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(54) **PROPELLANT GRAIN CONFIGURATION**

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(58) **Field of Search** 102/284, 287, 102/288

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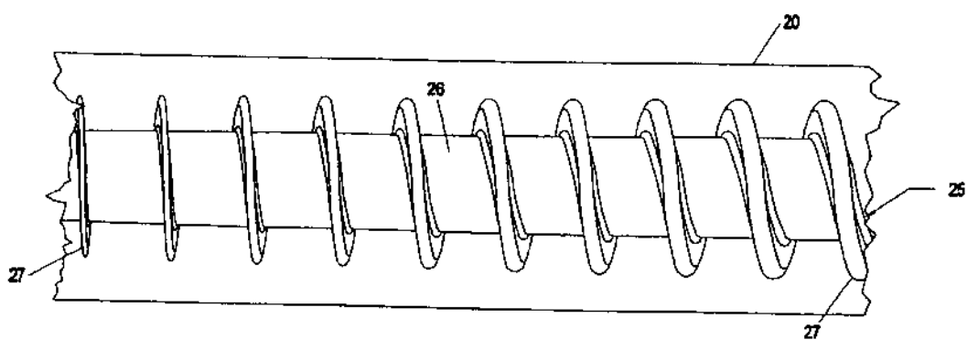
(57) **ABSTRACT**

A propellant grain for a cylindrical casing has a cavity including an axially central opening with a combustion product exit port at one end. The grain bears a plurality of surfaces extending circumferentially about and disposed normally or helically to this opening so as to define, between these surfaces and axially of the casing, alternating sections of propellant and sections of a groove or grooves in the propellant. The groove sections extend radially from the opening to a distance selectable to provide the grain with a large initial surface area while providing a high propellant volume.

21 Claims, 2 Drawing Sheets