

Title (en)

GRANULAR MATERIAL FOR 3D BINDER PRINTING, PRODUCTION METHOD AND USES THEREFOR

Title (de)

GRANULAT FÜR 3D-BINDERDRUCK, HERSTELLUNGSVERFAHREN UND ANWENDUNGEN DAFÜR

Title (fr)

GRANULAT POUR FORMAGE EN 3D SOUS L'EFFET D'UNE AGGLOMERATION EXERCEE PAR UN LIANT, PROCEDE DE PRODUCTION ET APPLICATIONS DUDIT GRANULAT

Publication

EP 1513669 A1 20050316 (DE)

Application

EP 03740089 A 20030616

Priority

- DE 0302012 W 20030616
- DE 10227224 A 20020618

Abstract (en)

[origin: WO03106147A1] The invention relates to a granular material for 3D binder printing, said granular material consisting of particles provided with an externally non-polar surface layer (2). The invention also relates to a method for producing a granular material for 3D binder printing, whereby a surface layer (2) having a non-polar outer side is applied to initial particles (1), and to a method for producing an object consisting of the inventive granular material, according to which a layer of the inventive granular material is applied to a base, and pre-determined regions (3) of said layer are moistened with a binding fluid, said binding fluid being selected from fluids in which a surface layer of the particles of the granular material is soluble. The invention further relates to objects consisting of interconnected particles of the inventive granular material. The invention enables a very precise printing process.

IPC 1-7

B29C 67/00; **B01J 2/00**

IPC 8 full level

B01J 2/00 (2006.01); **B01J 2/28** (2006.01); **B29C 67/00** (2006.01)

CPC (source: EP US)

B01J 2/006 (2013.01 - EP US); **B01J 2/28** (2013.01 - EP US); **B29C 64/165** (2017.07 - EP US); **B33Y 10/00** (2014.12 - EP US); **B29K 2029/04** (2013.01 - EP US); **B29K 2105/251** (2013.01 - EP US); **Y10T 428/2991** (2015.01 - EP US)

Citation (search report)

See references of WO 03106147A1

Cited by

CN110382440A; EP1770176A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

WO 03106147 A1 20031224; DE 10227224 A1 20040115; DE 10227224 B4 20051124; EP 1513669 A1 20050316; JP 2006516048 A 20060615; US 2005276976 A1 20051215; US 7402330 B2 20080722

DOCDB simple family (application)

DE 0302012 W 20030616; DE 10227224 A 20020618; EP 03740089 A 20030616; JP 2004513011 A 20030616; US 51845505 A 20050711