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(54) Title: BIODEGRADABLE POLYMER SCAFFOLD

(57) Abstract

A polymer scaffold is provided comprising an extensively interconnected macroporous network. The polymer scaffold embodies macropores having a diameter in a range of 0.5–3.5 mm, and preferably in a range of about 1.0 – 2.0 mm. The polymer scaffold is prepared using a novel process which advantageously combines the techniques of particulate leaching and phase inversion to render a process that provides amplified means by which to control the morphology of the resulting polymer scaffold. The polymer scaffold has utility in the area of tissue engineering, particularly as a scaffold for both *in vitro* and *in vivo* cell growth.