



(51) International Patent Classification:
H01M 4/06 (2006.01)

Maryville University Drive, St. Louis, Missouri 63141 (US).

(21) International Application Number:
PCT/US2010/040317

(72) Inventor; and

(22) International Filing Date:
29 June 2010 (29.06.2010)

(75) Inventor/Applicant (for US only): **SCHUBERT, Mark, A.** [US/US]; 1234 Winterberry Lane, Medina, Ohio 44256 (US).

(25) Filing Language: English

(74) Agent: **BARAONA, Robert, C.**; Eveready Battery Company, Inc., 25225 Detroit Road, Westlake, Ohio 44145 (US).

(26) Publication Language: English

(30) Priority Data:
61/222,199 1 July 2009 (01.07.2009) US

(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,

(71) Applicant (for all designated States except US): **EVEREADY BATTERY COMPANY, INC.** [US/US]; 533

[Continued on next page]

(54) Title: REMOVAL OF IMPURITIES FROM LITHIUM-IRON DISULFIDE ELECTROCHEMICAL CELLS

(57) Abstract: A lithium electrochemical cell, and a process for making the same, are disclosed. The cell includes a chelating agent that is specifically selected to remove impurities introduced to the cell by other component.

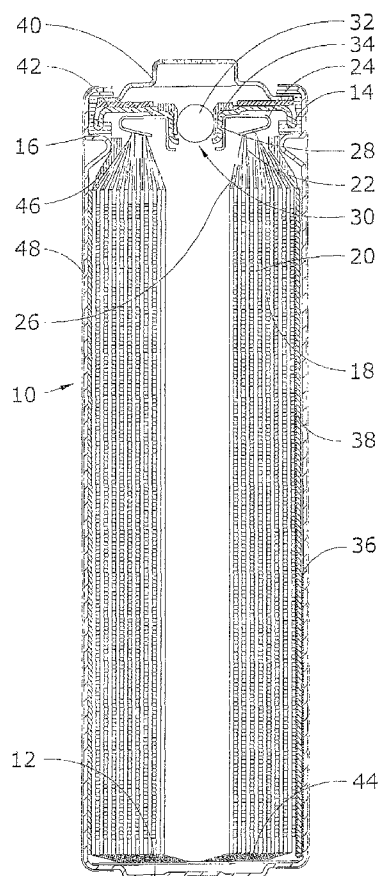


FIG. 1



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.

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, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(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,

Published:

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