Title (en)

METHOD FOR ADDITIVE MANUFACTURING OF INTUMESCENT PRODUCTS

Title (de)

VERFAHREN ZUR ADDITIVEN HERSTELLUNG INTUMESZIERENDER PRODUKTE

Title (fr)

PROCÉDÉ POUR LA FABRICATION ADDITIVE DE PRODUITS INTUMESCENTS

Publication

EP 4267375 A1 20231101 (EN)

Application

EP 21810382 A 20211122

Priority

- EP 20208969 A 20201120
- EP 2021082543 W 20211122

Abstract (en)

[origin: WO2022106698A1] The invention relates to a method for additive manufacturing of three-dimensional intumescent products (IP) comprising the steps of: Step 1: providing at least one intumescent composition (C), preferably in the form of a monofilament; Step 2: melting said composition (C) and printing the composition (C) in molten form using an additive manufacturing machine or 3D printer, preferably by using a monofilament additive manufacturing technique, to form the intumescent product (IP); wherein the intumescent composition (C), relative to the total weight of the composition (C), comprises: 20-80 % by weight (wt.%) of at least one binder polymer (P); 2-80 wt.% of at least one intumescent additive (I); 0-78 wt. % of at least one filler (F); wherein the sum of the components of composition (C), excluding the at least one binder polymer (P), is equal to or less than 80 wt.%.

IPC 8 full level

B29C 64/118 (2017.01); **C08K 3/013** (2018.01); **C08K 3/016** (2018.01); **C08K 3/04** (2006.01)

CPC (source: EP)

B29C 64/118 (2017.07); **B33Y 70/10** (2020.01); **C08K 3/04** (2013.01); **C08K 5/0066** (2013.01); C08K 3/013 (2017.12); C08K 3/016 (2017.12); C08K 3/346 (2013.01); C08K 5/34928 (2013.01); C08K 2003/2227 (2013.01); C08K 2003/323 (2013.01)

Citation (search report)

See references of WO 2022106698A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

WO 2022106698 A1 20220527; EP 4267375 A1 20231101

DOCDB simple family (application)

EP 2021082543 W 20211122; EP 21810382 A 20211122