

Title (en)
PURIFICATION METHOD WITH RECYCLING OF EFFLUENTS

Title (de)
REINIGUNGSVERFAHREN MIT ABWASSERRÜCKFÜHRUNG

Title (fr)
PROCEDE DE PURIFICATION AVEC RECYCLAGE DES EFFLUENTS

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Application
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Abstract (en)
[origin: WO2022064154A1] The invention relates to a purification method, comprising the following steps: - supplying a stream (6) comprising a non-ionised species, monovalent cations and divalent cations; - bringing the stream (6) into contact with a first cation exchange resin (1) in sodium and/or potassium form; - collecting a first fraction (7) which contains the non-ionised species and is enriched in monovalent cations and depleted of divalent cations with respect to the stream (6); - bringing the first fraction (7) into contact with a second cation exchange resin (2) in hydronium form; - collecting a second fraction (8) which contains the non-ionised species and is depleted of monovalent cations with respect to the first fraction (7); - regenerating the second cation exchange resin (2) with a sulphuric acid solution (10); - collecting a first regeneration effluent comprising at least one fraction A, the fraction A comprising sodium and/or potassium ions; and - recycling the fraction A to regenerate the first cation exchange resin (1).

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