

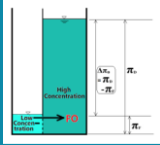
PEO Renewable Energy Generation System (US11092141)

Principle and Typical Design

Basic Principle of Osmosis

PO is a Nature Osmosis Phenomenon caused by:

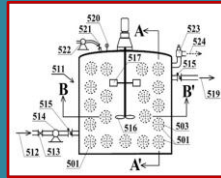
Brownian Movement



PEO Energy Generation Method:

- (1) Input Draw and Feed solutions into the PEO Module;
- (2) Pressurized Mixed solution is formed in the PEO module Draw Solution Compartment;
- (3) Release the pressurized solution from the PEO module to push the turbine/generator units to generate electricity.

Typical PEO Module:

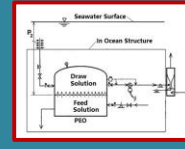
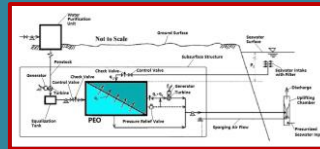


- 001 - Turbine PO Module (PEO Block)
- 002 - Porous Turbine Module Casing
- 003 - Turbine PO Membrane (PEO) lining
- 004 - Feed Solution Input
- 005 - Feed Solution Output
- 006 - Membrane Casing Opening
- 011 - PEO Membrane Module
- 012 - Draw Solution Input
- 013 - Control Valve
- 014 - High Pressure Pump
- 015 - Check Valve
- 016 - Propeller Motor
- 017 - Turbine Motor
- 019 - Pressurized Mixed Solution Output
- 020 - Pressure Vessel
- 021 - Air Control Valve
- 022 - Air Pump
- 023 - Pressure Relief Valve
- 024 - Transmitted Flow

Typical PEO System Design:

Subsurface Design:

(1) Underground (2) In the Ocean



Above Ground Design:

