

[54] BONE GRAFT IMPLANT

[75] Inventors: Pertti Törmälä, Tampere; Pentti Rokkanen, Helsinki; Valle J. Oikarinen, Helsinki; Seppo Vainionpää, Helsinki; Pertti Helevirta, Tampere, all of Finland

[73] Assignee: Biocon Oy, Tampere, Finland

[21] Appl. No.: 192,741

[22] PCT Filed: Sep. 2, 1987

[86] PCT No.: PCT/FI87/00119

§ 371 Date: Jul. 5, 1988

§ 102(e) Date: Jul. 5, 1988

[87] PCT Pub. No.: WO88/01517

PCT Pub. Date: Mar. 10, 1988

[30] Foreign Application Priority Data

Sep. 5, 1986 [FI] Finland 863573

[51] Int. Cl.⁴ A61F 2/28; A61C 8/00

[52] U.S. Cl. 623/16; 433/201.1; 623/66

[58] Field of Search 623/16, 66, 12, 11; 435/201.1, 202.1, 212; 424/95; 106/35

[56] References Cited

U.S. PATENT DOCUMENTS

4,657,548 4/1987 Nichols 623/10
 4,755,184 7/1988 Silveberg 623/66 X

Primary Examiner—Alan W. Cannon
 Attorney, Agent, or Firm—Pollock, Vande Sande & Priddy

[57] ABSTRACT

Supporting structure (1) for preventing the movements of powder material (2) which will be applied as bone graft (bone graft powder) which supporting structure (1) will be located to contact with bone tissue and which supporting structure (1) is manufactured of at least partially resorbable polymer, copolymer or polymer mixture and is of its form chutelike, box-like, a flat tube or bag and contains such open porosity, which allows the surrounding tissues to grow through the supporting structure (1) but which prevents the migration of the bone graft powder (2) through the pores outside the supporting structure (1). The part of the supporting (1) which will be located against bone surface contains at least one orifice, whose size is bigger than the size of pores of the supporting (1) and bigger than the size of the bone graft powder (2) particles, which orifice makes possible the growth of the bone tissue into the inside of the supporting structure (1).

11 Claims, 2 Drawing Sheets

