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(54) Title: MICROFABRICATED SCAFFOLD STRUCTURES

(57) Abstract: The present invention relates to a method for producing a three-dimensional scaffold construct comprising encapsulated cells, the method comprising: (a) providing a solution comprising cells, a photoinitiator, and a plurality of units capable of forming polymer chains; (b) providing a photolithography instrument comprising a two-photon laser; and (c) using the instrument to apply the laser to the solution to activate the photoinitiator thereby facilitating polymerisation of said units to form polymer chains, and, cross-linking of the polymer chains; wherein the laser is applied to the solution in three-dimensions in a pre-defined pattern to assemble said construct, and said cells are encapsulated within the assembled construct.



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