

Title (en)

DIRECT-CONTACT HEAT EXCHANGE PROCESS BETWEEN GASEOUS AND LIQUID FLUIDS, AND HEAT EXCHANGER CARRYING OUT SUCH A PROCESS

Publication

**EP 0097097 B1 19880107 (FR)**

Application

**EP 83401179 A 19830609**

Priority

FR 8210363 A 19820610

Abstract (en)

[origin: EP0097097A1] 1. A direct-contact process for transferring heat between a gaseous fluid and a liquid fluid, in which the gaseous fluid is introduced at one end of a vertical cylindrical chamber (1) and extracted at the other end of said chamber, the gaseous fluid circulating in said chamber as a cylindrical column with fluid streams substantially parallel to one another and in which the liquid is introduced through the chamber wall and sprayed within said chamber, from a plurality of coaxial spraying nozzles located at the centre and spaced apart in the direction of the gaseous fluid and fed from a common liquid feed source under pressure, as a plurality of coaxial thin conical sheets extending from each spraying nozzle to the chamber periphery, each conical sheet corresponding to a nozzle, the conical liquid sheets sprayed from the various nozzles being independent and serially crossed by the gaseous flux, characterized in that the sprayed liquid in each sheet is collected at the periphery of the sheet on the chamber wall.

IPC 1-7

**F28C 3/06**

IPC 8 full level

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CPC (source: EP)

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Cited by

AU756857B2; US5809981A; US5657630A; US8222457B2; WO9858221A1

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