

Title (en)  
Gas injection device for a flotation cell

Title (de)  
Begasungseinrichtung für eine Flotationszelle

Title (fr)  
Dispositif d'injection de gaz pour une cellule de flottation

Publication  
**EP 2377620 A1 20111019 (DE)**

Application  
**EP 10159627 A 20100412**

Priority  
EP 10159627 A 20100412

Abstract (en)  
The device (1'') has a container (2) with a gas inlet opening (2a) and a set of gas outlet openings (2b). A deflecting plate (4) is connected downstream to the container, and a gas-permeable sieve or grid-like component is arranged parallel to a plane of the plate between the outlet openings and the deflecting plate. A pipe section is connected to the container and provided for receiving gas emerging from the outlet openings. The component has sieve or grid-like openings with diameter ranging from 1 to 10 mm, where the container has an outer pipe (2c) closed at one side. Independent claims are also included for the following: (1) a flotation cell comprising a housing with a flotation chamber (2) a method for flotation of valuable material particles.

Abstract (de)  
Die Erfindung betrifft eine Begasungseinrichtung (1, 1', 1'', 1''') für eine Flotationszelle (100), umfassend ein Gefäß (2) mit mindestens einer Gaseintrittsöffnung (2a) und einer Anzahl an Gasaustrittsöffnungen (2b), sowie eine, dem Gefäß (2) nachgeordnete Prallplatte (4), sowie mindestens ein zwischen den Gasaustrittsöffnungen (2) und der Prallplatte (4) parallel zur Plattenebene der Prallplatte (4) angeordnetes, gasdurchlässiges sieb- oder gitterförmiges Bauteil (5, 5', 5a, 5b), weiterhin eine Flotationszelle (100) mit einer solchen Begasungseinrichtung (1, 1', 1'', 1''') und ein Flotationsverfahren.

IPC 8 full level  
**B01F 3/04** (2006.01); **B01F 5/04** (2006.01); **B03D 1/24** (2006.01)

CPC (source: EP)  
**B01F 23/2323** (2022.01); **B01F 25/31421** (2022.01); **B03D 1/1412** (2013.01); **B03D 1/245** (2013.01)

Citation (applicant)  
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Citation (search report)  
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• [XI] US 4287054 A 19810901 - HOLLINGSWORTH CLINTON A  
• [XI] US 4152409 A 19790501 - MACHIGUCHI HIROYUKI [JP], et al  
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• [Y] US 5335785 A 19940809 - KAWATRA SURENDRA K [US], et al

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Designated contracting state (EPC)  
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Designated extension state (EPC)  
AL BA ME RS

DOCDB simple family (publication)  
**EP 2377620 A1 20111019**; WO 2011128154 A1 20111020

DOCDB simple family (application)  
**EP 10159627 A 20100412**; EP 2011053264 W 20110304