



Methods for Osmotic Concentration of Hyper Saline Streams

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Summary: A novel method of extracting minerals from an aqueous source

Description: As the demand for minerals and salts has grown, industry has long sought processes for the further concentration and harvesting of salts from saline waters (e.g., seawater, lakes, or brackish ground water). This work relates to a novel method of extracting minerals from an aqueous source. The method comprises feeding the aqueous source into the feed side of a forward osmosis device. The feed and draw sides are separated by a semi-permeable membrane that allows water to be drawn through the membrane to the draw side, thus yielding a concentrated stream from the feed side. The solids can then be separated from that stream and recovered for use.

Main Advantages of this Invention

- Economical
- Less energy intensive than current methods
- Does not require a water pretreatment step

Potential Areas of Application

- Desalination plants
- Water treatment facilities
- Mineral extraction

ID number: 12025

Intellectual Property Status: US utility patent pending (application #13/0327,711); and PCT patent pending (application WO 13/134,710)

Opportunity: We are seeking an exclusive or non-exclusive licensee for marketing, manufacturing, and sale of this technology.

For more information contact:

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