

## 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

**EP 98109242 A 19980520**

## Priority

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## Abstract (en)

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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- [X] EP 0605138 A1 19940706 - NORDSON CORP [US]
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