

Title (en)  
LIQUID OSCILLATOR DEVICE

Publication  
**EP 0044331 B1 19860102 (EN)**

Application  
**EP 81900400 A 19810113**

Priority  
• US 11224880 A 19800114  
• US 21824780 A 19801219

Abstract (en)  
[origin: WO8101966A1] The liquid spray device includes an oscillator for producing a fan spray with liquid droplets of uniform size. The oscillator is constituted by a power nozzle (15), a pair of side walls (20, 21) forming a pair of vortex spaces (30, 31) offset from the power nozzle, a pair of inwardly extending protuberances or deflectors (20B, 21B) downstream of which are a pair of inlets (181, 191) to passages (18, 19) leading to exits (16, 17) adjacent the power nozzle, and an outlet throat or aperture (24) having a pair of short wall surfaces (26L, 26R) defining an exit throat of any value selected from about 30° to about 160° so that the fan angle can be selected to be from about 30° to 160°. This structure results in an oscillator which has a relatively low threshold of pressure at which oscillations are initiated and, most importantly, the liquid is issued in a much more uniform fan pattern than heretofore possible. In a preferred embodiment the liquid is a windshield washer fluid and the oscillator is incorporated in a nozzle for an automobile windshield washer assembly for issuing a fan spray of washer fluid onto the windshield.

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**B05B 1/08**

IPC 8 full level  
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CPC (source: EP)  
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Cited by  
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**WO 8101966 A1 19810723**; AU 544839 B2 19850613; AU 6778081 A 19810807; BR 8105864 A 19811117; EP 0044331 A1 19820127; EP 0044331 A4 19820528; EP 0044331 B1 19860102

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