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(21) International Application Number: PCT/US97/15588 (22) International Filing Date: 4 September 1997 (04.09.97) (30) Priority Data: Not furnished 6 September 1996 (06.09.96) US (71) Applicant: BELL COMMUNICATIONS RESEARCH, INC. [US/US]; 445 South Street, Morristown, NJ 07960-6438 (US). (72) Inventors: AMATUCCI, Glenn, G.; 407 Cornell Boulevard, Raritan, NJ 08869 (US). TARASCON, Jean-Marie; 16 Davis Court, Martinsville, NJ 08836 (US). (74) Agents: GIORDANO, Joseph et al.; c/o International Coord- inator, Room 1G112R, 445 South Street, Morristown, NJ 07960-6438 (US).		(81) Designated States: AU, CA, CN, IL, JP, MX, SG, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the</i> <i>claims and to be republished in the event of the receipt of</i> <i>amendments.</i>
(54) Title: LITHIUM MANGANESE OXY-FLUORIDES FOR LI-ION RECHARGEABLE BATTERY ELECTRODES (57) Abstract The cycling stability and capacity of li-ion rechargeable batteries are improved by the use of lithium manganese oxy-fluoride electrode component intercalation materials having the general formula $\text{Li}_{1+x}\text{M}_y\text{Mn}_{2-x-y}\text{O}_{4-z}\text{F}_z$, where M is a metal, e.g., Co, Cr, or Fe, and $x \leq 0.4$, $y \leq 0.3$ and $0.05 \leq z \leq 1.0$.		

