

Title (en)  
GLOW PLUG

Title (de)  
Glühkerze

Title (fr)  
Bougie d'incandescence

Publication  
**EP 2889541 A1 20150701 (EN)**

Application  
**EP 14191900 A 20141105**

Priority  
• JP 2013237001 A 20131115  
• JP 2014180916 A 20140905

Abstract (en)  
A glow plug (10) comprising: a heat-generating element (820) formed of an iron-based alloy; a sheath tube (810) formed of a nickel-based alloy, disposed around the heat-generating element (820) and extending in an axial line (O) direction; a fusion zone (850) formed through welding of the sheath tube (810) and the heat-generating element (820), and closing a forward end of the sheath tube (810), wherein in a cross section including the axial line (O), the fusion zone (850) has an iron content of 20 mass% to 60 mass% at a measurement point of maximum iron content in a region having a depth of 0.5 mm or less from an outer surface of the fusion zone (850). The measurement point is determined through EPMA analysis (WDS: wavelength-dispersive X-ray spectrometer) of the region at an acceleration voltage of 20 kV, a probe current of  $2.5 \times 10^{-8}$  A, a beam irradiation diameter of 10  $\mu\text{m}$ , and a measurement interval of 10  $\mu\text{m}$ .

IPC 8 full level  
**F23Q 7/00** (2006.01)

CPC (source: EP)  
**F23Q 7/001** (2013.01)

Citation (search report)  
• [I] JP 2009156560 A 20090716 - NGK SPARK PLUG CO  
• [A] JP 2009158431 A 20090716 - NGK SPARK PLUG CO

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