

Title (en)
Vacuum circuit-breaker, vacuum bulb for use therein, and electrodes thereof

Title (de)
Vakuumschalter und dabei verwendeten Vakuumgehäuse und Elektroden

Title (fr)
Disjoncteur sous vide, ampoule sous vide et électrodes pour le même

Publication
EP 0917171 A3 19990728 (EN)

Application
EP 98121200 A 19981113

Priority
JP 31310597 A 19971114

Abstract (en)
[origin: EP0917171A2] The invention aims at providing a vacuum circuit-breaker, a vacuum bulb used therein and electrodes for the vacuum bulb, which can reduce the manufacturing cost while being of high performance and compact in size. The invention resides in a vacuum circuit-breaker, a vacuum bulb and electrodes for the vacuum bulb, which are characterized in that fixed and movable electrodes (30a, 30b) each comprise arc electrodes (1), whose entire surfaces, mutually facing each other, are made of an alloy containing a refractory metal and a highly conductive metal, and electrode rods (4) of a highly conductive metal supporting the respective arc electrodes, and that each arc electrode and the mating electrode rod are integrally formed by means of solid-phase diffusion bonding. <IMAGE> <IMAGE>

IPC 1-7
H01H 33/66

IPC 8 full level
H01H 33/664 (2006.01); **H01H 1/02** (2006.01); **H01H 33/66** (2006.01)

CPC (source: EP)
H01H 33/664 (2013.01); **H01H 1/0203** (2013.01); **H01H 33/6643** (2013.01)

Citation (search report)
• [YA] DE 19513790 A1 19951019 - HITACHI LTD [JP]
• [YA] US 3828428 A 19740813 - WAYLAND P
• [A] US 4743718 A 19880510 - SANTILLI VINCENT J [US]
• [A] DATABASE WPI Section EI Week 9710, Derwent World Patents Index; Class X13, AN 97-107019, XP002104631

Cited by
EP0905726A3; EP1814131A3; CN103021727A; EP2575149A3; US6248969B1; US7679022B2

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 0917171 A2 19990519; EP 0917171 A3 19990728

DOCDB simple family (application)
EP 98121200 A 19981113