

United States Patent [19]

Hughes et al.

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[54] **COLLAGEN ORIENTATION**

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Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 402,722, Jul. 28, 1982, abandoned.

[51] Int. Cl.⁴ **B29D 7/02; D01D 1/02**

[52] U.S. Cl. **264/108; 260/123.7; 264/202**

[58] Field of Search **264/108, 164, 202; 260/123.7**

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[57] ABSTRACT

Monomeric collagen is oriented in solution and the orientation is retained in the resulting gel by setting up convective flow paths in the solution during gelation. The convection is induced by uniform peripheral heating of the cold, collagen solution in a small-diameter cylinder. Oriented collagen produced in this manner has excellent wet strength for use in implants for natural reconstruction of body collagen.

16 Claims, No Drawings