

Title (en)

DEVICE AND METHOD FOR AERATION OF FLUIDS

Title (de)

VORRICHTUNG UND VERFAHREN ZUM BEGASEN VON FLÜSSIGKEITEN

Title (fr)

DISPOSITIF ET PROCEDE D'AERATION DE FLUIDES

Publication

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Application

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Abstract (en)

[origin: WO9930812A1] The present invention provides aeration methods using spherical gas bubbles having a size on the order of 0.1 to 100 microns in size. A device of the invention for producing a monodispersion of bubbles includes a source of a stream of gas which is forced through a liquid held under pressure in a pressure chamber with an exit opening therein. The stream of gas surrounded by the liquid in the pressure chamber flows out of an exit orifice of the chamber into a liquid thereby creating a monodispersion of bubbles with substantially uniform diameter. The bubbles are small in size and produced with a relatively small amount of energy relative to comparable systems. Applications of the aeration technology range from oxygenating sewage with monodispersions of bubbles to oxygenation of water for fish maintenance.

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