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(54) Title (EN): RADIAL FLOW PROCESSOR AND METHOD FOR USING SAME

(54) Title (FR): PROCESSEUR D'ÉCOULEMENT RADIAL ET PROCÉDÉ D'UTILISATION ASSOCIÉ

(57) Abstract:

(EN): A liquid treatment apparatus (10) for processing a liquid includes an inlet nozzle (12) having an orifice (16) for directing a flow of liquid through the orifice (16) to define a fluid jet, and a conical diffuser (18) including a tip (20), a base portion (22), and a curved surface (26) therebetween. The conical diffuser (18) is generally aligned with the orifice (16) such that the fluid jet impacts upon the tip (20) of the conical diffuser (18). Moreover, the curvature of the curved surface (26) is selected to maintain a substantially constant Froude number of the liquid along the conical diffuser (18).

(FR): L'invention concerne un dispositif de traitement de liquide (10) pour le traitement d'un liquide comprenant une buse d'admission (12) comprenant un orifice (16) permettant de diriger un écoulement de liquide à travers l'orifice (16) pour définir un jet de fluide, et un diffuseur conique (18) comprenant une pointe (20), une partie de base (22) et une surface incurvée (26) entre celles-ci. Le diffuseur conique (18) est généralement aligné avec l'orifice (16) de sorte que le jet de fluide entre en collision avec la pointe (20) du diffuseur conique (18). De plus, la courbure de la surface incurvée (26) est sélectionnée de manière à maintenir sensiblement constant un nombre de Froude du liquide le long du diffuseur conique (18).

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