

[54] **TREATMENT OF COLLAGENOUS TISSUE WITH GLUTARALDEHYDE AND AMINODIPHOSPHONATE CALCIFICATION INHIBITOR**

[75] **Inventor:** **Mrinal K. Dewanjee, Rochester, N. Mex.**

[73] **Assignee:** **Mayo Foundation, Rochester, Minn.**

[21] **Appl. No.:** **640,725**

[22] **Filed:** **Aug. 14, 1984**

[51] **Int. Cl.⁴** **A63B 51/02**

[52] **U.S. Cl.** **8/94.11; 8/94.18; 8/94.33; 623/1; 623/2**

[58] **Field of Search** **8/94.11, 94.18, 94.33**

[56] **References Cited**

U.S. PATENT DOCUMENTS

3,562,820	2/1971	Braun	8/94.11
3,962,433	6/1976	Worms et al.	424/212
3,966,401	6/1976	Hancock et al.	8/94.11
3,988,782	11/1976	Dardik et al.	8/94.11
4,098,571	7/1978	Miyata et al.	422/100

4,120,649	10/1978	Schechter	8/94.11
4,323,358	4/1982	Lentz et al.	8/94.11
4,378,224	3/1983	Nimni et al.	8/94.11
4,402,697	9/1983	Pollock et al.	8/94.11

OTHER PUBLICATIONS

M. Potokar, et al., *Atherosclerosis*, 30 (1978), 313-320.

Primary Examiner—A. Lionel Clingman

Attorney, Agent, or Firm—Charles J. Knuth; Peter C.

Richardson; Mark Dryer

[57] **ABSTRACT**

A process for the treatment of collagenous tissue to adapt it for use in a prosthetic implant and to promote the growth of endothelial cells thereon after implantation comprising treatment with at least one surfactant prior to fixation, treatment with agents which inhibit calcification and agents which resist attack by phagocytic cells and optional treatment with stabilizing agents.

38 Claims, 7 Drawing Figures

