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(54) **BIOLOGICALLY ACTIVE SUTURES FOR REGENERATIVE MEDICINE**

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(58) **Field of Classification Search**

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See application file for complete search history.

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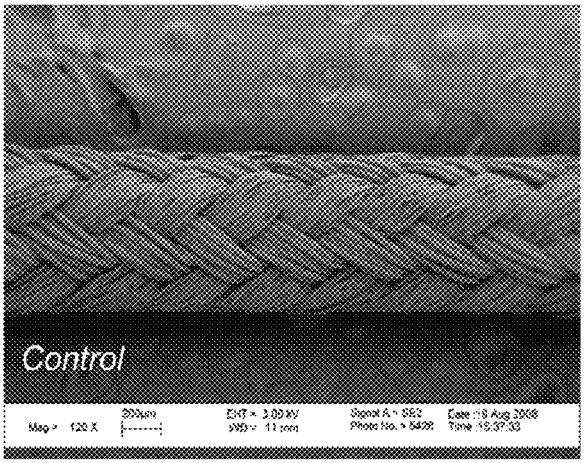
(57) **ABSTRACT**

The present disclosure generally relates to biodegradable and bioresorbable materials having a mineral layer on the surface of the material. More particularly, the disclosure relates to biodegradable and bioresorbable orthopedic devices having a degradable mineral layer on the surface thereof that can be used as a delivery vehicle for biological substances. Also provided are various methods of using the mineralized devices in tissue regeneration, including bone tissue engineering, and methods for producing the mineralized devices.

10 Claims, 17 Drawing Sheets