Title (en)

STABLE AMMONIUM NITRATE-EMULSION EXPLOSIVES AND EMULSION FOR USE THEREIN

Publication

EP 0131355 B1 19900328 (EN)

Application

EP 84303208 A 19840511

Priority

- US 49391683 A 19830512
- US 57660284 A 19840203

Abstract (en)

[origin: GB2140404A] Sensitised explosive blends of a water-in-oil emulsion and AN particles, e.g. AN or ANFO prills, have improved stability when their structure hinders the loss of water from the aqueous emulsion phase and transfer of such water across the oil phase to the AN particles. Such structure may be obtained by using an anionic emulsifying agent comprising a fatty acid salt, e.g. as formed in situ, to form the emulsion. Blends stabilised in this manner form storage-stable packaged products and can be pumped to boreholes through an annular stream of aqueous liquid flowing co-currently in the conduit. An emulsion is disclosed having a dispersed aqueous phase of oxidising salt solution and a continuous liquid carbonaceous fuel phase which contains a fatty acid and a fatty acid salt as an emulsifying system, the weight ratio of oil to fatty acid being in the range 1:1 to 3:1.

IPC 1-7

C06B 21/00; C06B 47/14

IPC 8 full level

C06B 47/14 (2006.01)

CPC (source: EP KR)

C06B 31/00 (2013.01 - KR); **C06B 47/145** (2013.01 - EP)

Cited by

EP0221701A1; CN105272783A; FR2624112A1; ES2123468A1; EP0331430A1; GB2216513A; CN1049417C; WO9112485A1; US6537399B2; WO9900342A1

Designated contracting state (EPC)

AT BE CH DE FR IT LI NL SE

DOCDB simple family (publication)

GB 2140404 A 19841128; **GB 2140404 B 19870903**; **GB 8412026 D0 19840620**; AU 2789484 A 19841115; AU 573217 B2 19880602; BR 8402200 A 19841218; CA 1217342 A 19870203; CS 345884 A3 19921118; DE 3481767 D1 19900503; EP 0131355 A2 19850116; EP 0131355 A3 19850529; EP 0131355 B1 19900328; ES 532316 A0 19870216; ES 8703394 A1 19870216; HK 17988 A 19880311; IE 57411 B1 19920826; IE 841170 L 19841112; IN 162344 B 19880507; KR 850002250 A 19850510; KR 910003094 B1 19910518; MA 20117 A1 19841231; MX 162156 A 19910403; MY 100182 A 19900329; NO 841906 L 19841113; NZ 208130 A 19900426; OA 07771 A 19850830; PT 78579 A 19840601; PT 78579 B 19860626; TR 22230 A 19861009; ZW 7684 A1 19840725

DOCDB simple family (application)

GB 8412026 A 19840511; AU 2789484 A 19840510; BR 8402200 A 19840509; CA 454071 A 19840510; CS 345884 A 19840510; DE 3481767 T 19840511; EP 84303208 A 19840511; ES 532316 A 19840509; HK 17988 A 19880303; IE 117084 A 19840511; IN 323CA1984 A 19840510; KR 840002561 A 19840512; MA 20339 A 19840511; MX 20132484 A 19840511; MY PI19860028 A 19861023; NO 841906 A 19840511; NZ 20813084 A 19840511; OA 58297 A 19840511; PT 7857984 A 19840511; TR 2223084 A 19840511; ZW 7684 A 19840511