

Title (en)  
Injection nozzle

Title (de)  
Einspritzdüse

Title (fr)  
Buse à injection

Publication  
**EP 1967730 B1 20091223 (EN)**

Application  
**EP 08157000 A 20040715**

Priority  
• EP 04254231 A 20040715  
• EP 03254661 A 20030715  
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Abstract (en)  
[origin: EP1967730A1] An injection nozzle for an internal combustion engine, the nozzle comprising: a valve member (30) which is engageable with a seating surface (32), defining a seat cone angle ( $\tilde{N}s$ ), so as to control fuel delivery through a nozzle outlet (36), the valve member (30) including a cylindrical upper region (44), a seat region (46), arranged immediately downstream of the upper region (44), defining a first cone angle ( $\tilde{N}1$ ), wherein the upper region (44) and the seat region (46) define, at their intersection, a seating line (40) for engagement with the seating surface (32), a second region (48), arranged immediately downstream of the seat region (46), defining a second cone angle ( $\tilde{N}2$ ), and an end conical region (50), arranged immediately downstream of the second region (48), wherein a first differential angle between the first cone angle ( $\tilde{N}1$ ) and the seat cone angle ( $\tilde{N}s$ ) is smaller than a second differential angle between the second cone angle ( $\tilde{N}2$ ) and the seat cone angle ( $\tilde{N}s$ ), said first differential angle being selected to ensure the seating line (40) migrates in a downstream direction along the seat region (46) as the valve member (30) becomes worn, in use, and the second differential angle being selected to prevent said migration of the seating line (40) beyond a pre-determined amount.

IPC 8 full level  
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