

Title (en)

Ceramic heating rod, glow plug comprising the same and method of production

Title (de)

Keramischer Heizstab und diesen enthaltende Glühkerze und Verfahren zu deren Herstellung

Title (fr)

Barre chauffante en céramique, bougie à incandescence la comprenant et procédé de production

Publication

EP 1065446 A2 20010103 (DE)

Application

EP 00111705 A 20000531

Priority

DE 19930334 A 19990702

Abstract (en)

An immersion heater has a heater element (1a) of electrically conductive ceramic material that has an elongated U-shaped heating area integrally connected to a pair of conductors. The heater element is embedded in an immersion heater body (1b) made of an electrically insulating ceramic substance (3). Various insulating layers of different materials are used.

Abstract (de)

Heizstab mit einem Heizelement aus elektrisch leitfähigem Keramikmaterial, das einen im Längsschnitt U-förmigen Heizbereich integral anschließend an ein Leiterpaar aufweist, wobei das Heizelement (1a) in einem Heizstabkörper (1b) aus elektrisch isolierender Keramikmasse (3) eingebettet ist. <IMAGE>

IPC 1-7

F23Q 7/00

IPC 8 full level

F23Q 7/00 (2006.01)

CPC (source: EP KR US)

F23Q 7/00 (2013.01 - KR); **F23Q 7/001** (2013.01 - EP US); **F23Q 2007/004** (2013.01 - EP US)

Citation (applicant)

DE 4117253 A1 19911212 - JIDOSHA KIKI CO [JP]

Cited by

CZ302319B6; US7224110B2; US6710305B2; WO03040623A1; WO02061338A1; EP1734304B1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

EP 1065446 A2 20010103; **EP 1065446 A3 20050302**; **EP 1065446 B1 20080305**; **EP 1065446 B2 20110608**; AT E388375 T1 20080315; DE 19930334 A1 20010111; DE 19930334 C2 20030731; DE 50015007 D1 20080417; ES 2298108 T3 20080516; JP 2001033037 A 20010209; KR 100588004 B1 20060608; KR 20010049674 A 20010615; US 6335516 B1 20020101

DOCDB simple family (application)

EP 00111705 A 20000531; AT 00111705 T 20000531; DE 19930334 A 19990702; DE 50015007 T 20000531; ES 00111705 T 20000531; JP 2000200410 A 20000703; KR 20000036963 A 20000630; US 60822400 A 20000630