

Title (en)  
THERMOPLASTIC POWDER COMPOSITION AND REINFORCED THREE-DIMENSIONAL OBJECT PRODUCED BY 3D PRINTING OF SUCH A COMPOSITION

Title (de)  
THERMOPLASTISCHE PULVERZUSAMMENSETZUNG UND VERSTÄRKTES DREIDIMENSIONALES OBJEKT, HERGESTELLT DURCH 3D-DRUCKEN EINER SOLCHEN ZUSAMMENSETZUNG

Title (fr)  
COMPOSITION DE POUDRE THERMOPLASTIQUE ET OBJET TRIDIMENSIONNEL RENFORCE FABRIQUE PAR IMPRESSION 3D D'UNE TELLE COMPOSITION

Publication  
**EP 3692093 A1 20200812 (FR)**

Application  
**EP 18793457 A 20181004**

Priority  
• FR 1759265 A 20171004  
• FR 2018052454 W 20181004

Abstract (en)  
[origin: WO2019069032A1] The present invention concerns a reinforced thermoplastic powder composition, comprising: - at least one polyamide powder with D50 less than 100 mm, - 5 to 70% by weight of at least one glass fibre: - with l50 in the range from 50 to 200 mm, - lmax less than 450 mm, - d50 in the range from 4 to 40 mm, - form factor F: l50/d50 between 5 and 15, and - 0.05 to 5% of a powder flow agent with D50 less than 20 µm; compared with the total weight of the composition. The present invention concerns, in particular, the use of said composition in 3D printing methods for producing reinforced three-dimensional objects.

IPC 8 full level  
**C08K 3/36** (2006.01); **B29C 64/153** (2017.01); **B33Y 70/00** (2020.01); **C08K 7/14** (2006.01)

CPC (source: EP US)  
**B29C 64/153** (2017.08 - EP US); **B33Y 70/10** (2020.01 - EP US); **C08K 3/36** (2013.01 - EP); **C08K 7/14** (2013.01 - EP); **C08L 77/06** (2013.01 - US); **B29C 45/0001** (2013.01 - US); **B29K 2077/00** (2013.01 - US); **B29K 2309/08** (2013.01 - US); **C08K 7/14** (2013.01 - US); **C08K 2201/003** (2013.01 - EP US); **C08K 2201/004** (2013.01 - EP US); **C08K 2201/005** (2013.01 - EP); **C08K 2201/016** (2013.01 - EP); **C08L 2205/14** (2013.01 - EP)

C-Set (source: EP)  
1. **C08K 3/36 + C08L 77/02**  
2. **C08K 7/14 + C08L 77/02**  
3. **C08K 7/14 + C08L 77/00**  
4. **C08K 7/14 + C08L 77/06**  
5. **C08K 3/36 + C08L 77/06**  
6. **C08K 3/36 + C08L 77/00**

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

DOCDB simple family (publication)  
**FR 3071840 A1 20190405**; **FR 3071840 B1 20191011**; CN 111183184 A 20200519; CN 111183184 B 20230331; EP 3692093 A1 20200812; JP 2020536153 A 20201210; JP 7240388 B2 20230315; US 11767428 B2 20230926; US 2020255660 A1 20200813; WO 2019069032 A1 20190411

DOCDB simple family (application)  
**FR 1759265 A 20171004**; CN 201880065205 A 20181004; EP 18793457 A 20181004; FR 2018052454 W 20181004; JP 2020519136 A 20181004; US 201816651572 A 20181004