United States Patent [19]

Kawamura et al.

[11] **Patent Number: 4,833,237**

[45] **Date of Patent: May 23, 1989**

[54] **PROCESS FOR PRODUCING GRANULAR POROUS CHITOSAN**

[75] Inventors: **Yoshihide Kawamura; Hiroaki Tanibe; Itsuo Kurahashi,** all of Shizuoka; **Hiroshi Seo,** Souka; **Saburo Nakajima,** Koshigaya, all of Japan

[73] Assignee: **Fuji Spinning Co., Ltd.,** Tokyo, Japan

[21] Appl. No.: **11,150**

[22] Filed: **Feb. 5, 1987**

[51] **Int. Cl.**[4] **C08B 37/08**

[52] **U.S. Cl.** **536/20;** 536/55.3; 536/124

[58] **Field of Search** 536/20, 55.3, 124

[56] **References Cited**

U.S. PATENT DOCUMENTS

2,040,880	5/1936	Rigby	536/20
3,879,376	4/1975	Vanlerberghe et al.	536/20
4,308,377	12/1981	Koshugi	536/20
4,336,070	6/1982	Koshugi	536/20
4,376,199	3/1983	Koshugi	536/20
4,532,321	7/1985	Castle et al.	536/20
4,574,150	3/1986	Austin	536/20
4,619,995	10/1986	Hayes	536/20
4,659,390	4/1987	Zeller et al.	536/124
4,659,700	4/1987	Jackson	536/20

FOREIGN PATENT DOCUMENTS

0026618	8/1981	European Pat. Off.	536/20
57-11258	1/1982	Japan	536/20
58-29801	2/1983	Japan	536/20
58-57401	4/1983	Japan	536/20
60-186504	9/1985	Japan	536/20
61-40303	2/1986	Japan	536/20

Primary Examiner—Ronald W. Griffin
Assistant Examiner—Nancy S. Carson
Attorney, Agent, or Firm—Spensley Horn Jubas & Lubitz

[57] **ABSTRACT**

A process for producing granular porous chitosan of extremely uniform particle size and having uniform fine pores on the spherical surface and cut cross sectional face. The process comprises dissolving a low molecular weight chitosan into an aqueous acidic solution, pouring the solution into a basic solution and thereby coagulating the product to precipitate porous chitosan.

11 Claims, No Drawings