

Title (en)  
Ultrasonic washing apparatus.

Title (de)  
Ultraschallwascheinrichtung.

Title (fr)  
Dispositif de nettoyage ultrasonique.

Publication  
**EP 0450222 A2 19911009 (EN)**

Application  
**EP 90308705 A 19900808**

Priority  
JP 8856090 A 19900403

Abstract (en)  
A spray type ultrasonic washing apparatus including a coaxial nozzle structure (1) which comprises inner and outer hollow conical frustums (3,2) for supplying nondeaerated washing liquid (12) by way of the annular passage (7) delimited between the frustums and supplying deaerated washing liquid (11) by way of the inner frustum, thus causing the deaerated washing liquid to be enclosed by nondeaerated washing liquid when spraying on a surface to be washed, so as to isolate the deaerated washing liquid from the surrounding atmosphere and thereby preventing invasion of air into the same. This enables cavitation to be formed effectively in the deaerated washing liquid, thereby increasing washing efficiency. <IMAGE>

IPC 1-7  
**B08B 3/12**

IPC 8 full level  
**B05B 7/06** (2006.01); **B08B 3/12** (2006.01)

CPC (source: EP)  
**B08B 3/12** (2013.01); **B08B 2203/0288** (2013.01)

Cited by  
CN105834165A; EP0675525A1; CN107876230A; EP3450103A1; US11679454B2; EP3450105A1; CN109420986A; CN109420987A; US10836012B2

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