

Title (en)

KAOLIN FOR THE MECHANICAL REINFORCEMENT OF POLYMERIC LASER SINTER POWDER

Title (de)

KAOLIN ZUR MECHANISCHEN VERSTÄRKUNG VON POLYMEREM LASERSINTER-PULVER

Title (fr)

KAOLIN DESTINÉ À RENFORCER MÉCANIQUEMENT UNE POUDRE POLYMÈRE POUR LE FRITTAGE LASER

Publication

EP 3416809 A1 20181226 (DE)

Application

EP 17705860 A 20170216

Priority

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- EP 2017053481 W 20170216

Abstract (en)

[origin: WO2017140764A1] The present invention relates to a method for producing a molded body by the selective laser sintering of a sinter powder (SP). The sinter powder (SP) contains at least one polyamide (P) and 5 to 50 wt%, preferably 10 to 50 wt%, of at least one aluminum silicate. The at least one aluminum silicate has a D50 value in the range of 2.5 to 4.5 µm. The present invention also relates to molded bodies obtainable by means of the method according to the invention.

IPC 8 full level

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CPC (source: EP KR US)

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C-Set (source: EP)

1. **C08L 77/06** + **C08K 3/346**
2. **C08L 77/02** + **C08K 3/346**

Citation (search report)

- [XIY] "POLYAMIDE NANOCOMPOSITES FOR SELECTIVE LASER SINTERING", 31 January 2006, article J H KOO ET AL: "POLYAMIDE NANOCOMPOSITES FOR SELECTIVE LASER SINTERING", XP055291856, DOI: 10.2514/6.2015-1353 & SONGHAN: "BYK Cloisite◆ 30B Nanoclay Category : Other Engineering Material , Additive/Filler for Polymer , Polymer", 3 January 2016 (2016-01-03), XP055292075, Retrieved from the Internet <URL:http://www.lookpolymers.com/pdf/BYK-Cloisite-30B-Nanoclay.pdf> [retrieved on 20160728]
- [Y] ANSARI D M ET AL: "Correlation of mechanical properties of clay filled polyamide mouldings with chromatographically measured surface energies", POLYMER, ELSEVIER SCIENCE PUBLISHERS B.V, GB, vol. 45, no. 11, 1 May 2004 (2004-05-01), pages 3663 - 3670, XP004506671, ISSN: 0032-3861, DOI: 10.1016/J.POLYMER.2004.03.045
- [XIY] PRASHANT K. JAIN ET AL: "Selective laser sintering of clay-reinforced polyamide", POLYMER COMPOSITES, 30 March 2009 (2009-03-30), US, pages NA - NA, XP055291846, ISSN: 0272-8397, DOI: 10.1002/pc.20854
- See also references of WO 2017140764A1

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