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(72) Nguyen, Anh D., CA

(73) ORICA EXPLOSIVES TECHNOLOGY PTY LTD., AU

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(54) **EXPLOSIF EN EMULSION A ACTIVATION CHIMIQUE**

(54) **CHEMICALLY GASED EMULSION EXPLOSIVE**

(57) A process for the production of a chemically gassed emulsion explosive wherein a chemical gassing agent is added to the emulsion as an essentially dry particulate powder. The process allows for the production of stable emulsion explosives which have more controllable emulsion explosive characteristics.

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ABSTRACT**Chemically Gassed Emulsion Explosive**

5 A process for the production of a chemically gassed emulsion explosive wherein a chemical gassing agent is added to the emulsion as an essentially dry particulate powder. The process allows for the production of stable emulsion explosives which have more controllable emulsion explosive characteristics.

FIELD OF THE INVENTION

The present invention is related to emulsion explosives and, more particularly, to emulsion explosives that have been sensitized by chemical gassing agents.

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DESCRIPTION OF THE RELATED ART

Semi-solid colloidal dispersions of water-bearing blasting agents are well known. These products typically comprise an oxidizing component, usually predominantly ammonium nitrate, a fuel component, and water. These
10 blasting agents are referred to in the art as water gels or slurry explosives, and emulsion-type blasting agents.

Slurry explosives typically comprise a discontinuous fuel phase which is dispersed in a continuous aqueous solution of the oxidizer salt. Thickening agents are added
15 to the aqueous phase in order to effect gelation and, thus, stabilize the structure of the explosive.

Emulsion explosives, as described by Bluhm in U.S. Patent No. 3,447,978, typically comprise a discontinuous aqueous oxidizer salt solution which is dispersed in a
20 continuous fuel phase. Emulsifying agents are added to stabilize the dispersion.

