

[54] **CARTILAGE AND BONE INDUCTION BY ARTIFICIALLY PERFORATED ORGANIC BONE MATRIX**

[76] Inventor: El Gendler, 2519 S. Flower, Los Angeles, Calif. 90007

[21] Appl. No.: 186,696

[22] Filed: Apr. 21, 1988

Related U.S. Application Data

[63] Continuation of Ser. No. 905,572, Sep. 9, 1986, abandoned, which is a continuation-in-part of Ser. No. 537,687, Sep. 30, 1983, abandoned.

[51] Int. Cl.⁵ A61F 2/38

[52] U.S. Cl. 623/16; 623/66

[58] Field of Search 623/10, 11, 16, 18, 623/22, 23, 66; 128/1 R

[56] **References Cited**

U.S. PATENT DOCUMENTS

- 3,852,045 12/1974 Wheeler et al. 623/16
- 4,330,891 5/1982 Branemark et al. 128/92 W
- 4,553,272 11/1985 Mears 623/1

FOREIGN PATENT DOCUMENTS

- 2821354 11/1978 Fed. Rep. of Germany 623/16

OTHER PUBLICATIONS

Holmes; "Bone Regeneration within a Cotallene Hy-

droxapatite Implant" Plastic & Reconstructure Surgery, vol. 63, No. 5, May 1979.

"Application of the Biological Principal of Induced Osteogenesis for Craniofacial Defects", by Julie Glowacki et al., The Lancet, May 2, 1981.

"Demineralized Bone Implants", by Julie Glowacki et al., Clinics in Plastic Surgery, vol. 12, No. 2, Apr. 1985.

"Use of Demineralized Allogenic Bone Implants for the Correction of Maxillocraniofacial Deformities", by John B. Mulliken, M. D.

"Chemosterilized Antigen-Extracted Surface-Demineralized Autolysed Allogenic (AAA) Bone for Arthrodesis", by Marshall R. Urist.

Primary Examiner—David J. Isabella

Attorney, Agent, or Firm—Leydig, Voit & Mayer

[57] **ABSTRACT**

A process of encouraging induction of cartilage and bone formation by organic bone matrix. The process involves forming a plurality of continous channel perforations in organic bone matrix prior to the implantation of same. These perforations become centers of cartilage and bone induction after the implantation of bone matrix and produce a significant increase in the ability of bone matrix to induce cartilage and bone formation.

2 Claims, 1 Drawing Sheet

