Title (en)

COMPOSITE PROPELLANT MANUFACTURING PROCESS BASED ON DEPOSITION AND LIGHT-ACTIVATED POLYMERIZATION FOR SOLID ROCKET MOTORS

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES ZUSAMMENGESETZTEN TREIBSTOFFES AUF DER GRUNDLAGE VON ABSCHEIDUNG UND LICHTAKTIVIERTER POLYMERISATION FÜR FESTSTOFFRAKETENMOTOREN

Title (fr)

PROCÉDÉ DE FABRICATION DE PROPERGOL COMPOSITE FONDÉ SUR LE DÉPÔT ET LA POLYMÉRISATION ACTIVÉE PAR LA LUMIÈRE POUR MOTEURS-FUSÉES SOLIDES

Publication

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Application

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Abstract (en)

[origin: WO2020212785A1] The invention relates to a manufacturing process, and to the relevant manufacturing plant, of composite solid propellant (1) for a chemical rocket motor (50) wherein at least one oxidising solid component (2), at least one polymeric liquid component (3) and at least one photo-initiator (4) are used, this photo-initiator (4) being necessary for the polymerization and the layered local crosslinking of the composite solid propellant (1). The invention also relates to the composite solid repellent (1) for a chemical rocket motor (50), obtained by the aforesaid manufacturing process or produced in the aforesaid manufacturing plant, having reduced toxicity and a lower chemical risk. The invention finds advantageous applications in the fields of civil and military aerospace propulsion, security and gas generation systems for emergency and non-emergency devices, as well as in the civil and military explosive field.

IPC 8 full level

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CPC (source: EP)

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