

Title (en)
Solid propellant rocket motor with low vulnerability

Title (de)
Feststoffraketenmotor mit geringer Empfindlichkeit

Title (fr)
Moteur, à propergol solide, de faible vulnérabilité.

Publication
EP 0886122 B1 20000830 (FR)

Application
EP 98401419 A 19980611

Priority
FR 9707429 A 19970616

Abstract (en)
[origin: EP0886122A1] The motor consists of a solid propellant charge (11) with a thermal protection layer (2) inside a metal casing (5) with end covers, one of which has an exhaust nozzle. The casing has a number of large apertures (6) set at intervals round it which are temporarily blocked by sealed stoppers (8) held in place between the thermal protection layer and a composite winding of impregnated fibres, e.g. of aramide fibres such as 'Kevlar' (RTM), or carbon fibres, in an epoxy resin. The stoppers, which have outer surfaces of the same curvature as the casing, are released by the accidental degradation of the composite winding. The thermal protection layer is e.g. an elastomer obtained by reticulation of a polybutadiene with a filling of refractory materials (SiO₂) in the form of powder and fibres.

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