

Title (en)

Cold solid propellant; pyrotechnic loading; methods of obtaining same

Title (de)

"Kalter Feststofftreibstoff; pyrotechnische Beschickung; Herstellungsverfahren"

Title (fr)

Propergol solide froid ; chargement pyrotechnique ; procédés d'obtention

Publication

**EP 1985599 A2 20081029 (FR)**

Application

**EP 08305093 A 20080410**

Priority

FR 0754723 A 20070426

Abstract (en)

Cold solid propellant, comprises gel comprising a liquid compound comprising oxidizing or reducing liquid compounds, in a cold hardened gel, where the liquid compound is gelled by a polymeric organic gelling agent and containing a filler particle comprising reducing filler particle, when the liquid compound is oxidizer, or oxidizing filler particle, when liquid particle is reducer. Independent claims are included for: (1) a pyrotechnic charge comprises the cold solid propellant; (2) a process for preparing the cold solid propellant comprising obtaining a cold gel by introducing the liquid compound in the mixer, preferably cooled to obtain the cold liquid by stirring, introducing a polymeric organic gelling agent, which is optionally precooled, in the mixer containing the liquid compound maintained and cooled by stirring, introducing filler particle, which is optionally cooled, in the mixer containing the liquid compound and the gelling agent mixture maintained and cooled by stirring, and agitating the cold mixture containing the liquid compound, oxidizer or reducer, gelling agent and filler particle in the mixer, and hardening the cold gel by stopping the stirring with optionally cooling; and (3) a process for preparing the pyrotechnic charge comprising preparing the cold solid propellant, casting of gel and hardening of the gel in a structure.

Abstract (fr)

La présente invention a pour objet: - des propergols solides froids, consistant en des gels durcis froids, lesdits gels comprenant au moins un composé liquide, choisi parmi les composés liquides oxydants ou les composés liquides réducteurs, gélifié par au moins un agent gélifiant organique polymérique et renfermant au moins une charge particulaire choisie parmi les charges particulières réductrices, lorsque ledit au moins un composé liquide est oxydant, ou les charges particulières oxydantes, lorsque ledit au moins un composé liquide est réducteur ; - des chargements pyrotechniques, comprenant de tels propergols solides ; ainsi que - des procédés d'obtention desdits propergols et chargements.

IPC 8 full level

**C06B 43/00** (2006.01); **C06B 21/00** (2006.01); **C06B 47/00** (2006.01)

CPC (source: EP)

**C06B 43/00** (2013.01); **C06B 47/00** (2013.01); **C06B 47/14** (2013.01)

Citation (applicant)

- WO 03087017 A1 20031023 - LO ROGER E [DE], et al
- US 6311479 B1 20011106 - LO ROGER E [DE]
- US 3047441 A 19620731 - BAKER ARTHUR W
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Designated contracting state (EPC)

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

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

**EP 1985599 A2 20081029**; **EP 1985599 A3 20090325**; FR 2915479 A1 20081031; FR 2915479 B1 20090821

DOCDB simple family (application)

**EP 08305093 A 20080410**; FR 0754723 A 20070426