

Title (en)

Process for producing emulsions, particularly emulsions of liquid fuels and water, and apparatus used in the process

Title (de)

Verfahren zur Herstellung von Emulsionen, insbesondere Emulsionen von flüssigen Brennstoffen und Wasser, und Vorrichtung dafür

Title (fr)

Procédé pour la préparation d'émulsions, notamment des émulsions de combustibles liquides et de l'eau et appareillage pour ce procédé

Publication

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Application

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Priority

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Abstract (en)

[origin: EP0958853A1] In a process for producing stable emulsions of at least two substantially immiscible fluids, particularly emulsions of a liquid fuel with water, a considerable increase in the efficiency of the emulsion-formation process is achieved by injecting the fluids to be emulsified into an emulsification chamber provided with an injection system which imparts to the fluids a motion in a direction which is substantially perpendicular to the general direction in which the fluids travel through the emulsification chamber. This injection system can be provided by means of a diffuser having an inlet hole, through which a stream of liquid is fed in a substantially axial direction, and at least one outlet hole, which leads into the chamber and whose axis lies on a plane which is substantially perpendicular to the direction of the inlet stream. In this manner, the stream strikes the walls of the emulsification chamber, producing a turbulent fluid motion which has a predominantly helical orientation and is capable of producing an efficient dispersion of one fluid in the other, forming dispersed-phase particles having an average diameter on the order of one micron or even less. <IMAGE>

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CPC (source: EP)

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Cited by

EP2587151A3; EP2596289A4; ITRM20120070A1; ITVR20130082A1; US10947930B2; EP1233235A3; GR1003835B; EP2992950A1; US11084004B2; US8973366B2; WO2012011873A1; US11015126B2; WO2014162281A2; WO2014162281A3; WO2015198231A1; WO2004081152A1; WO2013124726A1

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