

Title (en)
Injection nozzle

Title (de)
Einspritzventil

Title (fr)
Soupape d'injection

Publication
EP 1498602 A2 20050119 (EN)

Application
EP 04254231 A 20040715

Priority
• EP 04254231 A 20040715
• EP 03254661 A 20030715

Abstract (en)
An injection nozzle for an internal combustion engine includes a valve member, (30) having at least first (44), second (46) and third (48) distinct regions, and being engageable with a seating surface (32), which defines a seat cone angle (θ_s), so as to control fuel delivery through a nozzle outlet (36). The second region provides a seat region (46) of part-conical form, which defines a first cone angle (θ_1). The third region (48), of part-conical form, is arranged immediately downstream of the seat region (46) and defines a second cone angle (θ_2), the seat and third regions (46) defining, at their intersection, a seating line (40) for engagement with the seating surface (32). A first differential angle between the first cone angle (θ_1) and the seat cone angle (θ_s) is greater than a second differential angle between the second cone angle (θ_2) and the seat cone angle (θ_s), said first and second differential angles being selected to ensure the seating line (40) tends to migrate in an upstream direction along the seat region (46) as the valve member (30) is worn, in use. <IMAGE>

IPC 1-7
F02M 61/18

IPC 8 full level
F02M 61/18 (2006.01)

CPC (source: EP)
F02M 61/1873 (2013.01); **F02M 61/1806** (2013.01)

Cited by
CN114483403A; US6022651A

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EP 1967730 A1 20080910; **EP 1967730 B1 20091223**; AT E400736 T1 20080715; AT E453048 T1 20100115; DE 602004014854 D1 20080821; DE 602004024835 D1 20100204; EP 1498602 A2 20050119; EP 1498602 A3 20050504; EP 1498602 B1 20080709

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