

Title (en)  
Low energy optical detonator

Title (de)  
Optischer Zünder mit niedriger Energie

Title (fr)  
Détonateur optique basse énergie

Publication  
**EP 1306643 B1 20100303 (FR)**

Application  
**EP 02292357 A 20020925**

Priority  
FR 0113911 A 20011026

Abstract (en)  
[origin: EP1306643A1] An optical detonator comprises a secondary explosive (8) distributed in a cavity (7), a fibre optic (5) connected by one extremity to a laser source and an optical interface (11) at the other fibre extremity to transmit the laser ray towards the secondary explosive. A layer of an ignition powder (16) is disposed between the explosive and the interface.

IPC 8 full level  
**F42B 3/113** (2006.01)

CPC (source: EP US)  
**F42B 3/113** (2013.01 - EP US)

Cited by  
EP2390617A1; FR3005500A1; FR2943128A1; CN102422120A; US9970737B2; EP1742009A1; FR2888234A1; FR2960541A1; NO339580B1; WO2014180860A1; WO2010103231A1; US7810430B2; EP2386819A1; EP2554529A1; US8915188B2; US7784403B2

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**EP 1306643 A1 20030502; EP 1306643 B1 20100303**; DE 02292357 T1 20040415; DE 60235518 D1 20100415; FR 2831659 A1 20030502; FR 2831659 B1 20040409; US 2006096484 A1 20060511; US 7051655 B1 20060530

DOCDB simple family (application)  
**EP 02292357 A 20020925**; DE 02292357 T 20020925; DE 60235518 T 20020925; FR 0113911 A 20011026; US 27791002 A 20021021