

Title (en)

Castable double base propellants with compounds containing group IIA metal ions as ballistic modifiers.

Title (de)

Giessbare zweibasige Treibstoffe mit Metallionen der Gruppe IIA enthaltenden Verbindungen als Ballistikmodifikatoren.

Title (fr)

Propergols à double base coulable contenant des composés comprenant des ions métalliques du groupe IIA et agissant comme modificateurs balistiques.

Publication

EP 0611141 A1 19940817 (EN)

Application

EP 94300922 A 19940208

Priority

US 1638193 A 19930208

Abstract (en)

Propellant formulations are provided which include non-toxic burn rate modifiers. In order to produce a usable propellant formulation, it is necessary to control the burn rate of the propellant. Failure to adequately control the propellant burn rate often results in unacceptable performance of the propellant. It has been found that Group IIA metal salts, such as calcium carbonate and strontium carbonate, are capable of modifying the burn rate of propellants without resorting to lead as a burn rate additive. Accordingly, the use of from about 0.5% to about 5.0% Group IIA metal salt is taught as effective burn rate modifiers in propellants, in order provide non-toxic means for modifying the propellant burn rate.

IPC 1-7

C06B 23/00

IPC 8 full level

C06B 23/00 (2006.01); **F02K 9/10** (2006.01); **F02K 9/26** (2006.01)

CPC (source: EP)

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Citation (search report)

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