

Title (en)

IGNITION ELEMENT WITH A LASER LIGHT SOURCE

Title (de)

ZÜNDELEMENT MIT EINER LASERLICHTQUELLE

Title (fr)

ELEMENT D'AMOR AGE COMPORTANT UNE SOURCE DE LUMIERE LASER

Publication

EP 1104540 B1 20030409 (DE)

Application

EP 99944343 A 19990807

Priority

- DE 19837839 A 19980820
- EP 9905719 W 19990807

Abstract (en)

[origin: US6499404B1] In ignition elements where the energy required to ignite the charge is produced using a laser source, the laser light is injected by means of an optical fiber or a laser optics system enabling the laser light to be focused onto the charge at the required intensity for ignition. Transmission losses and injection losses occur while the laser light is transmitted by means of optical devices or optical fibers. Known ignition devices are also complicated in terms of construction. According to the invention, the laser light source is a laser diode (3) and the explosive (4) that is to be ignited is arranged directly on the part (12) of the housing (8) of the laser diode (3) that allows the laser light (13) to pass through it.

IPC 1-7

F42B 3/113

IPC 8 full level

F42B 3/113 (2006.01); **H01S 5/022** (2006.01)

CPC (source: EP US)

F42B 3/113 (2013.01 - EP US)

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)

US 6499404 B1 20021231; AT E237119 T1 20030415; DE 19837839 A1 20000224; DE 59904975 D1 20030515; EP 1104540 A1 20010606; EP 1104540 B1 20030409; ES 2196850 T3 20031216; JP 2002537534 A 20021105; WO 0011428 A1 20000302

DOCDB simple family (application)

US 76319301 A 20010413; AT 99944343 T 19990807; DE 19837839 A 19980820; DE 59904975 T 19990807; EP 9905719 W 19990807; EP 99944343 A 19990807; ES 99944343 T 19990807; JP 2000566638 A 19990807