

Title (en)
Dissolving gas in liquid.

Title (de)
Lösen von Gas in einer Flüssigkeit.

Title (fr)
Dissolution d'un gaz dans un liquide.

Publication
EP 0152201 A2 19850821 (EN)

Application
EP 85300488 A 19850124

Priority
GB 8401781 A 19840124

Abstract (en)
In order to dissolve a gas such as oxygen in a liquid, typically aqueous, a stream of liquid is taken from tank 2 by a pump 10 and pressurised thereby. Oxygen is introduced into the stream via a conduit 18 upstream of a venturi 20. Turbulence created as the stream passes through the venturi 20 helps to disperse the oxygen as fine bubbles in the stream. The dispersion is then conducted to a sparge pipe 14 and introduced into the main volume 4 of liquid in the tank 2. The bubbles are thereby sheared into very small bubbles that readily dissolve in or are consumed by the volume 4 of liquid. Some of the gas in the dispersion is separated therefrom at a relatively downstream position and drawn along a pipe 26 back into the stream at a relatively upstream position by the action of the stream passing through the venturi 20. A valve 28 is operable to regulate the rate at which gas is so recycled.

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