

Title (en)

Method and apparatus for mixing fluids.

Title (de)

Verfahren und Vorrichtung zum Mischen von Fluiden.

Title (fr)

Méthode et appareil pour mélanger des fluides.

Publication

EP 0137955 A2 19850424 (EN)

Application

EP 84109688 A 19840814

Priority

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Abstract (en)

Method and apparatus are disclosed which are used to mix two fluids, two gases, or a fluid and a gas. The preferred embodiment is useful primarily for the aeration of water but can be used to mix any gas with a liquid. The method involves creating relative movement between an elongate element and a fluid whereby a low-pressure area will be developed on the lee side of the element. The gas is then admitted to the low-pressure area and bubbles are formed. The element is preferably pointed to form a spike, and the bubbles are moved along the spike by a component of the relative motion toward the tip. When the bubble reaches the tip it will be detached and entrained in the fluid. When a plurality of spikes is used, significant efficiencies are observed. One embodiment employs spikes mounted to a rotating body and other embodiments use arrays of parallel spikes.

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