

**METHOD FOR PREPARING A PATTERNED SUBSTRATE AND USE THEREOF
IN IMPLANTS FOR TISSUE ENGINEERING**

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ABSTRACT

A method for preparing a patterned substrate is provided. The method includes melt-spinning at least one biocompatible polymer to form fibers; collecting the fibers on a substrate such that the fibers are aligned on the substrate; and applying a binding agent to the aligned fibers to bond the fibers into the aligned arrangement to obtain the patterned substrate in form of an aligned fiber mat. Use of the patterned substrate in an implant for tissue engineering is also provided.

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FIG. 14A