

Title (en)

HIGH DENSITY PERFORATING GUN SYSTEM PRODUCING REDUCED DEBRIS

Title (de)

GESCHOSSLOCHERSYSTEM VON HOHER DICHTHE UND MIT REDUZIERTEM ABFALL

Title (fr)

SYSTÈME DE CANONS DE PERFORATION À HAUTE DENSITÉ PRODUISANT UNE QUANTITÉ RÉDUITE DE DÉBRIS

Publication

EP 2013563 A4 20120404 (EN)

Application

EP 07840148 A 20070417

Priority

- US 2007066787 W 20070417
- US 40514806 A 20060417

Abstract (en)

[origin: US2007240599A1] A perforating system has a perforating module comprising a unitary body of explosive. The explosive is contained within a non-explosive casing, or liner, having formed indentations and a cover thereover. The indentations, which will transform into explosively formed penetrators (EFP's) upon detonation, have a perimeter shape that allows for improved packing density, e.g., a hexagonal perimeter, which results in relatively little "dead space" wherein no perforating penetrators are generated. In operation, the module provides a relatively dense shot pattern and substantially reduced amount of post-detonation debris that could clog the perforations and/or require remedial clean-up or repeat perforation.

IPC 8 full level

E21B 43/117 (2006.01); **F42B 1/028** (2006.01); **F42D 3/04** (2006.01)

CPC (source: EP US)

E21B 43/117 (2013.01 - EP US); **F42B 1/028** (2013.01 - EP US); **F42D 3/04** (2013.01 - EP US)

Citation (search report)

- [X] PL 187181 B1 20040531 - WOJSKOWA AKAD TECH [PL]
- [X] US 2831429 A 19580422 - MOORE ALLAN B
- [X] PL 187334 B1 20040630 - WOJSKOWA AKAD TECH [PL]
- [X] US 4018293 A 19770419 - KELLER LEONARD J
- [X] US 6186070 B1 20010213 - FONG RICHARD [US], et al
- See references of WO 2008019173A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

US 2007240599 A1 20071018; CA 2649728 A1 20080214; CA 2649728 C 20141223; CN 101466994 A 20090624; CN 101466994 B 20130918; EP 2013563 A2 20090114; EP 2013563 A4 20120404; NO 20084829 L 20090116; WO 2008019173 A2 20080214; WO 2008019173 A3 20080828

DOCDB simple family (application)

US 40514806 A 20060417; CA 2649728 A 20070417; CN 200780021643 A 20070417; EP 07840148 A 20070417; NO 20084829 A 20081117; US 2007066787 W 20070417