US008715742B2

(12) **United States Patent**
Koide

(10) **Patent No.: US 8,715,742 B2**
(45) **Date of Patent: May 6, 2014**

(54) **METHOD FOR REDUCING WEIGHT IN A SUBJECT**

(75) Inventor: **Masafumi Koide**, Aichi (JP)

(73) Assignee: **BBK Bio 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 356 days.

(21) Appl. No.: **12/761,929**

(22) Filed: **Apr. 16, 2010**

(65) **Prior Publication Data**

US 2010/0203176 A1 Aug. 12, 2010

Related U.S. Application Data

(63) Continuation of application No. 10/570,200, filed as application No. PCT/JP2004/012741 on Sep. 2, 2004, now abandoned.

(30) **Foreign Application Priority Data**

Sep. 2, 2003 (JP) 2003-309966

(51) **Int. Cl.**

A61K 35/60	(2006.01)
A61K 38/05	(2006.01)
A61K 48/00	(2006.01)
A01N 43/04	(2006.01)

(52) **U.S. Cl.**
USPC ..... **424/523**; 514/21.91; 514/44 R; 514/46

(58) **Field of Classification Search**
None
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,414,238	A	11/1983	Schmidl	
4,820,731	A	4/1989	Mascioli et al.	
4,871,768	A	10/1989	Bistrian et al.	
5,053,387	A	10/1991	Alexander	
6,048,543	A *	4/2000	Schneider et al.	424/442
6,696,057	B1	2/2004	Bojrab	
7,179,491	B1	2/2007	Mag	
2004/0043013	A1 *	3/2004	McCleary	424/94.1
2005/0238694	A1 *	10/2005	Gerhardt et al.	424/439

FOREIGN PATENT DOCUMENTS

DE	20214827	2/2003
EP	0 367 724	5/1990
EP	0 567 433	4/1993
EP	0 674 902	2/1995
EP	0 855 181	7/1998
EP	1330957	7/2003
JP	5-252905	10/1993
JP	10-004918	1/1998
JP	10-139683	5/1998
JP	10-203972	8/1998
JP	11-501301	2/1999
JP	2001131575 A *	5/2001
JP	2003-147388	5/2003
WO	96/25861	8/1996

OTHER PUBLICATIONS

Bullo-Bonet et al. Tumour necrosis factor, a key role in obesity?, Federation of European Biochemical Societies (FEBS) Letters 451 (1999) 215-219.*
Decision of Rejection — 2005-513667 — Jun. 15, 2010.
European Search Report—PCT/JP2004/012741—Dec. 16, 2010.

* cited by examiner

Primary Examiner — Michael G Hartley
Assistant Examiner — Nabila Ebrahim
(74) *Attorney, Agent, or Firm* — Young & Thompson

(57) **ABSTRACT**

A method is provided for reducing weight in a subject by administering an effective amount of a composition comprising omega-3 polyunsaturated fatty acid (PUFA), at least one of L-arginine, L-ornithine, an L-arginine precursor and an L-ornithine precursor, and at least one of a nucleobase, a nucleoside and a nucleic acid. The method can also be used to treat obesity, hyperlipidemia, diabetes and/or hypertension and for improving diathesis, or treating adult disease or disposition to adult disease.

10 Claims, 1 Drawing Sheet