Title (en)

METHOD AND APPARATUS FOR GENERATING MICROBUBBLES IN FROTH FLOTATION MINERAL CONCENTRATION SYSTEMS

Publication

EP 0364654 A3 19910123 (EN)

Application

EP 89103088 A 19890222

Priority

US 26081388 A 19881021

Abstract (en)

[origin: EP0364654A2] A method and apparatus for generating microbubbles in a flowing liquid stream for use in a froth flotation system. The system utilizes a microbubble generator (50) having a tubular housing (53) with an inlet end (51) and an outlet end (52). Located coaxially within the housing (53) is an inner member (90) with an elongated exterior cylindrical surface. A porous tubular sleeve (80) is mounted between the housing (53) and the inner member (90) coaxially therewith to define with the cylindrical interior surface of the housing (53) an elongated air chamber (85) of annular cross section. The porous sleeve (80) also has a cylindrical inner surface that defines with the exterior surface of the inner member (90) an elongated liquid flow chamber (99) of thin, annular cross section. An aqueous liquid is supplied to the liquid flow chamber (99) at a relatively high flow rate and air under pressure is supplied to the air chamber (85) so that air is forced radially inwardly through the porous sleeve (80) to be diffused in the form of microbubbles in the flowing stream.

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B03D 1/24

IPC 8 full level

B01F 3/04 (2006.01); **B01F 5/04** (2006.01); **B03D 1/24** (2006.01)

CPC (source: EP US)

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