

Title (en)  
INSTALLATION FOR PROGRAMMABLE PYROTECHNIC SHOT FIRING

Title (de)  
ANLAGE FÜR PROGRAMMIERBARE PYROTECHNISCHE ABSCHÜSSE

Title (fr)  
INSTALLATION DE TIRS PYROTECHNIQUES PROGRAMMABLES

Publication  
**EP 1456598 A1 20040915 (FR)**

Application  
**EP 02793234 A 20021114**

Priority  
• FR 0203891 W 20021114  
• FR 0114916 A 20011119

Abstract (en)  
[origin: US2005016407A1] Programmable pyrotechnical firing installation comprising a programming and firing control unit (8), a programming and control line comprising two conductor wires (6a, 6b) and a plurality of electronic detonators (4) mounted in parallel on this two-wire line, wherein the programming unit (8) comprises means (9, 10) for establishing a continuous voltage between the two wires (6a, 6b), means (9, 10) for producing pulses of this voltage so as to form coded signals, and means (11, 9) for reading the current variations existing on the two-wire line, wherein every detonator comprises an electronic module (12) that has means (14, 17) suitable for producing, in response to certain of the coded signals of the programming unit (8), current pulses in the two-wire line (6a, 6b) for forming coded signals.

IPC 1-7  
**F42D 1/05**

IPC 8 full level  
**F42D 1/05** (2006.01)

CPC (source: EP US)  
**F42D 1/05** (2013.01 - EP US)

Citation (search report)  
See references of WO 03044451A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)  
**US 2005016407 A1 20050127**; AT E386250 T1 20080315; AU 2002358894 A1 20030610; AU 2002358894 B2 20090903; CA 2467808 A1 20030530; CA 2467808 C 20091222; DE 60225055 D1 20080327; EP 1456598 A1 20040915; EP 1456598 B1 20080213; FR 2832501 A1 20030523; FR 2832501 B1 20040618; WO 03044451 A1 20030530; ZA 200403856 B 20060628

DOCDB simple family (application)  
**US 49584804 A 20040827**; AT 02793234 T 20021114; AU 2002358894 A 20021114; CA 2467808 A 20021114; DE 60225055 T 20021114; EP 02793234 A 20021114; FR 0114916 A 20011119; FR 0203891 W 20021114; ZA 200403856 A 20040519