

Title (en)

Process and device for the spraying of liquid, as well as their applications.

Title (de)

Verfahren und Vorrichtung zum Zerstäuben einer Flüssigkeit sowie ihre Anwendungen.

Title (fr)

Procédé et dispositif de pulvérisation de liquide, ainsi que leurs applications.

Publication

EP 0458685 B1 19940727 (FR)

Application

EP 91401281 A 19910517

Priority

FR 9006447 A 19900523

Abstract (en)

[origin: EP0458685A1] The invention relates to a process for spraying a liquid with the aid of at least one auxiliary fluid, such as a gas, this process comprising the use of: - an annular flow of the said liquid (27), - an annular flow of a primary gas (38), - an annular flow of a secondary gas (23) which is identical to or different from the previous gas, the said process consisting in: a) directing the flow of liquid within the said flow of primary gas in the flow direction of the latter, b) producing an annular thin film of liquid by directing the coaxial flows of liquid and primary gas onto the periphery of a ring (30), one of the free ends of which is shaped in the form of a ridge, c) spraying the liquid at the end of the said ridge. According to the invention, the ratio of the total mass of gas with respect to the total mass of the liquid is less than 0.5. <IMAGE>

IPC 1-7

B05B 7/04; **B05B 7/06**; **F23D 11/10**

IPC 8 full level

B05B 7/04 (2006.01); **B05B 7/06** (2006.01); **F23D 11/10** (2006.01); **F23D 11/14** (2006.01)

CPC (source: EP)

B05B 7/04 (2013.01); **B05B 7/065** (2013.01); **F23D 11/106** (2013.01); **F23D 11/14** (2013.01)

Cited by

US2017304851A1; US5845846A; CN101884962A; EP0652403A1; BE1008206A3; EP0914870A1; EP2236919A1; FR2875585A1; EP1640661A3; GB2316022A; GB2316022B; GB2362847A; EP0575254A1; FR2692502A1; CN102858466A; US5810252A; CN107107080A; JP2017534443A; AU2014408516B2; US10245602B2; US7506496B2; WO2011128433A1; WO2010105989A3; WO2016055115A1; US7547292B2; TWI606865B

Designated contracting state (EPC)

AT BE CH DE DK ES GB GR IT LI LU NL SE

DOCDB simple family (publication)

EP 0458685 A1 19911127; **EP 0458685 B1 19940727**; AT E109031 T1 19940815; DE 69103086 D1 19940901; DE 69103086 T2 19950302; DK 0458685 T3 19940905; ES 2057803 T3 19941016; FR 2662377 A1 19911129; FR 2662377 B1 19940603

DOCDB simple family (application)

EP 91401281 A 19910517; AT 91401281 T 19910517; DE 69103086 T 19910517; DK 91401281 T 19910517; ES 91401281 T 19910517; FR 9006447 A 19900523