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Bayerlein et al.

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[54] METHOD FOR THE PREPARATION OF BORATE-CONTAINING, DISPERSIBLE, WATER-SOLUBLE POLYGALACTOMANNANS AND POLYGALACTOMANNAN DERIVATIVES

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[*] Notice: The portion of the term of this patent subsequent to Feb. 24, 2004 has been disclaimed.

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Related U.S. Application Data

[63] Continuation of Ser. No. 420,684, Sep. 21, 1982, Pat. No. 4,645,833.

[30] Foreign Application Priority Data

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[52] U.S. Cl. 536/17.1; 536/18.3; 536/18.5; 536/114; 536/121

[58] Field of Search 536/17.1, 18.3, 18.5, 536/114, 121

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[57] ABSTRACT

Method for preparation of dispersible, water-soluble polygalactomannans and polyglactomannan derivatives by crosslinking with borate ions, in which the polygalactomannan-containing endosperm of legumes is allowed to soak in an aqueous alkaline solution of a material containing borate ions in which the concentration of the borate ions, expressed as borax, is between 0.001 and 0.09 wt. % and the hydroxyl ion concentration, expressed as NaOH, is between 0.2 and 10 wt. % of the polygalactomannan and after taking up the solution, the cell structure of the splits is mechanically destroyed using high shear forces in a flaking, crushing or extruder process and then the product of the process is dried and ground in known fashion.

12 Claims, No Drawings