

Title (en)
NANOFILTRATION PROCESS FOR ENHANCED BRINE RECOVERY AND SULFATE REMOVAL

Title (de)
NANOFILTRATIONSVERFAHREN ZUR VERBESSERTEN SOLERÜCKGEWINNUNG UND SULFATBESEITIGUNG

Title (fr)
PROCÉDÉ DE NANOFILTRATION PERMETTANT D'AMÉLIORER LA RÉCUPÉRATION DE LA SAUMURE ET L'ÉLIMINATION DES SULFATES

Publication
EP 2822674 A1 20150114 (EN)

Application
EP 13758618 A 20130220

Priority

- US 201261607722 P 20120307
- CA 2013050131 W 20130220

Abstract (en)
[origin: WO2013131183A1] In a nanofiltration system for removing sulfate impurity from an aqueous brine stream and for recovering the brine, introducing a dilution stream upstream of the feed stream inlet of a nanofiltration module in the system dilutes the feed stream. This increases the amount of brine salt and water obtained in the permeate stream without substantially diluting the concentration of sulfate in the pass stream and hence results in enhanced recovery of brine while efficiently removing sulfate impurity. The system and process is especially suitable for recovering brine and removing sulfate impurity from a brine stream in a brine electrolysis plant. In a conventional system, the heat exchanger typically used to cool the feed stream can be omitted if the dilution stream is provided at a temperature suitably lower than that of the feed stream.

IPC 8 full level
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C-Set (source: EP)
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