

Title (en)

Process for producing metal powder containing water-based pyrotechnic agent, coated metal powder and use thereof

Title (de)

Verfahren zur Herstellung von Metallpulver enthaltenden pyrotechnischen Wirkmassen auf wässriger Basis, beschichtete Metallpulver sowie deren Verwendung

Title (fr)

Procédé pour la fabrication d'agent pyrotechnique à base aqueuse contenant une poudre métallique, poudre métallique revêtue et son utilisation

Publication

EP 0614863 B1 19970813 (DE)

Application

EP 94103430 A 19940307

Priority

DE 4307237 A 19930308

Abstract (en)

[origin: DE4307237C1] A water-based prodn. of active pyrotechnic materials (I) contg. metal powder (II) comprises coating (II) with not more than 5 wt.% plastic (III) which is insoluble in dil. acid and water and largely impermeable to water and oxygen, making a slurry of the coated powder with water, mixing with the other components of (I) and introducing the slurry into the required mould. Also claimed is metal powder coated with not more than 5 wt.% plastic (III) as above. Pref. (II) is coated by a fluid-bed process, pref. a vacuum fluid-bed process. (II) is Al or Mg powder, and (III) is a (co)polymer based on (meth)acrylic acid and/or (meth)acrylate esters, esp. a methacrylic acid-methyl methacrylate (MA/MMA) copolymer, which is dissolved in a solvent. USE/ADVANTAGE - Coated metal powder as above is useful for the prodn. of (I) (claimed). The coated metal powder can be stored in this form and then mixed in a slurry with other active ingredients such as red phosphorus; the coated powder has excellent stability in storage and during prodn. of the slurry, and the reactivity of the active material is not significantly reduced.

IPC 1-7

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IPC 8 full level

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