



US005655556A

United States Patent [19]

[11] Patent Number: **5,655,556**

Guerrera et al.

[45] Date of Patent: **Aug. 12, 1997**

[54] **DISHWASHER WITH ROTATING SPRAY AGITATOR**

1,733,249	10/1929	Clinton	239/255
2,021,710	11/1935	Wilson .	
2,202,349	5/1940	Lewis	239/258
3,160,164	12/1964	Constance et al.	239/256
3,596,834	8/1971	Cushing	239/255
3,642,208	2/1972	Guth	239/255
3,771,725	11/1973	Jenkins et al.	134/179
3,797,509	3/1974	Fukuzawa et al. .	
4,884,585	12/1989	Oh	239/255

[75] Inventors: **Carlo Guerrera**, Pordenone; **Franco Marcorin**, Venezia; **Dino Munini**, Pordenone, all of Italy

[73] Assignee: **Electrolux Zanussi Elettrodomestici S.p.A.**, Pordenone, Italy

FOREIGN PATENT DOCUMENTS

[21] Appl. No.: **490,166**

0053231	6/1982	European Pat. Off. .
4020899	1/1992	Germany .

[22] Filed: **Jun. 14, 1995**

[30] Foreign Application Priority Data

Jun. 16, 1994 [IT] Italy PN940023 U

Primary Examiner—Frankie L. Stinson
Attorney, Agent, or Firm—Pearne, Gordon, McCoy & Granger LLP

[51] **Int. Cl.⁶** **B08B 3/02**

[57] ABSTRACT

[52] **U.S. Cl.** **134/176; 134/179; 134/198; 134/201; 239/256; 239/258**

A dishwasher with a spray agitator (1) rotating about an axis (2) in alternating opposite directions due to the effect of two nozzles with opposite thrusts (6,7). The nozzles are alternately fed with water under pressure by means of a rotating shutter (13). The shutter is made to rotate by reduction gears (12,14) and a rotor (11) activated by a nozzle (8) provided inside the agitator (1). The dishes are washed efficiently even if a mechanical obstruction interferes with the agitator.

[58] **Field of Search** 134/176, 179, 134/183, 158, 201, 56 D, 57 D, 58 D; 239/265.19, 255, 258, 256, 222.17, 251

[56] References Cited

U.S. PATENT DOCUMENTS

1,408,077 2/1922 Clinton 134/179

5 Claims, 2 Drawing Sheets

