20020411

Abstract (en)
[origin: EP1353061A2] Material for the nozzle head (2) of a fuel injection nozzle (1) of an internal combustion engine, especially a large diesel engine, comprises a chromium-based alloy containing (in wt.%) 0-50 nickel, 0-5 carbon, 0-5 silicon and at least 50 chromium. An Independent claim is also included for a nozzle head for a fuel injection nozzle of an internal combustion engine, especially a large diesel engine comprising a longitudinal hole (20) and a nozzle hole (21) for introducing fuel into a combustion chamber. The transition between the longitudinal hole and the nozzle hole is rounded. Preferred Features: The alloy contains lanthanum, cerium, yttrium, hafnium, scandium and rare earths as reactive elements. The alloy preferably contains (in wt.%) at least 45 nickel, 50-55 chromium, 0-5 carbon, 0-5 silicon and 0-5 reactive element.

IPC 8 full level
F02M 61/16 (2006.01); **F02M 61/18** (2006.01); **B22F 3/15** (2006.01); **C22C 27/06** (2006.01); **F02M 19/03** (2006.01); **F02M 61/00** (2006.01); **F02B 3/06** (2006.01); **F02B 75/02** (2006.01)

CPC (source: EP KR)
B22F 3/15 (2013.01 - EP); **C22C 1/045** (2013.01 - EP); **C22C 27/06** (2013.01 - EP KR); **F02M 61/166** (2013.01 - EP); **F02M 61/18** (2013.01 - EP); **F02M 61/182** (2013.01 - EP); **B22F 2998/10** (2013.01 - EP); **F02B 3/06** (2013.01 - EP); **F02B 2075/025** (2013.01 - EP); **F02F 2007/0097** (2013.01 - EP)

C-Set (source: EP)
B22F 2998/10 + B22F 9/08 + B22F 3/15

Cited by
EP2000550A1; AT511880A1; AT511880B1; EP2228462A1; KR101534536B1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1353061 A2 20031015; EP 1353061 A3 20060531; EP 1353061 B1 20080305; AT E388322 T1 20080315; CN 100436625 C 20081126; CN 1450186 A 20031022; DE 50309291 D1 20080417; DK 1353061 T3 20080623; JP 2003301233 A 20031024; JP 4870323 B2 20120208; KR 100959597 B1 20100527; KR 20030081020 A 20031017; PL 199117 B1 20080829; PL 359617 A1 20031020

DOCDB simple family (application)
EP 03405171 A 20030312; AT 03405171 T 20030312; CN 03110568 A 20030410; DE 50309291 T 20030312; DK 03405171 T 20030312; JP 2003106188 A 20030410; KR 20030015814 A 20030313; PL 35961703 A 20030409