

Title (en)

A DETONATION TUBE WITH IMPROVED SEPARABILITY FROM THE PROCESSED BROKEN STONE

Title (de)

DETONATIONSROHR MIT VERBESSERTER TRENNBARKEIT AUS DEM BEARBEITETEN SCHOTTER

Title (fr)

TUBE À DÉTONATION POSSÉDANT UNE SÉPARABILITÉ AMÉLIORÉE À PARTIR DE LA PIERRE CONCASSÉE TRAITÉE

Publication

**EP 2079979 A1 20090722 (EN)**

Application

**EP 07817391 A 20071026**

Priority

- CZ 2007000095 W 20071026
- CZ 2006682 A 20061027

Abstract (en)

[origin: WO2008049379A1] The invention deals with a detonation tube with improved separability from the processed broken stone designed as a double-layer or multi-layer detonation tube of an industrial non-electric detonator containing the active component of the detonator stored in an at least double-layered tubular body or package where the principle is that at least one layer of its body or package is made of magnetic material while the magnetic material is preferentially created as a mixture of the magnetic and non-magnetic main material component while the content of the magnetic main material component in individual layers of the body or package of the detonation tube is advantageously 2 to 60% of weight and the rest to 100% consists of the non-magnetic main material component, all related to the weight of individual layers, and the magnetic main material component is beneficially produced on the basis of magnetite -  $\text{Fe}_{\text{SUB}3\text{SUB}}\text{O}_{\text{SUB}4\text{SUB}}$ , or on the basis of ferrite with the general formula  $\text{Me}_{\text{SUP}II\text{SUB}}\text{Fe}_{\text{SUB}2\text{SUB}}\text{O}_{\text{SUB}4\text{SUB}}$ , where Me represents Co, Mn, Ni, Ca, Cu, Zn, Mg, or ferrite with the general formula  $\text{Ln}_{\text{SUP}II\text{SUB}}\text{Fe}_{\text{SUB}2\text{SUB}}\text{O}_{\text{SUB}4\text{SUB}}$ , where Ln represents noble earth elements, or on the basis of noble earth elements in the oxidation degree II, or on the basis of ferric oxide in the modification  $\text{Fe}_{\text{SUB}2\text{SUB}}\text{O}_{\text{SUB}3\text{SUB}}$ , or on the basis of powder iron, or on the basis of a magnetic alloy of iron or on the basis of a mixture or alloy containing the above mentioned magnetic partial components, where advantageous magnetic alloys of iron are alloys containing at least noble earth elements, or especially advantageous magnetic alloys of iron are alloys containing at least one noble earth element and B and/or Co or where alternatively the magnetic main material component is made on the basis of magnetically hard materials of the AlNiCo or FeCoCr type. The non-magnetic main material component is beneficially created on the basis of a plastic material, preferentially from the group of polymers or copolymers, mainly on the basis of substances from the PE, PP, PTFE plastic material group or ethylene copolymers with derivatives of methacrylic acid.

IPC 8 full level

**F42B 3/11** (2006.01); **F42D 1/04** (2006.01)

CPC (source: EP US)

**C06C 5/04** (2013.01 - EP US); **F42B 3/11** (2013.01 - EP US); **F42D 1/04** (2013.01 - EP US)

Citation (search report)

See references of WO 2008049379A1

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

Designated extension state (EPC)

BA

DOCDB simple family (publication)

**WO 2008049379 A1 20080502**; AT E519089 T1 20110815; CZ 2006682 A3 20080507; CZ 306750 B6 20170614; EP 2079979 A1 20090722; EP 2079979 B1 20110803; RU 2009119407 A 20101210; RU 2447394 C2 20120410; UA 94773 C2 20110610; US 2010000437 A1 20100107

DOCDB simple family (application)

**CZ 2007000095 W 20071026**; AT 07817391 T 20071026; CZ 2006682 A 20061027; EP 07817391 A 20071026; RU 2009119407 A 20071026; UA A200905057 A 20071026; US 44669007 A 20071026