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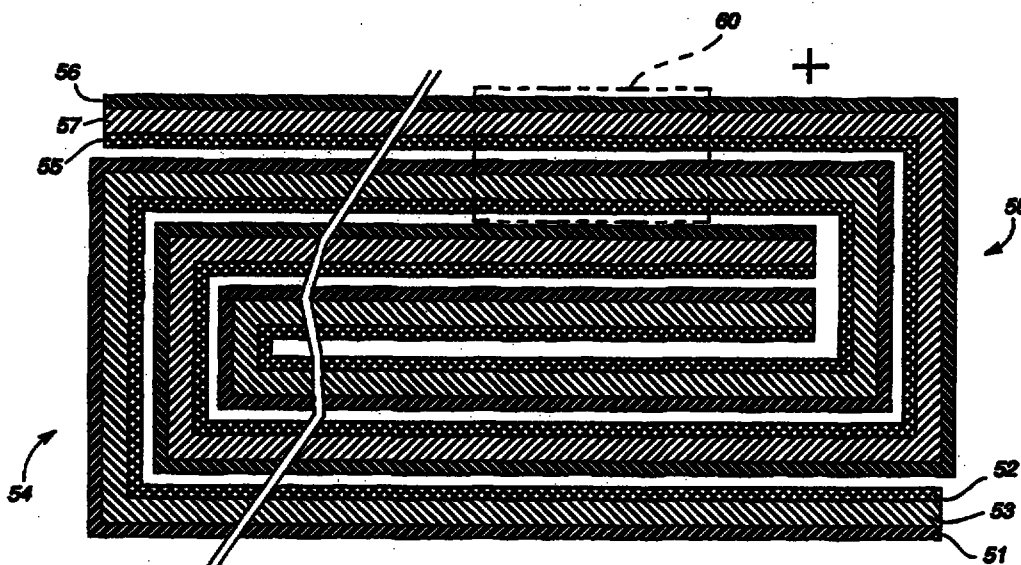
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(54) Title: RECHARGEABLE LITHIUM BATTERY CONSTRUCTION



## (57) Abstract

A rechargeable lithium ion battery comprises a plurality of interleaved flexible electrolytic cells, each of which is a unitary planar laminated structure comprising polymeric anode (13), cathode (17), and intermediate electrolyte layers (15) disposed between electrically conductive anode (11) and cathode collector foil (19) elements. One of the collector foils (19) of a cell has an open grid structure to allow penetration of electrolyte solution into the cell layer while the other is substantially more continuous to provide supporting strength to the cell. At least a pair of cells (54, 58) having respective continuous foil anode and cathode collectors are interleaved in spiral-folded fashion to present the collector foils at the outer surface of the resulting structure to provide terminal contacts for the resulting high-capacity, low-profile battery.

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