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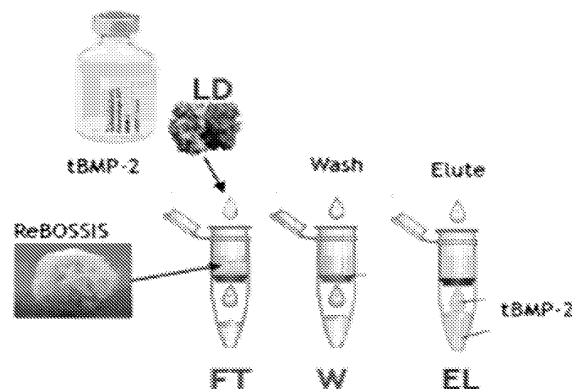
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(54) Title: OSTEOINDUCTIVE BONE REGENERATION MATERIAL AND PRODUCTION METHOD OF THE SAME

[Fig. 10]



(57) Abstract: A method of producing an osteoinductive bone graft formed of a plurality of electrospun biodegradable fibers is disclosed. The method includes preparing a fibrous scaffold material formed of the plurality of electrospun biodegradable fibers, wherein the plurality of electrospun biodegradable fibers are entangled with each other to form a cotton-wool like structure having inter-fiber spaces forming a microenvironment for cell growth therein, and immersing the fibrous scaffold in a solution containing BMP-2 so that the BMP-2 is bound to the calcium particles exposed on the surface of the fibers. Area of binding site for BMP-2 on calcium particles exposed on a surface of the electrospun biodegradable fibers is adjusted by an amount of the calcium particles contained in the electrospun biodegradable fibers.

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WO 2021/261408 A1

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