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(54) **HOUSING FOR ELECTROCHEMICAL DEVICES**

(52) U.S. Cl. 429/176; 429/53; 429/185; 429/175

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(57) **ABSTRACT**

An improved housing for a rolled-ribbon electrochemical device is provided. The housing comprises a fastener that aligns first and second cups during assembly and maintains electrode contact independent of external pressure on the housing eliminating the possibility of an open circuit state for a cell. In one alternative embodiment, the fastener comprises a stem that fits into a hollow tube and resists detachment from the tube. In another alternative embodiment, the fastener comprises a stem that fits into a grommet and resists detachment from the grommet. In yet another alternative embodiment, the fastener comprises a tube that fits into a grommet and resists detachment from the grommet.

(21) Appl. No.: **11/104,363**

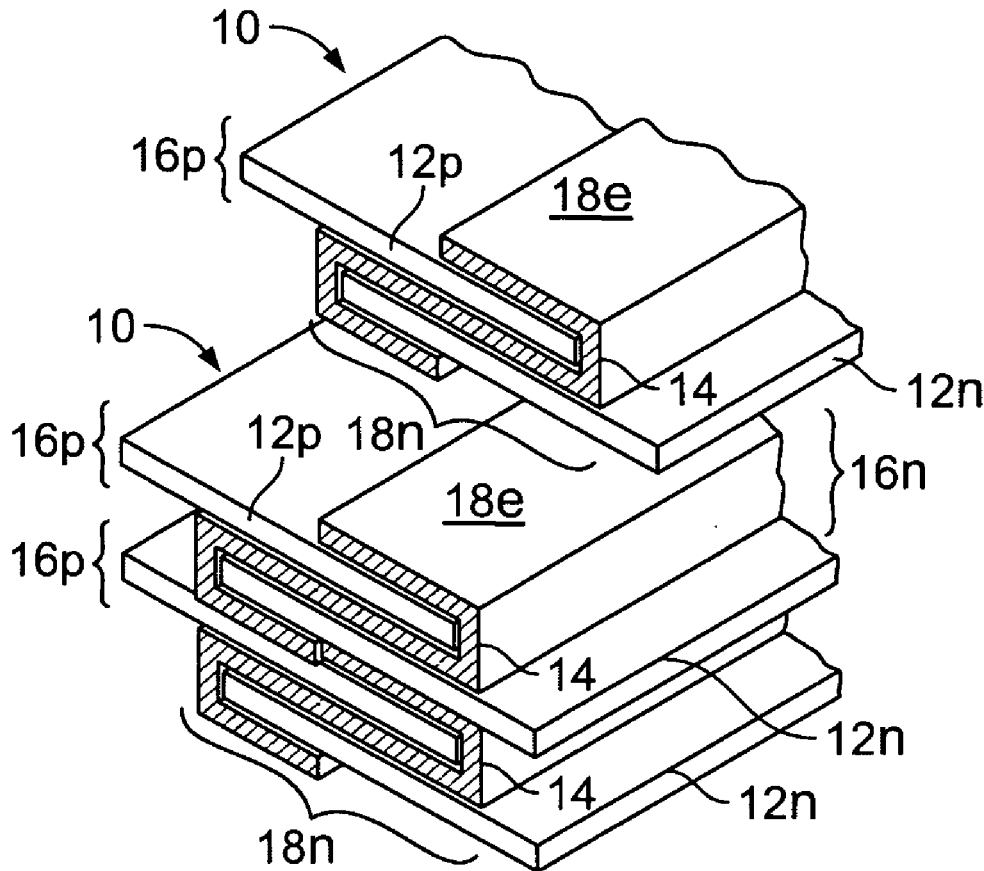
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(51) Int. Cl.⁷ **H01M 2/02; H01M 2/12; H01M 2/08; H01M 2/04**



