

Title (en)  
SPARK PLUG

Title (de)  
ZÜNDKERZE

Title (fr)  
BOUGIE D'ALLUMAGE

Publication  
**EP 1671405 B1 20061227 (EN)**

Application  
**EP 04743145 A 20040630**

Priority  
• GB 2004002797 W 20040630  
• GB 0317671 A 20030729

Abstract (en)  
[origin: GB2404422A] The spark plug comprises a tubular metallic shell 120 along which extends an electrically insulating sleeve 12 surrounding a first electrode 16 that co-operates with a second, ground electrode 22 carried by the shell to define a primary spark gap G1. The insulating sleeve 12 has one or more lateral projections 32 of electrically insulating material spaced from the tip and the metallic shell part extends axially to the vicinity 10 of the projection(s) 32 as a plurality of shell extension elements 1211, 1212 of limited circumferential extent separated by spaces 1231, 1232 that define lateral sleeve exposing openings. The extension elements define with the sleeve projection secondary spark gaps G2 and the openings permit fuel to access the counterbore in the vicinity of the secondary spark gaps and a flame front of fuel ignited by a spark at a secondary gap to pass efficiently into the combustion chamber. The extension elements may be capped by a circumferentially extending ring (325, Fig 4) or the elements and intervening spaces may be defined by a tubular wall with through-apertures 427, Fig 5. The arrangement ensures less fouling and better cooling of the sleeve that enables the plug to function at higher engine temperatures.

IPC 8 full level  
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DE FR IT

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**GB 0317671 D0 20030903**; **GB 2404422 A 20050202**; **GB 2404422 B 20060705**; DE 602004003972 D1 20070208;  
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