

Title (en)
EMULSION-TYPE EXPLOSIVES OF THE WATER-IN-OIL TYPE

Title (de)
WASSER-IN-ÖL SPRENGSTOFFEMULSION

Title (fr)
EXPLOSIFS À ÉMULSION DU TYPE EAU DANS HUILE

Publication
EP 4305007 A1 20240117 (EN)

Application
EP 22711522 A 20220308

Priority
• EP 21161191 A 20210308
• EP 2022055797 W 20220308

Abstract (en)
[origin: EP4056545A1] The present disclosure relates to a water-in-oil emulsion explosive composition, comprising an organic phase and an oxidizer phase at least comprising ammonium nitrate, wherein at least 50 wt.% of the normally used non-renewable oil in the organic phase is replaced with one or more renewable oils. The present disclosure relates to an explosive emulsion composition of the water-in-oil type, comprising between 80 wt.% and 95 wt.% of an oxidizer phase in view of the total weight of the emulsion composition, comprising at least 40 wt.% of ammonium nitrate (AN), and at least one or more secondary nitrate salts, comprising in particular at least 10 wt.% calcium nitrate or at least 20 wt.% calcium nitrate and/or sodium nitrate, in view of the total weight of the oxidizer phase composition, between 5 wt.% and 20 wt.% of an organic phase in view of the total weight of the emulsion composition, the organic phase comprising between 12 wt.% and 50 wt.% of one or more emulsifiers, between 50 wt.% and 88 wt.% of a fuel composition, in view of the total weight of the organic phase composition, in which the fuel composition consists of between 0 wt.% and 50 wt.% of one or more non-renewable oils, and between 50 wt.% and 100 wt.% of one or more renewable oils, in view of the total weight of the fuel composition, the total weight% of the oils being 100.

IPC 8 full level
C06B 47/14 (2006.01)

CPC (source: EP US)
C06B 47/145 (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

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
EP 4056545 A1 20220914; AU 2022233004 A1 20230907; BR 112023017507 A2 20231010; CA 3207422 A1 20220915;
EP 4305007 A1 20240117; US 2024132421 A1 20240425; WO 2022189381 A1 20220915

DOCDB simple family (application)
EP 21161191 A 20210308; AU 2022233004 A 20220308; BR 112023017507 A 20220308; CA 3207422 A 20220308;
EP 2022055797 W 20220308; EP 22711522 A 20220308; US 202218280520 A 20220308