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### (54) CELL STRUCTURE FOR ELECTROCHEMICAL DEVICES AND METHOD OF MAKING SAME

(76) Inventor: Thomas D. Kaun, New Lenox, IL (US)

Correspondence Address: **FOLEY & LARDNER 150 EAST GILMAN STREET** P.O. BOX 1497 MADISON, WI 53701-1497 (US)

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- (22) Filed: Jul. 10, 2002

### **Related U.S. Application Data**

(60) Provisional application No. 60/305,339, filed on Jul. 13, 2001.

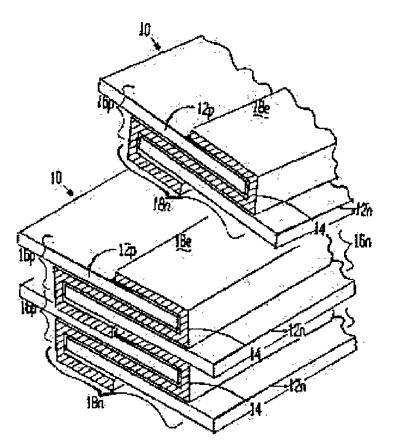
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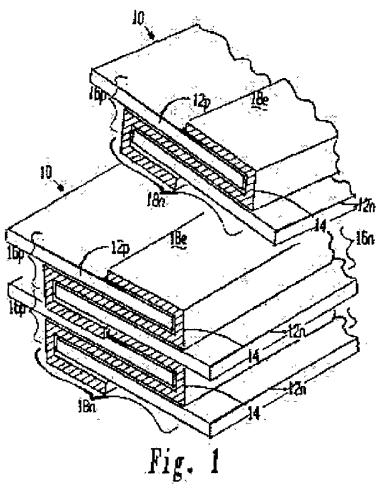
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#### (57)ABSTRACT

An electrochemical device comprising alternating layers of positive and negative electrodes separated from each other by separator layers. The electrode layers extend beyond the periphery of the separator layers providing superior contact between the electrodes and battery terminals, eliminating the need for welding the electrode to the terminal. Electrical resistance within the battery is decreased and thermal conductivity of the cell is increased allowing for superior heat removal from the battery and increased efficiency. Increased internal pressure within the battery can be alleviated without damaging or removing the battery from service while keeping the contents of the battery sealed off from the atmosphere by a pressure release system. Nonoperative cells within a battery assembly can also be removed from service by shorting the nonoperative cell thus decreasing battery life.





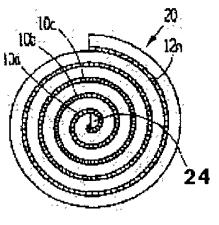
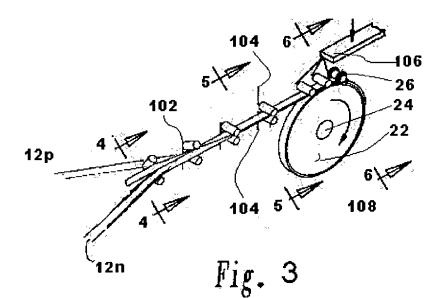
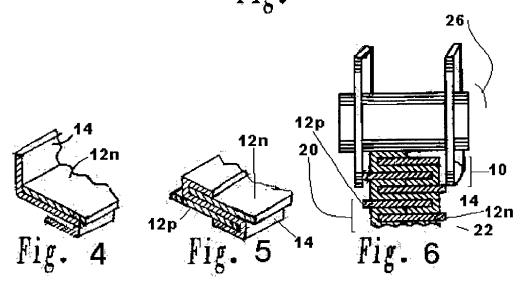


Fig. 2

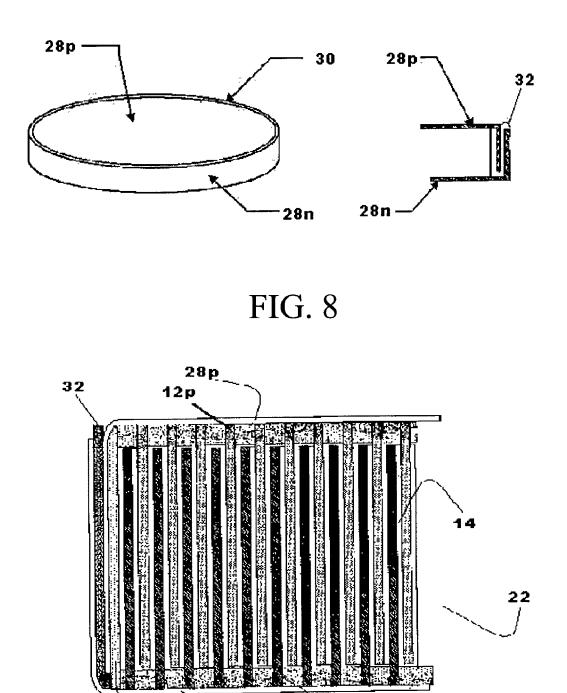
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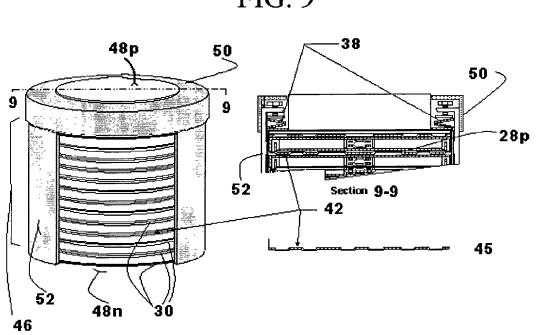
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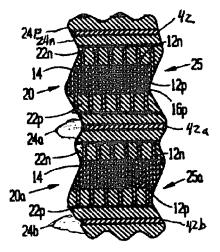
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FIG. 9

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