

CONCENTRATION DIFFERENCE POWER GENERATION DEVICE AND METHOD FOR
OPERATING SAME

ABSTRACT

A concentration-difference power generation apparatus in which high-concentration water and low-concentration water which differ in their concentrations
5 are brought into contact with each other through a semi-permeable membrane unit including a semi-permeable membrane, and a resultant increase in an amount of the high-concentration water due to permeation of water from a low-concentration side to a high-concentration side caused by a forward osmotic pressure is utilized to drive an electric generator to generate electricity, in which the semi-permeable membrane unit is
10 divided into a plurality of subunits and the concentration-difference power generation apparatus includes a pressure change mechanism disposed on a high-concentration-side channel extending from the preceding-stage subunit to the next-stage subunit or a low-concentration-side channel.

Figure 1