

**Abstract****Production and use of porous bead polymers in 3D printing using the binder jetting method**

- 5 The present invention relates to the technical field of 3D printing, especially in the form of the binder jetting method, in which particulate material in a powder bed is bonded by means of a printed adhesive to form a three-dimensional object. The particulate materials may be inorganic materials, for example sand or a metal powder, or particulate polymeric materials, for example polymethacrylates or polyamides. For this purpose, polymethacrylates may take the form, for
- 10 example, of suspension polymers, called bead polymers.
- The present invention relates to the use of porous particles in the binder jetting process, in particular of porous suspension polymers. These powders for 3-D printing differ from the prior art in that the porosity results in a faster and better absorption of the printed binder by the powder particles. A great advantage of this procedure is additionally that a product with less warpage is
- 15 formed and that the end product has a better surface appearance.

[no suitable figure]