

Title (en)

Process for continuous production of pyrotechnical objects

Title (de)

Verfahren zum kontinuierlichen Herstellen von pyrotechnischen Gegenständen

Title (fr)

Procédé de fabrication en continu d'un objet pyrotechnique

Publication

EP 1741690 B1 20180404 (FR)

Application

EP 06116548 A 20060704

Priority

FR 0507191 A 20050706

Abstract (en)

[origin: EP1741690A2] In the continuous manufacturing of propellant loadings and explosive pyrotechnical object comprises supplying an organic mixture into different constituents of an object is done by varying its parameters, so that flowing mixture composition is modified during process. The parameters to vary are based on number, nature and the supply of intervening constituent. The constituents are: mixed within a structure of organic mixture; and results from a preliminary mixture of ingredients such as reticulants, binders, active pre-mixture or pulverulent fillers. In the continuous manufacturing of propellant loadings and explosive pyrotechnical object comprises supplying an organic mixture into different constituents of an object is done by varying its parameters, so that flowing mixture composition is modified during process. The parameters to vary are based on number, nature and the supply of intervening constituent. The constituents are: mixed within a structure of organic mixture; and results from a preliminary mixture of ingredients such as reticulants, binders, active pre-mixture or pulverulent fillers. The supply of organic mixture is electronically controlled by programme. The flow is implemented on a mixture without gas or few gas, to atmospheric pressure through nozzle, which is sealed or opened under vacuum by intermediate degasification grid. The obtained mixture has a viscosity of 200-3000 Pa.s. An independent claim is included for a device to manufacture propellant loadings and explosive pyrotechnical object.

IPC 8 full level

C06B 21/00 (2006.01); **B01F 15/04** (2006.01); **C06B 45/12** (2006.01)

CPC (source: EP NO)

B01F 35/81 (2022.01 - EP NO); **B01F 35/892** (2022.01 - EP NO); **C06B 21/00** (2013.01 - NO); **C06B 21/0058** (2013.01 - EP); **C06B 45/12** (2013.01 - EP)

Citation (examination)

BRUCK H A ET AL: "Fabrication and Design of Multifunctional Energetic Structures Using Gradient Architectures", AMERICAN SOCIETY OF MECHANICAL ENGINEERS, MATERIALS DIVISION (PUBLICATION) MD - PROCEEDINGS OF THE ASME MATERIALS DIVISION - 2003 2003 AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME) USA, vol. 98, 2003, pages 335 - 341, DOI: 10.1115/IMECE2003-43328

Cited by

CN103073369A; WO2013045804A1; US9393503B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1741690 A2 20070110; **EP 1741690 A3 20141119**; **EP 1741690 B1 20180404**; FR 2888233 A1 20070112; FR 2888233 B1 20080425; NO 20063125 L 20070108; NO 342430 B1 20180522

DOCDB simple family (application)

EP 06116548 A 20060704; FR 0507191 A 20050706; NO 20063125 A 20060705