Title (en)

ELECTROCHEMICAL PRIME MOVER

Publication

EP 0204872 B1 19911106 (EN)

Application

EP 85304066 A 19850607

Priority

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Abstract (en)

[origin: EP0204872A1] A prime mover or motor having a single compartment in which pressure variations are produced by transporting molecules into and/or out of the compartment by means of an electrolytic membrane (310). A device is disclosed for converting the pressure changes to mechanical motion without adversely affecting the sealed condition of the compartment. The mechanical motion produced by the apparatus is typically reciprocating linear motion. Disposed within the compartment is an electrochemically active material that can exist in the gaseous phase and that can enter into an oxidation/reduction reaction in order to form ions that move across the electrolytic membrane (310) so as to increase or decrease pressure in the compartment in response to application of a voltage gradient of proper duration and polarity across the membrane. Hydrogen and oxygen are suitable materials for use in the apparatus.

IPC 1-7

F03G 7/06; F04B 17/00

IPC 8 full level

F04B 17/00 (2006.01)

CPC (source: EP)

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Cited by

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