

Title (en)  
METHOD AND APPARATUS FOR THE TREATMENT OF POURING WATER DURING THE POURING BY ENRICHMENT WITH CO<sub>2</sub> AND H<sub>2</sub>CO<sub>3</sub>

Publication  
**EP 0142595 B1 19890913 (DE)**

Application  
**EP 84101155 A 19840206**

Priority  
DE 3330375 A 19830823

Abstract (en)  
[origin: EP0142595A2] 1. Process for the preparation of watering water by means of enrichment with CO<sub>2</sub> and H<sub>2</sub> CO<sub>3</sub> , in which CO<sub>2</sub> gas which is constantly under pressure is introduced into the water which is flowing through a pipe which has a pressure and temperature approximately identical to those in a normal water supply pipe, characterized in that the watering water is led through a straight flow-channel section forming an impregnation zone and in the process the pressure of the watering water is, at least two partial areas which are at a distance in the flow direction and in each case at the circumference of the flow, momentarily reduced to below the pressure of the CO<sub>2</sub> gas by means of an abrupt change in the flow speed, the external liquid layers of the watering-water flow in the impregnation zone being led in each case, at the areas of abrupt pressure reduction, over thin, shoulder-like, cross-sectional widenings of the flow channel section, and in that the watering-water flow is, in each case in the areas of momentarily reduced pressure, ultra-finely impregnated with the CO<sub>2</sub> gas, these liquid layers being in each case maintained, immediately after each shoulder viewed in the direction of flow, in a free flow connection with the CO<sub>2</sub> gas supply chamber via a plurality of bores corresponding to the shoulder width.

IPC 1-7  
**B01F 3/04**; **B01F 5/04**

IPC 8 full level  
**A01G 7/02** (2006.01); **A01G 25/00** (2006.01); **B01F 1/00** (2006.01); **B01F 3/04** (2006.01); **B01F 3/08** (2006.01); **B01F 5/02** (2006.01); **B01F 5/04** (2006.01); **B05B 7/04** (2006.01)

CPC (source: EP)  
**B01F 23/23231** (2022.01); **B01F 23/454** (2022.01); **B01F 25/21** (2022.01); **B01F 25/3142** (2022.01); **B01F 25/31425** (2022.01); **B01F 23/23** (2022.01)

Cited by  
EP1726366A1

Designated contracting state (EPC)  
AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)  
**EP 0142595 A2 19850529**; **EP 0142595 A3 19870715**; **EP 0142595 B1 19890913**; AT E46278 T1 19890915; DE 3330375 A1 19850307; DE 3479710 D1 19891019; IN 160730 B 19870801; JP S6128427 A 19860208; JP S647813 B2 19890210; ZA 846545 B 19850424

DOCDB simple family (application)  
**EP 84101155 A 19840206**; AT 84101155 T 19840206; DE 3330375 A 19830823; DE 3479710 T 19840206; IN 517MA1984 A 19840717; JP 16796084 A 19840813; ZA 846545 A 19840822