US009408870B2

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

(10) **Patent No.: US 9,408,870 B2**
(45) **Date of Patent: Aug. 9, 2016**

(54) **ORAL CARE COMPOSITION**

(75) Inventors: **Maya Treesa Saji**, Bangalore (IN); **Ritesh Kumar Sinha**, Bangalore (IN)

(73) Assignee: **Conopco, Inc.**, Englewood Cliffs, NJ (US)

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

(21) Appl. No.: **13/990,480**

(22) PCT Filed: **Nov. 17, 2011**

(86) PCT No.: **PCT/EP2011/070317**

§ 371 (c)(1),
(2), (4) Date: **Jul. 10, 2013**

(87) PCT Pub. No.: **WO2012/076310**

PCT Pub. Date: **Jun. 14, 2012**

(65) **Prior Publication Data**

US 2013/0295027 A1 Nov. 7, 2013

(30) **Foreign Application Priority Data**

Dec. 7, 2010 (IN) 3322/MUM/2010
Jan. 25, 2011 (EP) 11151950

(51) **Int. Cl.**

A61K 33/42	(2006.01)
A61K 31/05	(2006.01)
A61K 31/315	(2006.01)
A61K 33/30	(2006.01)
A61K 8/27	(2006.01)
A61K 8/34	(2006.01)
A61Q 11/00	(2006.01)
A61K 8/92	(2006.01)

(52) **U.S. Cl.**

CPC . ***A61K 33/42*** (2013.01); ***A61K 8/27*** (2013.01); ***A61K 8/34*** (2013.01); ***A61K 8/347*** (2013.01); ***A61K 8/922*** (2013.01); ***A61K 31/05*** (2013.01); ***A61K 31/315*** (2013.01); ***A61K 33/30*** (2013.01); ***A61Q 11/00*** (2013.01)

(58) **Field of Classification Search**

None

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

658,596	A		9/1900	Simpson
2,196,763	A		4/1940	Figg, Jr.
2,359,241	A		9/1944	Partansky
3,120,469	A		2/1964	Tamas
3,256,310	A		6/1966	Weil
3,779,932	A		12/1973	Jaggers et al.
3,787,566	A		1/1974	Gauvreau
3,966,627	A		6/1976	Gray
4,267,168	A		5/1981	Van Leuven
4,284,434	A		8/1981	Lingmann et al.
4,474,798	A		10/1984	Inagi et al.
4,548,809	A		10/1985	Fung
4,597,887	A		7/1986	Colodney et al.
4,966,754	A		10/1990	Purohit
4,992,259	A		2/1991	Schiraldi et al.
5,013,486	A		5/1991	Joshi
5,073,366	A		12/1991	Beck
5,283,056	A		2/1994	Chung et al.
5,322,638	A		6/1994	Schadt et al.
5,328,682	A		7/1994	Pullen et al.
5,435,935	A		7/1995	Kupneski
5,472,684	A	*	12/1995	Nabi et al. 424/49
5,474,712	A		12/1995	Dotolo
5,474,761	A		12/1995	Liang
5,591,708	A		1/1997	Richter
5,610,189	A		3/1997	Whiteley
5,763,468	A		6/1998	Barranx et al.
5,817,295	A		10/1998	Chaudhari et al.
5,939,050	A		8/1999	Iyer
5,942,478	A		8/1999	Lopes
5,965,518	A		10/1999	Nakatsu et al.
6,048,368	A		4/2000	Tcheou et al.
6,048,836	A		4/2000	Romano et al.
6,066,674	A		5/2000	Hioki
6,103,683	A		8/2000	Romano et al.
6,110,883	A		8/2000	Petri et al.
6,114,298	A		9/2000	Petri
6,121,315	A	*	9/2000	Nair et al. 514/494
6,177,388	B1		1/2001	Cheung et al.

(Continued)

FOREIGN PATENT DOCUMENTS

CH	692411	6/2002
CN	1071998	10/2001

(Continued)

OTHER PUBLICATIONS

Mintel, Antibacterial Fluride Toothpaste, Antibacterial Fluride Toothpaste, Nov. 2007, NA, NA, NZ.

(Continued)

Primary Examiner — Frederick Krass

Assistant Examiner — Michael P Cohen

(74) *Attorney, Agent, or Firm* — Ronald A. Koatz

(57) **ABSTRACT**

The present invention relates to an oral care composition and a method of disinfecting the oral cavity. So far synthetic material (e.g. Triclosan) has been used which is believed by many consumers to be harsh on them. Consumers, more and more prefer using products that contain natural materials. Further, in many countries, culturally or otherwise, people are reluctant to using alcohol in their mouthwashes. The present inventors have been working on solving these problems and have come up with an oral care composition which includes natural materials that are found to interact synergistically with certain metal salts in killing *S. mutans*, a bacterium responsible for tooth decay.

11 Claims, No Drawings