

Title (en)

METHOD FOR MINIMISING THE NEW WATER USE IN THE WATER CIRCULATION SYSTEM OF A TREATMENT PLANT

Title (de)

VERFAHREN ZUM MINIMIEREN DES NEUWASSEREINSATZES IM WASSERKREISLAUF BEI EINER AUFBEREITUNGSSANLAGE

Title (fr)

PROCEDE POUR MINIMISER L'UTILISATION D'EAU D'APPORT DANS UN CIRCUIT D'EAU FAISANT PARTIE D'UNE INSTALLATION DE TRAITEMENT

Publication

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Application

EP 00969229 A 20000926

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Abstract (en)

[origin: WO0127383A1] The invention relates to a method for minimising the new water use in the water circulation system of a treatment plant. The material to be treated is purified and/or disintegrated by means of water in a treatment step. The suspension containing the remaining components is subjected to mechanical purification and the mechanically purified suspension is separated into two process water streams. The first process waters stream is supplied back into the treatment step and the second process water stream is subjected to a chemical-physical clarification. The chemically-physically clarified process water stream is separated into two clear water streams. The first clear water stream is led into one of the two process water streams and/or into the suspension and the second clear water stream is subjected to a biological clarification. The biologically clarified clear water stream being a fresh water stream is led in one or two clear water stream/s. The ratio between the process water streams and the clear water streams has been determined before according to the material that is supplied to the treatment step and the kind of the mechanical purification and the kind of the chemical-physical clarification.

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IPC 8 full level

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Cited by

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WO 0127383 A1 20010419; AR 025977 A1 20021226; AU 7901900 A 20010423; BG 106668 A 20021229; BR 0014692 A 20020618;
CA 2387140 A1 20010419; CN 1378611 A 20021106; CZ 20021267 A3 20030115; DE 19949265 A1 20010517; DE 19949265 C2 20020919;
EE 200200186 A 20030415; EP 1220963 A1 20020710; HK 1049507 A1 20030516; HU P0301638 A2 20030828; IL 148950 A0 20021110;
JP 2003517916 A 20030603; KR 20020047223 A 20020621; NZ 517960 A 20031031; PL 354313 A1 20040112; RU 2002110109 A 20040220;
SK 4872002 A3 20021106; US 6767463 B1 20040727

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DE 0003363 W 20000926; AR P000105290 A 20001006; AU 7901900 A 20000926; BG 10666802 A 20020430; BR 0014692 A 20000926;
CA 2387140 A 20000926; CN 00814150 A 20000926; CZ 20021267 A 20000926; DE 19949265 A 19991012; EE P200200186 A 20000926;
EP 00969229 A 20000926; HK 03100268 A 20030110; HU P0301638 A 20000926; IL 14895000 A 20000926; JP 2001529507 A 20000926;
KR 20027004584 A 20020410; NZ 51796000 A 20000926; PL 35431300 A 20000926; RU 2002110109 A 20000926; SK 4872002 A 20000926;
US 8928602 A 20020913