



US006254905B1

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

(10) **Patent No.:** **US 6,254,905 B1**
(45) **Date of Patent:** **Jul. 3, 2001**

(54) **FOOD ADDITIVE SLURRY OR POWDER
COMPOSITION AND FOOD COMPOSITION
CONTAINING SAME AND METHOD OF
MAKING**

5,820,903 * 10/1998 Fleury et al. 426/74
5,855,936 * 1/1999 Reddy et al. 426/74

FOREIGN PATENT DOCUMENTS

57-110167 7/1982 (JP) .
6-125741 5/1994 (JP) .
6-127909 5/1994 (JP) .
6-197736 7/1994 (JP) .
9-47269 2/1997 (JP) .
WO96/13176 5/1996 (WO) .

(75) Inventors: **Hisakazu Hojo; Naoki Kubota; Shiro
Minayoshi**, all of Hyogo (JP)

(73) Assignee: **Maruo Calcium Company Limited**,
Akashi (JP)

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

* cited by examiner

Primary Examiner—Helen Pratt

(74) *Attorney, Agent, or Firm*—Armstrong, Westerman,
Hattori, McLeland & Naughton, LLP

(21) Appl. No.: **09/404,875**

(22) Filed: **Sep. 24, 1999**

(51) **Int. Cl.**⁷ **A23L 1/304**; A23L 1/05

(52) **U.S. Cl.** **426/74**; 426/506; 426/518;
426/573; 426/648

(58) **Field of Search** 426/74, 648, 573,
426/506, 518

(57) **ABSTRACT**

A food additive slurry or powder composition which com-
prises 100 parts by weight of at least one selected from the
group consisting of calcium carbonate, calcium phosphate
and ferric pyrophosphate (A) and 1 to 60 parts by weight of
gum arabic (B), and a calcium ion concentration M (mg/l)
satisfying $10 < M \leq 500$. The composition is superior not only
in re-dispersibility and dispersion stability in liquid for a
long period of time, and flavor, but is capable of providing
highly concentrated products, and therefor it is advanta-
geous economically.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,851,243 * 7/1989 Andersen et al. 426/74
5,609,897 * 3/1997 Chandler et al. 426/74

14 Claims, No Drawings