

Title (en)

Apparatus for dissolution of gas in liquid.

Title (de)

Apparat zum Auflösen von Gas in Flüssigkeit.

Title (fr)

Appareil pour dissoudre du gaz dans du liquide.

Publication

EP 0524376 A1 19930127 (EN)

Application

EP 92106451 A 19920414

Priority

US 72799791 A 19910710

Abstract (en)

An apparatus for dissolving gas in a downflow of liquid, the apparatus comprising an outer vessel (14) including an upper end having an inlet (20), and a lower end having an outlet (24), the outer vessel defining a flow chamber for conducting the downflow between the inlet and the outlet, a funnel member (38) including a tubular portion which defines at least part of the inlet, and which cooperates with the outer vessel to define a collection well, and a downwardly diverging portion extending downwardly into the flow chamber from the tubular portion, the downwardly diverging portion including an outlet end, and defining a bubble contact chamber, and a mechanism (52) for introducing bubbles of gas into the downflow, the mechanism for introducing including a source of gas under pressure, and a bubble dispersing device (60) connected to the source, and positioned within the flow chamber adjacent the outlet end of the downwardly diverging portion so that the bubbles travel in a countercurrent direction into the bubble contact chamber and toward the inlet, and wherein the bubbles are sized to have a buoyant velocity greater than the downflow velocity of the liquid exiting the outlet end, and wherein the downflow velocity of the liquid in the tubular portion is greater than the buoyant velocity of the bubbles.
<IMAGE>

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CPC (source: EP)

B01F 23/2321 (2022.01)

Citation (search report)

- [X] DE 1020001 B 19571128 - BENCKISER GMBH JOH A
- [A] US 3804255 A 19740416 - SPEECE R

Cited by

US6048460A; CN103983575A; WO9713726A1

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