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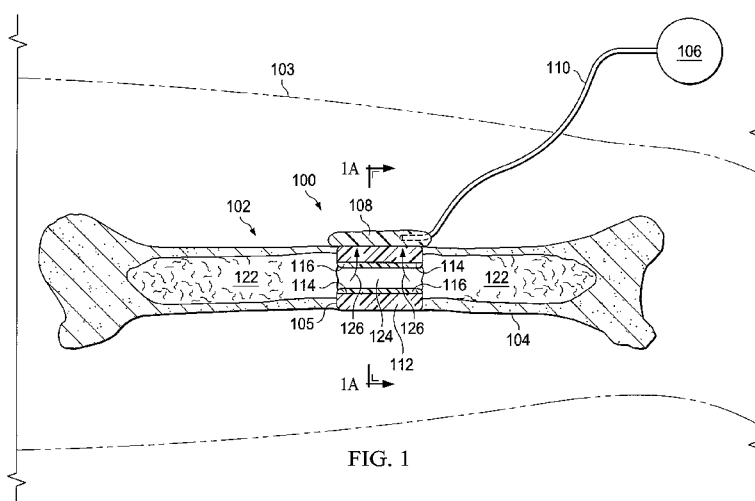


FIG. 1

(57) Abstract: Provided is an apparatus that includes a scaffold with a gel or liquid composition deposited on at least a portion of a luminal surface, the gel or liquid composition adapted to include microbubbles. Also provided is a system that includes a source of reduced pressure, the above scaffold, a manifold adjacent the scaffold, and a conduit for providing fluid communication between the manifold and the source of reduced pressure. Additionally provided is a method that includes implanting the above scaffold at the tissue site and disrupting a substantial portion of the microbubbles to induce fluid flow to the scaffold. Further provided is an apparatus that includes a scaffold that comprises a slowly degradable material and a quickly degradable material. Additionally provided is a system for coupling nerve tissue and a microchip assembly.



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