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(12) United States Patent Wu et al.

(54) FINE BUBBLE GENERATING DEVICE

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(57) ABSTRACT

A fine bubble generating device is provided, including: a main body, having an inlet, an outlet and a venturi tube mechanism located between the inlet and the outlet, the venturi tube mechanism having a neck portion communicating with outside; a bubble fining mechanism, having at least one passage which is smaller than the inlet in cross-sectional area, the at least one passage communicating with and between the venturi tube mechanism and the outlet. The bubble fining mechanism includes a first vortex member having at least one first slant hole and a second vortex member having at least one second slant hole. The at least one first slant hole and the at least one second slant hole are inclined toward opposite directions, and the first vortex member and the second vortex member is disposed between the venturi tube mechanism and the outlet.

11 Claims, 7 Drawing Sheets