

Title (en)

METHOD OF MIXING AND DISTRIBUTING A LIQUID PHASE AND A GASEOUS PHASE

Title (de)

VERFAHREN ZUM MISCHEN UND VERTEILEN EINER FLÜSSIGPHASE UND EINER GASPHASE

Title (fr)

METHODE DE MELANGE ET DE DISTRIBUTION D UNE PHASE LIQUIDE ET D UNE PHASE GAZEUSE

Publication

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Application

**EP 04805359 A 20041029**

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Abstract (en)

[origin: WO2005044441A1] The invention relates to a method whereby a gas and a liquid are mixed and distributed to a chamber which comprises a distribution means (2) formed by a liquid-filled compartment (8) and which is traversed by a gas stream. The inventive method is characterised in that it consists in injecting the liquid into the gas flow area(s) (7), either counter current or co-current to the gas, through at least two ports (10) in the compartment, said ports (10) being disposed essentially facing one another. The invention is further characterised in that the diameter and the number of ports and/or the speed V of the liquid leaving each of the ports and/or the distance d between two facing injection points are selected such that the Froude number Fr is greater than 0.5, the Froude number being defined by relation  $F_1$ , wherein g is the gravitational constant. The invention also relates to the application of said method in relation to processes involving at least one liquid phase and at least one gaseous phase in at least one separation, purification or chemical conversion step and to acid gas treatment.

IPC 8 full level

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