



(51) International Patent Classification:
H01M 8/16 (2006.01)

(21) International Application Number:
PCT/IL2010/001051

(22) International Filing Date:
14 December 2010 (14.12.2010)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (for all designated States except US):
EMEFCY LTD. [IL/IL]; 7 Ha-Eshel Street, P.O. Box
3171, 30889 Caesarea (IL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **SHECHTER, Ronen
Itzhak** [IL/IL]; 25 Hatamar Street, P.O. Box 2122, 36530
Kiryat Tivon (IL). **LEVY, Eytan Baruch** [IL/IL]; 24 Ha-
Ilanot Street, 48570 Rosh Ha'ain (IL).

(74) Agents: **SANFORD T. COLB & CO.** et al.; P.O. Box
2273, 76122 Rehovot (IL).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,

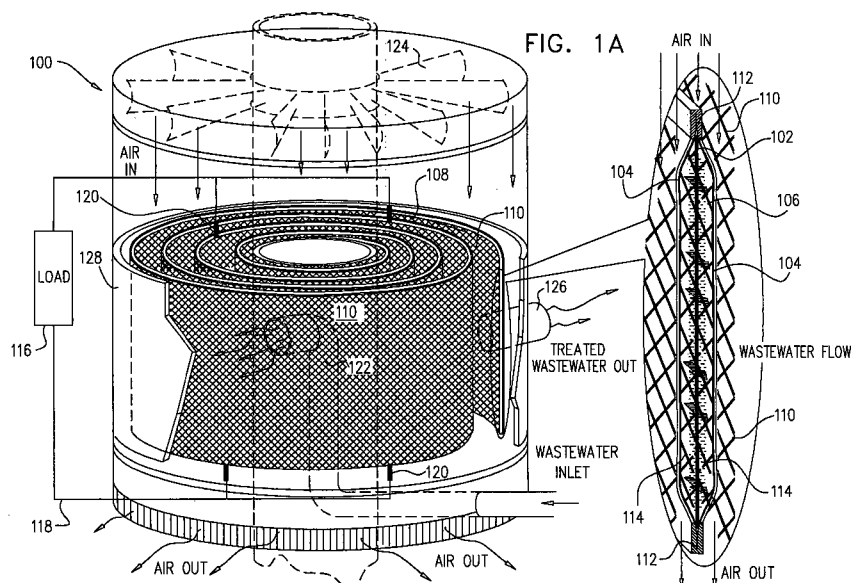
AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO,
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,
HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,
MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ,
OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG,
SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ,
UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG,
ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ,
TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV,
MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: SPIRALLY WOUND MICROBIAL FUEL CELL



(57) Abstract: A bacterial fuel cell including at least one anode and at least two cathodes in liquid communication with a liquid to be treated, the at least one anode being separated from the at least two cathodes by at least first and second electrically insulating spacers and the at least one anode and the at least two cathodes being electrically connected across an external load and the at least one anode and the at least two cathodes being wound together generally in a spiral configuration together with at least a third electrically insulating spacer.