

#### US00D695905S

# (12) United States Design Patent

Walter et al.

## (10) Patent No.:

US D695,905 S

(45) Date of Patent: \*\* Dec. 17, 2013

#### (54) MIXING ELEMENT

(75) Inventors: Alexander Walter, Pürgen (DE); Özcan

Dönmez, Landsberg am Lech (DE); Korbinian Schepke-Gerlach, Gauting (DE); Emir Jelovac, München (DE); Manfred Harre, Landsberg am Lech (DE); Jens Gramann, Gräfelfing (DE)

(73) Assignee: 3M Innovative Properties Company,

Saint Paul, MN (US)

(\*\*) Term: 14 Years

(21) Appl. No.: 29/398,425

(22) Filed: Jul. 29, 2011

#### (30) Foreign Application Priority Data

	Feb. 1, 2011	(EM) 0012	257497
(51)	LOC (9) Cl.	• • • • • • • • • • • • • • • • • • • •	24-01
(52)	U.S. Cl.		

(58) Field of Classification Search

See application file for complete search history.

#### (56) References Cited

### U.S. PATENT DOCUMENTS

D269,039	S	5/1983	Klein
D290,395	$\mathbf{S}$	6/1987	Stevens et al.
5,249,862	$\mathbf{A}$	10/1993	Herold et al.
6,244,740	B1		Wagner et al.
6,394,643	B1	5/2002	Bublewitz et al.
6,443,612	B1	9/2002	Keller
6,523,992	B1	2/2003	Bublewitz et al.

#### 

#### FOREIGN PATENT DOCUMENTS

DE	20302987	4/2003
EP	1149627	10/2001
WO	98/43727	10/1998

#### OTHER PUBLICATIONS

Color photograph (one page) of a Penta Mixing Tip, 3M ESPE Item #71510 (white mixing tip shaft), which was made commercially available by 3M ESPE Dental Products prior to Sep. 20, 2004.

#### (Continued)

Primary Examiner — Anhdao Doan

(74) Attorney, Agent, or Firm — Qiang Han; 3M Innovative Properties Company

#### (57) CLAIM

The ornamental design for a mixing element, as shown and described.

#### **DESCRIPTION**

FIG. 1 is a perspective view of a new design for a mixing element;

FIG. 2 is a back view thereof;

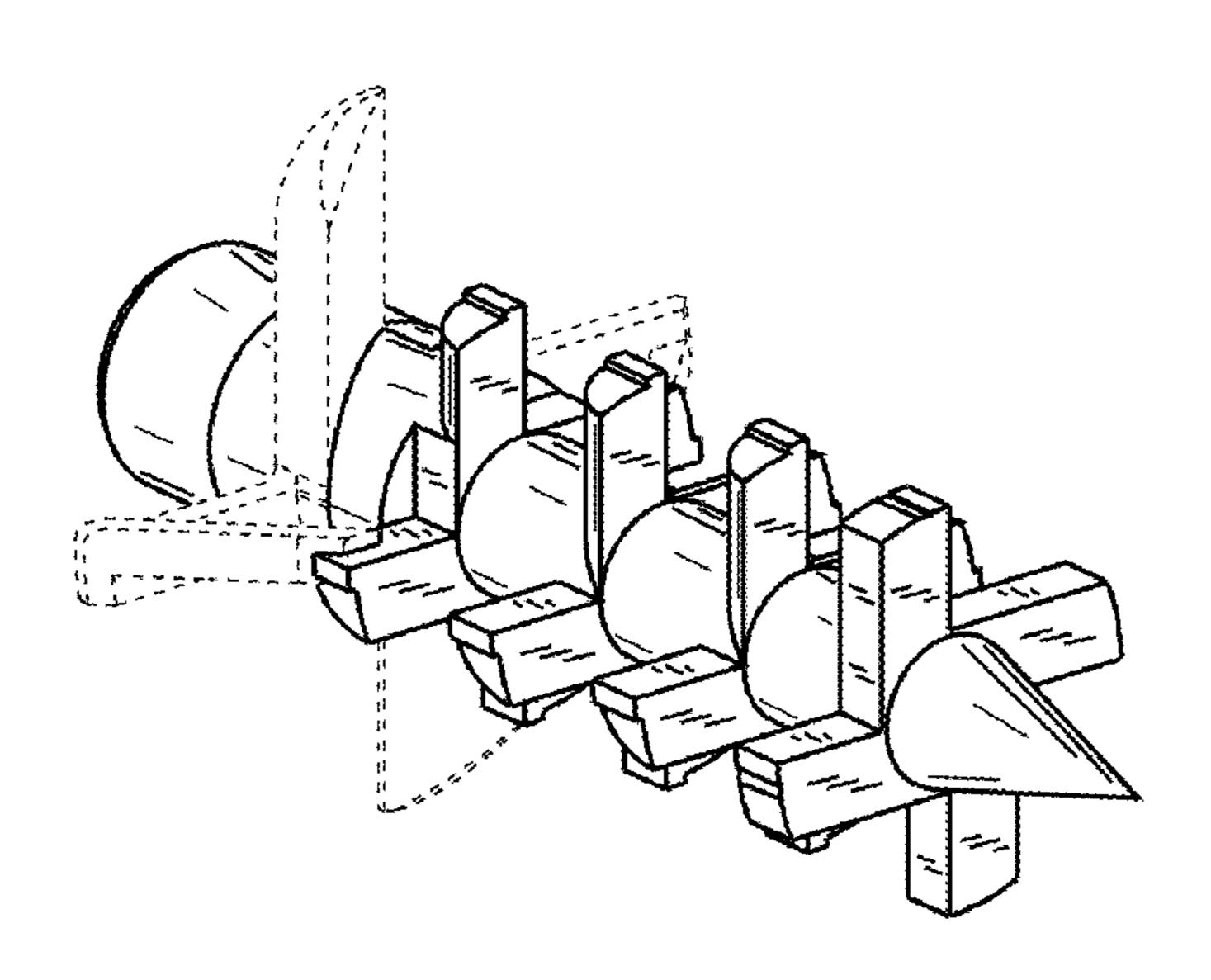
FIG. 3 is a front view thereof;

