

[54] **CELL-SEEDING PROCEDURES INVOLVING FIBROUS LATTICES**

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[58] **Field of Search** 3/1; 604/890-900, 604/266; 424/34, 35, 94, 31, 32; 128/155, 156

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[57] **ABSTRACT**

This invention relates to the introduction of viable cells into a fibrous lattice by surgical, force-utilizing, or other manipulative techniques, all of which are referred to herein as "seeding." One embodiment comprises an autografting technique which involves intact tissue. Other embodiments which involve the distribution of an aqueous suspension of cells comprise centrifugal, spraying, pipetting and syringe emplacement. Each cell that survives the seeding process may reproduce into a colony of cells which grow until they reach confluence, thereby creating a uniform layer or volume of tissue. By proper placement of cells capable of generating such colonies, the period of recovery of a wound may be drastically reduced. In addition, research by the Applicants indicates that tissue that is regenerated using the methods of this invention to seed a lattice comprising collagen and glycosaminoglycan tends to be smoother, more uniform, less fibrotic, less scarred and more flexible than tissue that is regenerated by wound contraction or conventional autografting.

16 Claims, 5 Drawing Figures

