



US006773740B2

(12) **United States Patent**  
**Hyde et al.**

(10) **Patent No.:** **US 6,773,740 B2**  
(45) **Date of Patent:** **Aug. 10, 2004**

(54) **METHOD FOR PREPARING CHEESE PRODUCTS AND PROCESS CHEESE BASES**

5,904,944 A 5/1999 Batterman et al.  
6,183,804 B1 \* 2/2001 Moran et al. .... 426/582  
6,183,805 B1 \* 2/2001 Moran et al. .... 426/582

(75) Inventors: **Michael Anthony Hyde**, Wheeling, IL (US); **Lisa M. Carruthers**, Wilmette, IL (US); **John James McGeown**, Chicago, IL (US); **Gary William Trecker**, Lake Zurich, IL (US)

**FOREIGN PATENT DOCUMENTS**

BE 529 883 A 12/1954  
EP 0 340 857 11/1989  
EP 0 765 608 A2 9/1996  
EP 0 997 073 A2 10/1999  
EP 0 997 073 A2 5/2000  
GB 2 002 217 A 2/1979  
WO 99/07232 2/1999

(73) Assignee: **Kraft Foods Holding, Inc.**, Northfield, IL (US)

**OTHER PUBLICATIONS**

(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

Seas et al., "Development of Cheese-Flavored Dairy Spreads with Controlled Fat Content", *Magazines for Industry*, New York, vol. 9, Nov. 1, 1975, pp. 68, 70, 74.

(21) Appl. No.: **09/737,096**

\* cited by examiner

(22) Filed: **Dec. 12, 2000**

(65) **Prior Publication Data**

*Primary Examiner*—Leslie Wong

US 2002/0071897 A1 Jun. 13, 2002

(74) *Attorney, Agent, or Firm*—Fitch, Even, Tabin & Flannery

(51) **Int. Cl.**<sup>7</sup> ..... **A23C 19/00**

(57) **ABSTRACT**

(52) **U.S. Cl.** ..... **426/582**; 426/36; 426/39; 426/580

The present invention provides a method for preparing cheese products, and process cheese bases for use in the production of process cheese. The method generally includes mixing one or more concentrated powders derived from milk with sodium chloride, milk fat, water, and, optionally, an edible acid and/or a preservative for a period of time sufficient to produce a well-mixed, homogeneous product, and cooling the resulting mixture for a time and at a temperature which is sufficient to allow the mixture to form a solid matrix. The solid matrix can be consumed, or can be used as a substitute for natural cheese and ground by a cheese grinding system during the production of process cheese. The present invention also provides cheese products and process cheese bases prepared according to this method, and to process cheeses produced with the process cheese bases.

(58) **Field of Search** ..... 426/34, 36, 39, 426/40, 519, 580, 582

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

3,920,857 A 11/1975 Barker et al. .... 426/307  
4,460,613 A 7/1984 Yang et al. .... 426/601  
4,546,003 A 10/1985 Izzo et al. .... 426/581  
4,762,725 A 8/1988 Player et al. .... 426/582  
H1165 H 4/1993 Horton et al. .... 426/555  
5,215,778 A 6/1993 Davison et al. .... 426/582  
5,281,432 A 1/1994 Zallie et al. .... 426/549  
5,433,962 A 7/1995 Stipp ..... 426/96  
5,562,937 A 10/1996 Senkeleski et al. .... 426/48  
5,709,900 A 1/1998 Miller et al. .... 426/582  
5,851,577 A 12/1998 Brenton et al. .... 426/582  
5,882,713 A 3/1999 Eskins et al. .... 426/578

**17 Claims, 1 Drawing Sheet**