FIG. 4 is a side view thereof; and,

FIG. 5 is a top view thereof.

The broken lines in the drawing views are included for the purpose of illustrating portions of the mixing element that form no part of the claimed design.

#### 1 Claim, 1 Drawing Sheet



#### (56) References Cited

#### U.S. PATENT DOCUMENTS

D571,927	S		6/2008	Wagner
D607,476		*		Saul
D608,800	S	*	1/2010	Ettlin
D617,001	$\mathbf{S}$		6/2010	Lee
7,731,413	B2	*	6/2010	Busin et al 366/171.1
D622,298	$\mathbf{S}$	*	8/2010	Ettlin
7,771,110	B2		8/2010	Wang
D672,873	$\mathbf{S}$	*	12/2012	An
2001/0005338	$\mathbf{A}1$		6/2001	Muhlbauer et al.
2002/0175186	<b>A</b> 1		11/2002	Keller
2003/0137898	$\mathbf{A}1$		7/2003	Wagner et al.
2004/0085854	$\mathbf{A}1$		5/2004	Pauser et al.
2012/0218856	A1		8/2012	Walter

#### OTHER PUBLICATIONS

Color photograph (one page) of a MixPac Systems AG dynamic mixing tip (blue mixing tip shaft), which was publicly available prior to Sep. 20, 2004.

Color photograph (one page) of a Heraeus Kulzer GmbH dynamic mixing tip (grey mixing tip shaft), which was publicly available prior to Sep. 20, 2004.

Color photograph (one page) of a Heraeus Kulzer GmbH dynamic mixing tip (blue mixing tip shaft), which was publicly available prior to Sep. 20, 2004.

Color photograph (one page) of a Heraeus Kulzer GmbH dynamic mixing tip (white mixing tip shaft), which was publicly available prior to Sep. 20, 2004.

Color photograph (one page) of a Kettenbach GmbH & Co. KG Panasil Binetics Putty Dynamic Mixer Mixing Tip (white mixing tip shaft), which was publicly available prior to Sep. 20, 2004.

Color photograph (one page) of a Kettenbach GmbH & Co. KG dynamic mixing tip (white mixing tip shaft), which was publicly available prior to Sep. 20, 2004.

Color photograph (one page) of a Kettenbach GmbH & Co. KG dynamic mixing tip (grey mixing tip shaft), which was publicly available prior to Sep. 20, 2004.

Color photograph (one page) of a DMG Chemisch-Pharmazeutische Fabrik GmbH dynamic mixing tip, which was publicly available prior to Sep. 20, 2004.

Color photograph (one page) of a DMG Chemisch-Pharmazeutische Fabrik GmbH Honigum— Heavy, MixStar Tip, which was publicly available prior to Sep. 20, 2004.

<sup>\*</sup> cited by examiner

