

6/9/02
2002054047

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
20 September 2001 (20.09.2001)

PCT

(10) International Publication Number
WO 01/69701 A1

(51) International Patent Classification⁷: **H01M 4/86**,
8/00, 4/58, C01B 6/24

Hills, MI 48037 (US). **YOUNG, Rosa**; 4136 Golf Ridge
Drive East, Bloomfield Hills, MI 48302 (US). **HOPPER,**
Thomas; 9902 Hendrickson, Clawson, MI 48017 (US).

(21) International Application Number: PCT/US01/07864

(22) International Filing Date: 13 March 2001 (13.03.2001)

(74) Agents: **SCHUMAKER, David, W.** et al.; Energy Con-
version Devices, Inc., 1675 W. Maple Road, Troy, MI
48084 (US).

(25) Filing Language: English

(26) Publication Language: English

(81) Designated States (*national*): AU, BR, CA, CN, IN, JP,
KR, MX, NO, RU, SG, UA.

(30) Priority Data:
09/524,116 13 March 2000 (13.03.2000) US

(84) Designated States (*regional*): European patent (AT, BE,
CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,
NL, PT, SE, TR).

(71) Applicant: **ENERGY CONVERSION DEVICES, INC.**
[US/US]; 1675 W. Maple Road, Troy, MI 48084 (US).

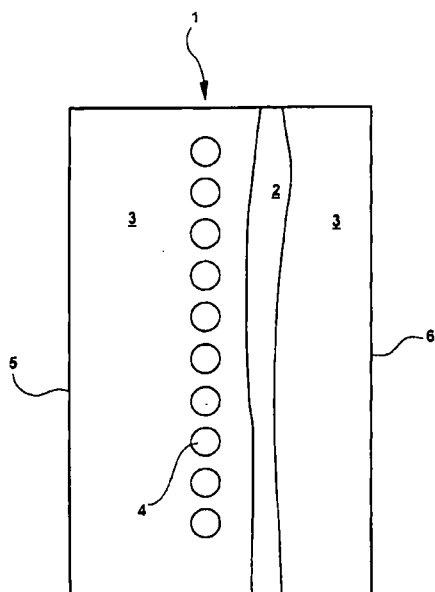
Published:

— with international search report

(72) Inventors: **OVSHINSKY, Stanford, R.**; 2700 Squirrel
Road, Bloomfield Hills, MI 48304 (US). **VENKATESAN,**
Srinivasan; 30115 Woodgate Drive, Southfield, MI 48076
(US). **ALADJOV, Boyko**; 1415 Brians Way, Rochester

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: NOVEL ALKALINE FUEL CELL



(57) Abstract: A fuel cell (7) which has the ability to start up instantly and can accept recaptured energy such as that of regenerative braking by operating in reverse as an electrolyzer. The instant startup fuel cells (7) have increased efficiency and power availability (higher voltage and current) and a dramatic improvement in operating temperature range of about -20 to 150 °C.

WO 01/69701 A1



162162



ACTION