

Title (en)

APPARATUS FOR MIXING AND REACTING AT LEAST TWO FLUIDS

Title (de)

VORRICHTUNG ZUM MISCHEN UND REAGIEREN VON MINDESTENS ZWEI FLUIDEN

Title (fr)

APPAREIL DESTINE A MELANGER ET A FAIRE REAGIR AU MOINS DEUX FLUIDES

Publication

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Application

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Abstract (en)

[origin: WO02089966A2] A novel apparatus for mixing and reacting at least two fluids is disclosed. Excellent mixing and superior pressure drop characteristics are achieved in a device comprising at least two supply channels to feed a mixing chamber and create a vortex. The alignment of the supply channels is such that fluids are introduced into the chamber at both tangential and radial directions. In the case of gas/liquid mixing, particularly advantageous is the injection of the liquid stream tangentially and the gas stream radially. Reaction of the fluids can take place within the mixing chamber or in a separate reactor in fluid communication with the mixing chamber outlet. The mixer/reactor apparatus is especially useful for reactions where rapid diffusion is critical.

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