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Ferree

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(54) **ENGINEERED TISSUE ANNULUS FIBROSIS AUGMENTATION METHODS AND APPARATUS**

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(52) **U.S. Cl.** **623/17.11**; 424/93.7; 623/908

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(57) **ABSTRACT**

Living annulus fibrosis cells are combined with annulus fibrosis extracellular matrix obtained from recently deceased human or animal donors to restore disc function and eliminate pain in patients with disc disease. Additional therapeutic substances like culture medium, growth factors, differentiation factors, hydrogels, polymers, antibiotics, anti-inflammatory medications, or immunosuppressive medications could be added to the transplanted annulus fibrosis tissue. The process can be used to replace or repair other tissues or organs of the body such as the meniscus of the knee.

28 Claims, No Drawings