

Title (en)

METHOD FOR MODIFYING THE SWIRL MOTION OF A LIQUID IN A SWIRL CHAMBER OF A NOZZLE AND NOZZLE SYSTEM

Title (de)

VERFAHREN ZUM VERÄNDERN DER DRALLBEWEGUNG EINES FLUIDS IN DER DRALLKAMMER EINER DÜSE UND EIN DÜSENSYSTEM

Title (fr)

PROCEDE PERMETTANT DE MODIFIER LE MOUVEMENT DE ROTATION D'UN FLUIDE DANS LA CHAMBRE DE ROTATION D'UN GICLEUR ET SYSTEME COMPORTANT UN GICLEUR

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Abstract (en)

[origin: US6517012B1] A method for modifying the swirl motion of a liquid in the swirl chamber of a nozzle, and a swirl generator for nozzles. Such nozzles are used in industrial burners, oil burners and installations for cleaning flue gas and spray-drying food. The invention provides a method and nozzle for adjusting the mean droplet diameter at a constant volume flow rate on maintaining the droplet spectrum constant in case of adjustment of the volume flow rate. Partial flows are distributed across supply channels which differ in terms of their cross sections at their point of connection with the swirl chamber. When the partial flows are constituted by the sum of cross-sections of the channels branching off the corresponding flow. Thus, the sums of the cross-sections at the connection point with the swirl chamber are different.

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