Title (en)

OXIDIZER SOLUTION

Title (de)

OXIDATIONSMITTELLÖSUNG

Title (fr)

SOLUTION D'OXYDANT

Publication

EP 2812295 B1 20160622 (EN)

Application

EP 13714699 A 20130211

Priority

- GB 201202402 A 20120210
- IB 2013051107 W 20130211

Abstract (en)

[origin: WO2013118103A2] According to this invention there is provided an aqueous oxidizer solution containing a mixture of dissolved oxidizing salts, for use in the preparation of explosives formulations, which a crystallization point as low as below 0°C. The solution has a water content of 25% by mass or less and contains ammonium nitrate and calcium nitrate wherein the ratio of the the molar concentration of ammonium nitrate to calcium nitrate is preferably approximately 1. When the water content of the solution is 24% by mass or less, the solution further contains monomethylammonium nitrate. This solution can be used for manufacturing watergel explosives, or emulsion explosives or ANE's (ammonium nitrate emulsion suspension or gel explosives). It can be easily transported underground in deep level mines through relatively small diameter pipelines, using existing access ways and shafts, to the working places at which point it can then be converted into a watergel or emulsion explosive or an ANE.

IPC 8 full level

C06B 25/36 (2006.01); **C06B 31/12** (2006.01); **C06B 31/32** (2006.01); **C06B 47/00** (2006.01)

CPC (source: EP US)

C06B 25/36 (2013.01 - EP US); **C06B 31/12** (2013.01 - EP US); **C06B 31/32** (2013.01 - EP US); **C06B 47/00** (2013.01 - EP US)

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

DOCDB simple family (publication)

WO 2013118103 A2 20130815; **WO 2013118103 A3 20131107**; AP 2014007908 A0 20140831; AP 3822 A 20150930; AU 2013217230 A1 20140918; AU 2013217230 B2 20170504; BR 112014019850 A2 20170620; BR 112014019850 A8 20170711; BR 112014019850 B1 20210309; CA 2864216 A1 20130815; CA 2864216 C 20200602; CL 2014002115 A1 20150306; EA 027414 B1 20170731; EA 201400885 A1 20150529; EP 2812295 A2 20141217; EP 2812295 B1 20160622; GB 201202402 D0 20120328; PL 2812295 T3 20170131; US 2015000804 A1 20150101; ZA 201406433 B 20160525

DOCDB simple family (application)

IB 2013051107 W 20130211; AP 2014007908 A 20130211; AU 2013217230 A 20130211; BR 112014019850 A 20130211; CA 2864216 A 20130211; CL 2014002115 A 20140808; EA 201400885 A 20130211; EP 13714699 A 20130211; GB 201202402 A 20120210; PL 13714699 T 20130211; US 201314377542 A 20130211; ZA 201406433 A 20140902