

- [54] **INSTANT MILK PROCESS**
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- [22] **Filed:** Jun. 12, 1978

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**Related U.S. Application Data**

- [63] Continuation-in-part of Ser. No. 837,934, Sep. 29, 1977, abandoned, which is a continuation-in-part of Ser. No. 820,403, Aug. 1, 1977, abandoned, which is a continuation of Ser. No. 678,986, Apr. 21, 1976, abandoned, which is a continuation-in-part of Ser. No. 582,744, Jun. 2, 1975, abandoned.

- [51] **Int. Cl.<sup>3</sup>** ..... **A23C 9/16**
- [52] **U.S. Cl.** ..... **426/285; 426/585; 426/588; 426/662**
- [58] **Field of Search** ..... 426/99, 285, 302, 334, 426/585, 586, 588, 587, 580, 590, 289, 465, 453, 547, 511, 601, 602, 613, 662, 663, 664, 92, 98

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[57] **ABSTRACT**

A process for the manufacture of instant fat-containing dry milk and flavored dry milk products. Anhydrous non-fat milk powder is used as a source material and fat in the form of a fat emulsion is added in the instantizing or agglomerating operation. The fat emulsion is one prepared in such a manner that it is stable with respect to reversal of the emulsion phase. In one processing step the anhydrous powder is treated in an agglomerating chamber to which is supplied separately atomized materials comprising fat emulsion and lecithin, accompanied by sufficient moisture to cause the milk particles to become sticky and to form random aggregates which incorporate the fat emulsion and the lecithin as extraneous lecithin. The aggregates are dried to produce the desired instant fat containing dry milk product. Also instant fat-containing dry milk products produced by the process which are characterized by good storage stability, good wettability and dispersibility in cold water, and by their ability to provide a reconstituted milk of good quality that is not subject to objectionable cream separation.

**12 Claims, 4 Drawing Figures**

