

Title (en)  
METHOD FOR OPERATING A PRINT HEAD FOR A 3D PRINTER AND PRINT HEAD FOR A 3D PRINTER FOR CARRYING OUT THE METHOD

Title (de)  
VERFAHREN ZUM BETREIBEN EINES DRUCKKOPFES FÜR EINEN 3D-DRUCKER UND DRUCKKOPF FÜR EINEN 3D-DRUCKER ZUR DURCHFÜHRUNG DES VERFAHRENS

Title (fr)  
PROCÉDÉ POUR FAIRE FONCTIONNER UNE TÊTE D'IMPRESSION POUR UNE IMPRIMANTE 3D ET TÊTE D'IMPRESSION POUR UNE IMPRIMANTE 3D POUR LA MISE EN OEUVRE DU PROCÉDÉ

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Abstract (en)  
[origin: WO2022194675A1] The invention relates to a method (200) for operating a print head (10) for a 3D printer. According to the invention, the method (200) comprises the following steps: filling (210) a cavity (40) with printable material (10) by means of a feed device (2); closing (220) an opening cross-section (21) of a piston bushing (4) by the advance of a piston (3) starting from a starting position (3a) in the direction of a nozzle (8) of the print head (100); converting (230) the material from a solid phase (10) via a plastic phase (11) into a liquid phase (12); compressing (240) the material (10, 11, 12); determining (250) a spring constant of the liquid phase (12); print preparation (260) of the liquid phase (12); dispensing (270) the liquid phase (12) of the material (10) from the nozzle (8) for printing a three-dimensional component (9); returning (280) the piston (3) to the starting position (3a) and repeating (290) the steps (210) to (280) until terminating the method (200). The invention also relates to a print head (100) for a 3D printer for carrying out the method (200) according to the invention.

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