US008187624B1

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

(10) **Patent No.: US 8,187,624 B1**
(45) **Date of Patent: May 29, 2012**

(54) **COMPOSITIONS FOR TAKING DIETARY FIBERS**

(75) Inventors: **Shigeyuki Ono**, Tokyo (JP); **Yasushi Kajihara**, Tokyo (JP); **Yoko Sugiura**, Tokyo (JP); **Hiroyuki Sugaya**, Tokyo (JP)

(73) Assignee: **Kao Corporation**, Tokyo (JP)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 265 days.

(21) Appl. No.: **10/297,582**

(22) PCT Filed: **Jun. 14, 2000**

(86) PCT No.: **PCT/JP00/03850**

§ 371 (c)(1),
(2), (4) Date: **Dec. 12, 2002**

(87) PCT Pub. No.: **WO01/95746**

PCT Pub. Date: **Dec. 20, 2001**

(51) **Int. Cl.**

A61K 47/00	(2006.01)
A23L 1/50	(2006.01)
A23L 2/00	(2006.01)
A61N 65/00	(2006.01)

(52) **U.S. Cl.** **424/439**; 426/573; 426/590; 424/750

(58) **Field of Classification Search** 424/439, 424/434, 435

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,085,883	A	2/1992	Garleb et al.	
5,104,677	A *	4/1992	Behr et al.	426/590
5,112,964	A *	5/1992	Aoe et al.	536/56
5,126,143	A *	6/1992	Nakashima et al.	424/439
5,622,738	A *	4/1997	Takeuchi et al.	426/52
5,629,036	A *	5/1997	Yanetani et al.	426/19
6,004,610	A *	12/1999	Wang et al.	426/599
6,017,550	A *	1/2000	Berk et al.	424/401

FOREIGN PATENT DOCUMENTS

EP	552728	7/1993
EP	1 125 507	8/2001
JP	62-220169	9/1987
JP	02-276556	11/1990
JP	7-12294	2/1995
JP	09-065855	3/1997
JP	11-75777	3/1999
JP	11075777 A *	3/1999
JP	11-225706	8/1999
JP	11-253114	9/1999
JP	11-302448	11/1999
JP	2000-232855	8/2000
WO	WO 9904027 A1 *	1/1999

OTHER PUBLICATIONS

Nishizawa et al. "Effect of Depolymerized Sodium Alginate on the Serum and Liver Cholesterol Levels in Cholesterol-Fed Rats", J.Home Econ. Jpn. vol. 48 No. 8 695-698 (1997).*

Takahashi et al., Effect of partially hydrolyzed guar gum on fecal output in human volunteers, vol. 13, Issue 6, Jun. 1993, p. 649-657.*

T. Kondo, et al., Journal of Gastroenterology, vol. 31, pp. 654-658, XP-009024681, "Breath Hydrogen and Methane Excretion Produced by Commercial Beverages Containing Dietary Fiber", 1996.

G. D. Sunvold, et al., Journal of Animal Science, vol. 73, No. 4, pp. 1100-1109, XP-002072351, "Dietary Fiber for Dogs: In Vitro Fermentation of Selected Fiber Sources for Dog Fecal Inoculum and in Vivo Digestion and Metabolism of Fiber-Supplement Diets", 1995.

Biosci. Biotechnol. Biocheem., 63 (8)m 1340-1345, 1999.

Japan Food Research Laboratories No. 30 Dec. 2002 w. partial English language translation.

Food & Beverage Asia, Aug. 2004—Prebiotics.

* cited by examiner

Primary Examiner — Michael G Hartley
Assistant Examiner — Nabila Ebrahim
(74) *Attorney, Agent, or Firm* — Oblon, Spivak, McClelland, Maier & Neustadt, L.L.P.

(57) **ABSTRACT**

The invention relates to a composition for taking dietary fibers, which comprises 1 to 50% by weight, on the basis of the whole composition, of dietary fibers composed of water-soluble and hardly fermentable dietary fiber and water-soluble and fermentable dietary fiber, wherein the water-soluble and fermentable dietary fiber is contained in a proportion of 0.1 to 3 parts by weight per part by weight of the water-soluble and hardly fermentable dietary fiber. The composition remarkably ameliorates not only bowel movement frequency but also full consciousness, feeling of unsatisfied defecation, etc. and is hence useful as food for ameliorating bowel movement.

7 Claims, No Drawings