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United States Patent [19]

Little et al.

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[54] **METHOD OF PREPARING REDUCED FAT FOODS**

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Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 918,862, Jul. 30, 1992, and a continuation-in-part of Ser. No. 908,728, Jul. 6, 1992, which is a continuation of Ser. No. 578,994, Sep. 6, 1990, abandoned, which is a continuation-in-part of Ser. No. 483,208, Feb. 20, 1990, abandoned, said Ser. No. 918,862, is a continuation-in-part of Ser. No. 746,381, Aug. 16, 1991, abandoned, and a continuation-in-part of Ser. No. 798,291, Nov. 26, 1991, abandoned.

[51] **Int. Cl.**[5] **A23L 1/05**

[52] **U.S. Cl.** **426/573;** 426/238; 426/549; 426/661; 426/804

[58] **Field of Search** 426/18, 28, 238, 549, 426/573, 578, 658, 661, 603, 604, 804; 127/29, 32, 33, 36, 38, 39, 40, 58, 65, 69–71; 252/315.3

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[57] **ABSTRACT**

A method of preparing a material useful in reduced fat foods is provided. This method involves debranching an amylopectin starch in the presence of ultrasonic waves. The debranched amylopectin starch is precipitated and then fragmented to form an aqueous dispersion that is useful in replacing fat in a variety of food formulations. The debranched amylopectin starch can be derived from a starch which contains amylopectin, e.g. common corn starch and waxy maize starch, by gelatinizing the starch followed by treatment with a debranching enzyme, e.g. isoamylase or pullulanase, in the presences of ultrasonic waves followed by precipitation of the debranched starch.

7 Claims, No Drawings