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[54] **PREPARATION OF MAGNESIUM-FLUOROPOLYMER PYROTECHNIC MATERIAL**

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[73] Assignee: **The United States of America as represented by the Secretary of the Navy**, Washington, D.C.

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[52] **U.S. Cl.** **149/109.6**; 149/19.2; 149/19.9; 149/87; 264/3.5; 264/3.6

[58] **Field of Search** 264/3.5, 3.6; 149/109.6, 149/87, 19.2, 19.91

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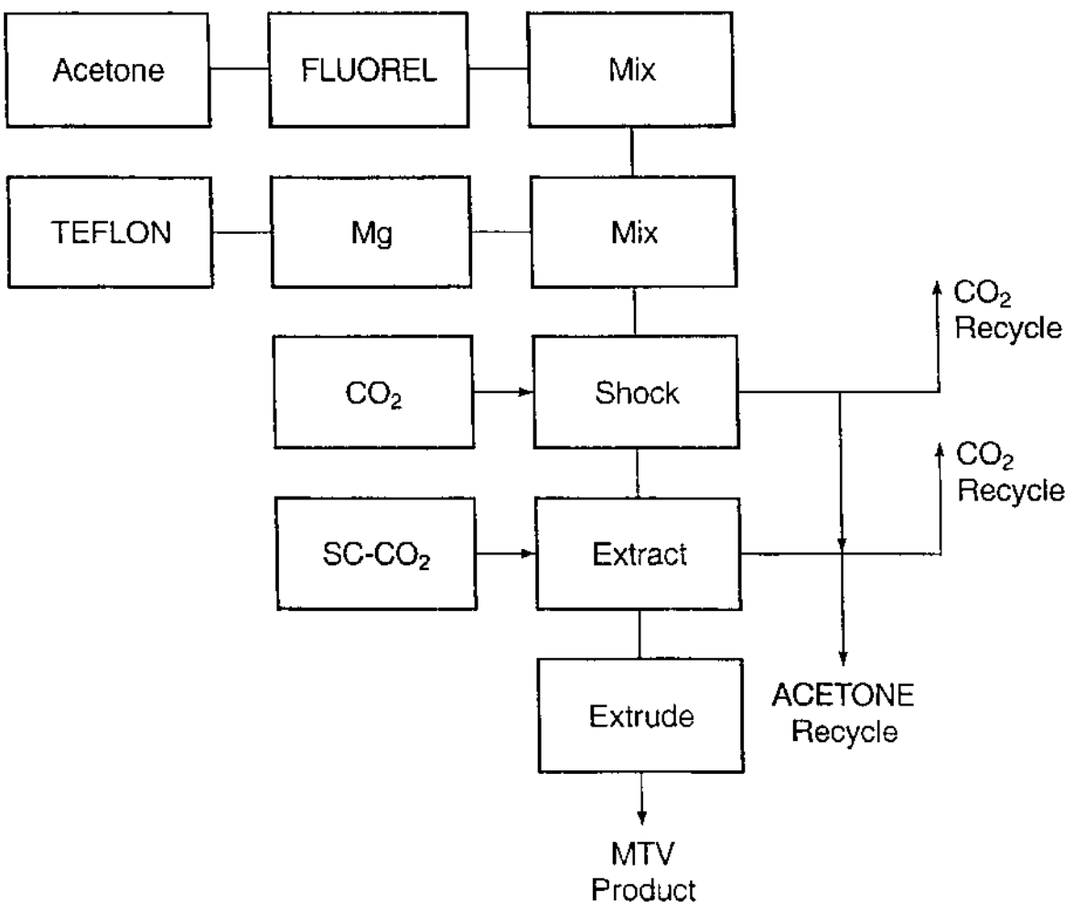
[57] **ABSTRACT**

A process for preparing energetic materials by (1) dissolving a vinylidenefluoride-hexafluoropropylene copolymer in a ketone that is acetone, methyl ethyl ketone, or mixtures thereof, (2) adding polytetrafluoroethylene particles and reactive metal (magnesium, aluminum, or their alloys) particles to form a slurry, (3) adding CO_2 to the slurry to precipitate out the copolymer which then coats the polytetrafluoroethylene and reactive metal particles, and (4) separating the copolymer-coated particles from the ketone and CO_2.

21 Claims, 2 Drawing Sheets