

Title (en)

RESONANT ACOUSTIC MIXING (RAM) OF AN EXPLOSIVE COMPOSITION

Title (de)

RESONANT-AKUSTISCHES MISCHEN (RAM) EINER SPRENGSTOFFZUSAMMENSETZUNG

Title (fr)

MÉLANGER RESONANT-ACOUSTIQUE (RAM) D'UNE COMPOSITION EXPLOSIVE

Publication

**EP 3385246 A1 20181010 (EN)**

Application

**EP 17275043 A 20170403**

Priority

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Abstract (en)

The invention relates to a cast explosive composition, particularly to a pre-cure castable explosive composition comprising an explosive material, a polymerisable binder, a microencapsulated cross linking reagent, said microencapsulated cross linking reagent, comprising a cross linking agent encapsulated in a microcapsule. Providing a process for formulating a homogenous crosslinked polymer bonded explosive composition comprising the steps of: i) forming an admixture of pre-cure castable explosive composition, said composition comprising an explosive material, a polymerisable binder, a microencapsulated cross linking reagent, said microencapsulated cross linking reagent, comprising a cross linking reagent encapsulated in a microcapsule; wherein the microcapsule, comprises at least one shell wall polymer, wherein the microcapsule's shell wall polymer comprises at least one resonant acoustic stimulus labile linkage; ii) applying resonant acoustic stimulus to the admixture, causing the microcapsule to rupture and release said cross linking reagent, to cause the cure process to start.

IPC 8 full level

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CPC (source: EP)

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Citation (applicant)

WO 2017006110 A1 20170112 - BAE SYSTEMS PLC [GB]

Citation (search report)

- [XDAI] WO 2017006110 A1 20170112 - BAE SYSTEMS PLC [GB]
- [XA] US 2010294113 A1 20101125 - MCPHERSON MICHAEL D [US]
- [A] DE 2327107 A1 19750220 - ISL INST FRANCO ALLEMAND DE RE
- [A] US 3505428 A 19700407 - KIDWELL ALFRED S, et al

Cited by

CN116354777A; CN114591120A; CN113429247A; CN114269533A; CN115487742A; WO2021041498A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

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