52.- Small units for desalination of seawater by electrodialysis

Title and name of product or technology
Small units for desalination of sea water by electrodialysis
Abstract
PCCell develops an advanced sea water desalination device based on the ED200. The unit should be capable to produce 20 – 50 l/h drinking water and the device size should fit into a small case.
Description including main features/advantages
At the moment intensive research is conducted on the development of a sea water desalination device based on the ED200 type of cells in a continuous mode. This combination of small ED units with continuous desalination should combine low operational costs, high efficiency, long life time of membranes, low energy costs with a low technical effort. To achieve these characteristics, membrane properties are optimised to this particular application.
Innovative aspects
Renewable energies can be used to drive a plant. Technical, operational and energy costs are low. The membranes feature a high durability and a long life time and such an unit is lightweight and very compact.
Current and potential industrial users/domains of application
As drinking water issues are generally regulated on governmental level / public authorities, we want to enter this application field from the “small side”. The units should directly been used by the end consumer on place.
Current state of development
At the moment a pilot plant driven to optimise process parameters. An industrial plant will be developed on base of the obtained values within 2009.

Contact details	
Organisation	PCCell GmbH
Website	www.electrodialysis.de
Contact person	Dr. Patrick Altmeier
Address	Lebacher Str. 60 66265 Heusweiler Germany
Phone	0049 6806 603730
Fax	0049 6806 603731
Email	technicalservice@electrodialysis.de