Title (en)

Glow plug

Title (de)

Glühkerze

Title (fr)

Bougie à incandescence

Publication

EP 1455086 B1 20060920 (EN)

Application

EP 04004740 A 20040301

Priority

JP 2003055392 A 20030303

Abstract (en)

[origin: EP1455086A1] A glow plug 1 includes a sheathed heater 3 and a metallic shell 2. The sheathed heater 3 is configured such that a resistance wire coil 3b having a heating coil portion 30b and an insulating MgO powder 3d are placed in a sheath 3a and such that a bar electrode 3c is inserted into the sheath 3a. The heating coil portion 30b is formed of, for example, an Fe-Cr-A1 alloy, which exhibits, for example, excellent heat resistance. However, when the temperature of the heating coil portion 30b exceeds 1,000 DEG C, there arises a phenomenon that the heating coil portion 30b fails to exhibit expected durability. An object of the present invention is to provide the glow plug 1 that exhibits excellent durability at high temperature, particularly a high temperature in excess of 1,000 DEG C. The heating coil portion 30b is formed by a coil base material 31b and a coating layer 32b, which covers the surface of the coil base material 31b, and the coating layer 32b is formed of Pt, Pd, Rh, or an alloy of two or more of Pt, Pd, and Rh. <IMAGE>

IPC 8 full leve

C25B 11/04 (2006.01); F23Q 7/00 (2006.01); F02P 19/02 (2006.01)

CPC (source: EP US)

F23Q 7/001 (2013.01 - EP US); F02P 19/02 (2013.01 - EP US)

Citation (examination)

- US 6121577 A 20000919 JAKOBI HANSJOERG [DE], et al
- US 4582980 A 19860415 IZZI GILBERTO [IT]

Cited by

EP2631542A3; WO2010056411A1

Designated contracting state (EPC)

DE FR

DOCDB simple family (publication)

EP 1455086 A1 20040908; **EP 1455086 B1 20060920**; DE 602004002416 D1 20061102; DE 602004002416 T2 20070920; JP 2004263951 A 20040924; US 2004173595 A1 20040909

DOCDB simple family (application)

EP 04004740 Á 20040301; DE 602004002416 T 20040301; JP 2003055392 A 20030303; US 78639504 A 20040226