

Title (en)

METHOD AND DEVICE FOR ATOMIZING LIQUID FILMS

Title (de)

VERFAHREN AND VORRICHTUNG ZUM ZERSTÄUBEN VON FLÜSSIGKEITSFILMEN

Title (fr)

DISPOSITIF ET PROCEDE DE PULVERISATION DE FILMS DE LIQUIDE

Publication

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Application

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Abstract (en)

[origin: WO2005123311A1] The invention relates to a method for atomizing liquid films to fine droplets (2), wherein the liquid (2) is discharged from an elongate slotted nozzle (3) in the shape of a straight film. The outlet opening of said slotted nozzle (3) is located inside a linear Venturi nozzle (5) in whose divergent section linear gas outlet openings (7) (Laval nozzles) are provided and impinged upon by gas (6). The negative pressure produced in the area of the Laval nozzles (7) draws in gas flows (4) from the gas chambers (1), located at both sides of the liquid film and delimited by the convergent section of the Venturi nozzle (5). Said gas flows stabilize the liquid film in such a manner that it is atomized to a tent-shaped cone of liquid droplets only after passage of the narrowest point of the Venturi nozzle (5).

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