

## Title (en)

COLD FORMABLE, PLASTICS-BOUND HIGH POWER EXPLOSIVE AND PROCESS FOR PREPARING IT

## Publication

**EP 0068528 B1 19850220 (DE)**

## Application

**EP 82200629 A 19820524**

## Priority

- CH 142382 A 19820309
- CH 340381 A 19810525

## Abstract (en)

[origin: US4428786A] A plastic bound high power explosive comprises 90 to 97 percent by weight of a powerful explosive compound, for example octogen, and 3 to 10 percent by weight of a novel stabilizing and binding agent. The agent comprises substantially 20 to 50 percent poly-O-butyl acrylate and 3.5 to 20 percent paraffin, as well as 2 to 7 percent poly tetrafluorethylene as a lubricant, 20 to 65 percent of a filler and 1 to 8 percent poly ethylene or, respectively, in the case of an antistatic high power explosive, 25 to 65 percent graphite as a lubricant and 15 to 25 percent calcium sulphate as a filler, each by weight of the portion of solids in the agent. Further additives like emulsifiers, dispersants, defoamers, surfactants, thickeners and small amounts of silica gel are added. The stabilizing and binding agent is prepared as an aqueous dispersion which is mixed with the dry explosive compound in a mixing drum, then dried or, respectively, predried and treated with an isopropanol-water mixture (1:1) prior to being finally dried. Homogeneous bodies cold-pressed therefrom using a die at pressures in the range of about 1.5 to 4.2 kbar/cm<sup>2</sup> have densities above 1.8 g/cm<sup>3</sup> and their detonation velocities exceed 8.6 km/s.

## IPC 1-7

**C06B 21/00**; **C06B 45/10**

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