

Title (en)
APPARATUS FOR DISSOLVING SOLID BULK MATERIAL IN A LIQUID

Publication
EP 0486933 A3 19920603 (DE)

Application
EP 91119336 A 19911113

Priority
CH 366690 A 19901119

Abstract (en)
[origin: EP0486933A2] In enlarge dissolvers, for example, the sugar and sugar dust (2) carried by the transfer air is to be bound as intensively and hence as rapidly as possible by the liquid (23). It should be possible to work without a cyclone separator and without filters. For this purpose, the solid bulk material to be dissolved, for example sugar, is fed directly to the outlet region (11) of the circulation line (6, 6', 6'') of the circulating liquid before the latter strikes the impingement plate (5). The solid bulk material, for example sugar, is, with highly turbulent flow of the liquid, intensively mixed with the latter in the outlet section (11), and is partially dissolved, and the stream issuing from an outlet nozzle (4) of the outlet section (11) strikes the impingement plate (5). The transfer air is split by the latter into a multiplicity of small air bubbles which, rising slowly in the liquid (23), permit rapid binding of the sugar dust to the liquid. <IMAGE>

IPC 1-7
B01F 1/00

IPC 8 full level
B01F 33/40 (2022.01)

CPC (source: EP)
B01F 21/20 (2022.01); **B01F 25/25** (2022.01); **B01F 25/53** (2022.01); **B01F 33/404** (2022.01)

Citation (search report)
• [X] GB 2055050 A 19810225 - BURGERT H
• [Y] GB 2195094 A 19880330 - HEALPLAN LTD
• [Y] FR 555142 A 19230625
• [Y] DE 3341992 A1 19850530 - SCHREIBER GEORG DIPL ING
• [XP] EP 0408360 A2 19910116 - MCDERMOTT MATTHEW [GB]
• [Y] SOVIET PATENTS ABSTRACTS Section Ch, Week 8831, 7. Juli 1988 Derwent Publications Ltd., London, GB; Class J, AN 88-219317/31 & SU-A-1 368 012 (PODDUBNYI BN) 23. Januar 1988

Cited by
EP2594331A1; EP0799573A1; US8876363B2; WO2017050639A1; US10654008B2

Designated contracting state (EPC)
AT BE DE DK ES FR GB IT NL SE

DOCDB simple family (publication)
EP 0486933 A2 19920527; EP 0486933 A3 19920603; EP 0486933 B1 19950315; AT E119804 T1 19950415; CH 682460 A5 19930930; DE 59104957 D1 19950420

DOCDB simple family (application)
EP 91119336 A 19911113; AT 91119336 T 19911113; CH 366690 A 19901119; DE 59104957 T 19911113