

[54] **COLLAGEN-ENZYME CONJUGATES THAT EXHIBIT NO INFLAMMATORY RESPONSE AND METHOD FOR MAKING THE SAME**

[76] Inventors: **Steven R. Jefferies**, 5802 Leith Walk, Baltimore, Md. 21239; **James L. Gutmann**, 10112 Daventry Dr., Cockeysville, Md. 21030; **Barry M. Heatfield**, 33 Penny La., Baltimore, Md. 21209

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*Primary Examiner*—Howard E. Schain

*Attorney, Agent, or Firm*—Cushman, Darby & Cushman

[57] **ABSTRACT**

Collagen polymers are rendered non-inflammatory by complexation with alkaline phosphatase according to the procedure disclosed. Applications of these non-inflammatory collagen complexes include the production of non-inflammatory collagen sutures, collagen soft tissue replacements including wound and burn coverings and arterial vessel replacements, collagen drug delivery devices, and vitreous replacement for ophthalmologic therapy. Gels composed of the collagen-alkaline phosphatase conjugate plus calcium hydroxide are useful as an agent in endodontic therapy. Structural durability and stabilization of the anti-inflammatory properties of the material are enhanced by crosslinking with glutaraldehyde or other crosslinking agents. Glutaraldehyde also acts to sterilize and disinfect the collagen conjugate prior to in-vivo use.

**11 Claims, 3 Drawing Figures**