

Title (en)
Fuel injection nozzle for internal combustion engines

Title (de)
Kraftstoff-Einspritzdüse für Brennkraftmaschinen

Title (fr)
Buse d'injection de combustible pour moteurs à combustion interne

Publication
EP 0619426 B1 19990811 (DE)

Application
EP 94102949 A 19940228

Priority
DE 4310154 A 19930329

Abstract (en)
[origin: EP0619426A1] A fuel injection nozzle for internal combustion engines has a nozzle body (10) with a valve seat (18) arranged on the combustion-chamber side and an outward-opening valve needle (15) with a closing head (16) which has a closing cone (17) that interacts with the valve seat (18). Arranged in the closing head (16) is at least one outward-directed spray hole (25) which is supplied with fuel from a pressure chamber (21) via a feed passage (27). The feed passage is aligned axially with the spray hole and merges into the latter in a funnel shape. Its width D corresponds approximately to the length l of the spray hole. The spray hole and the feed passage extend at an obtuse angle α , matched to the combustion chamber, relative to the longitudinal axis of the closing head. The inlet of the feed passage is situated in an end of the closing head remote from the combustion-chamber end. <IMAGE>

IPC 1-7
F02M 61/08

IPC 8 full level
F02M 61/06 (2006.01); **F02M 61/04** (2006.01); **F02M 61/08** (2006.01); **F02M 61/18** (2006.01)

CPC (source: EP US)
F02M 61/045 (2013.01 - EP US); **F02M 61/08** (2013.01 - EP US)

Cited by
EP0984159A3; GB2312926A; GB2312926B; GB2295648A; GB2295648B; US5755385A; WO9727397A1

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
DE 4310154 A1 19941006; DE 59408599 D1 19990916; EP 0619426 A1 19941012; EP 0619426 B1 19990811; JP H06317234 A 19941115;
US 5405088 A 19950411

DOCDB simple family (application)
DE 4310154 A 19930329; DE 59408599 T 19940228; EP 94102949 A 19940228; JP 5878194 A 19940329; US 17699694 A 19940103