

Title (en)

SYSTEM AND METHOD FOR MANIPULATION OF ION CONCENTRATION TO MAXIMIZE EFFICIENCY OF ION EXCHANGE

Title (de)

SYSTEM UND VERFAHREN ZUR MANIPULATION DER IONENKONZENTRATION ZUR MAXIMIERUNG DER EFFIZIENZ DES IONENAUSTAUSCHS

Title (fr)

SYSTÈME ET PROCÉDÉ DE MANIPULATION DE CONCENTRATION D'IONS POUR MAXIMISER L'EFFICACITÉ D'ÉCHANGE D'IONS

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2017132151A1] A method for manipulating ion concentration to maximize ion exchange media performance is disclosed herein. First a source liquid is directed through an ion concentrator such as a nanofilter, reverse osmosis membrane, or an evaporator/crystallizer. The ion concentrator separates the source liquid into a concentrate stream and a permeate stream wherein the permeate stream comprises a smaller concentration of ions than the concentrate stream. The concentrate stream and/or the permeate stream (input stream) may then be directed through an ion exchange vessel. The ion exchange vessel receives the input stream, enables ion exchange between the ion exchange media in the vessel and the input stream resulting in a liquid output having a smaller concentration of ions than the input stream.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

See references of WO 2017132151A1

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