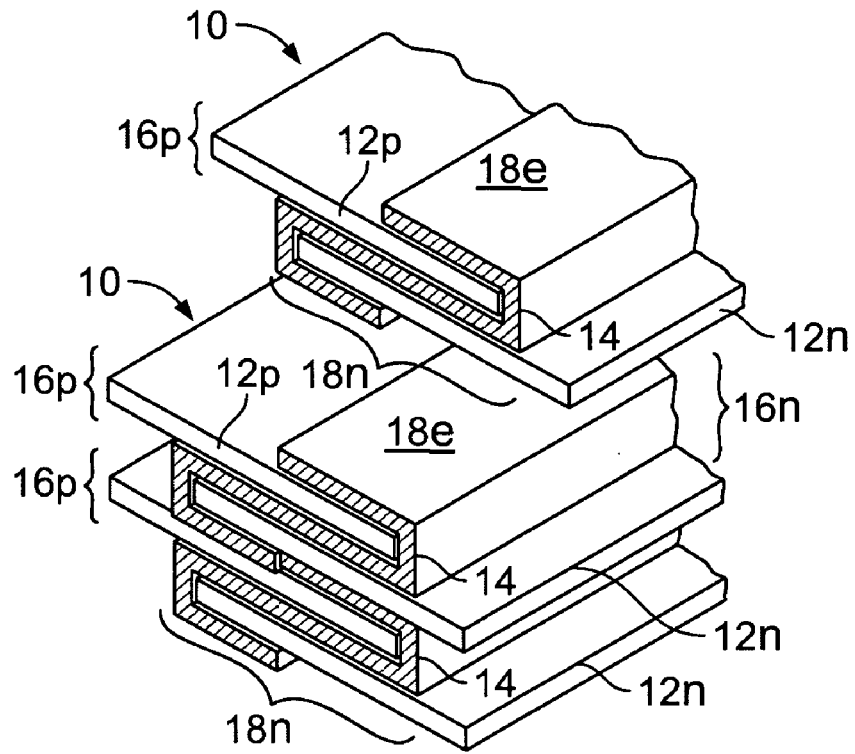


FIG. 1

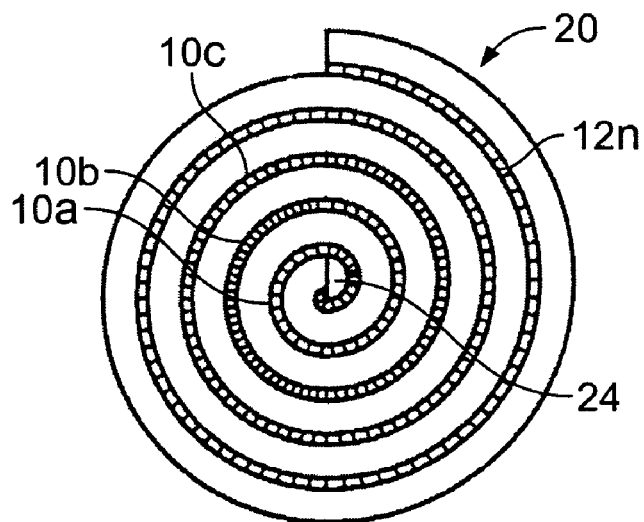


FIG. 2

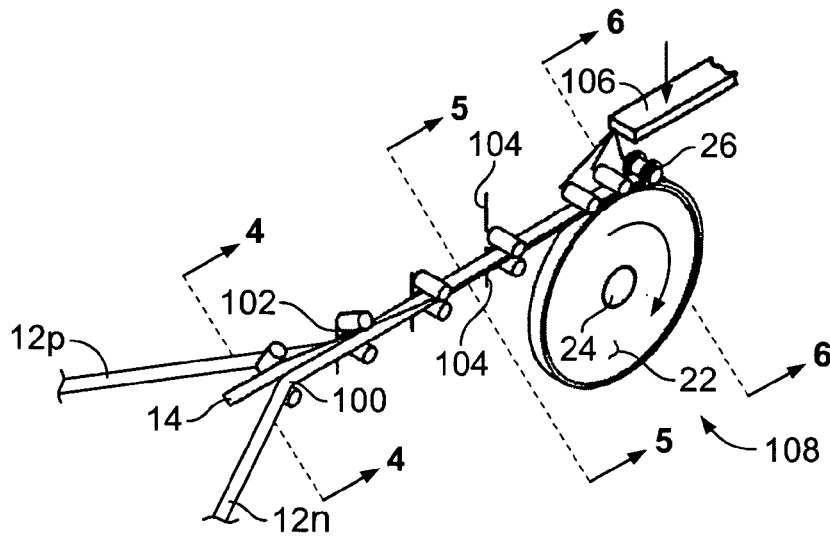


FIG. 3

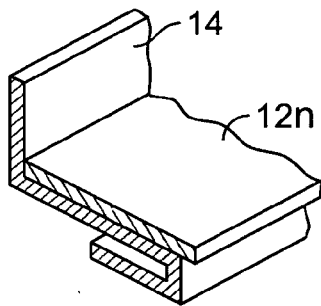


FIG. 4

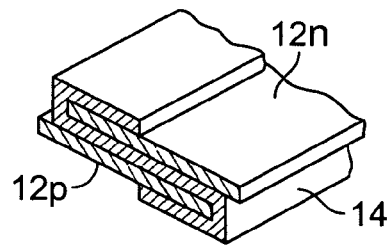


FIG. 5

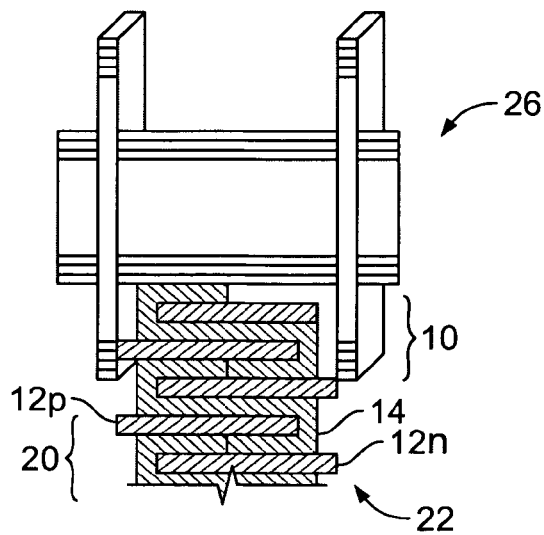


FIG. 6

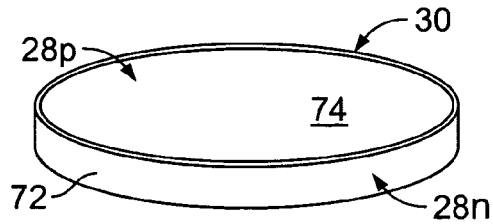


FIG. 7A

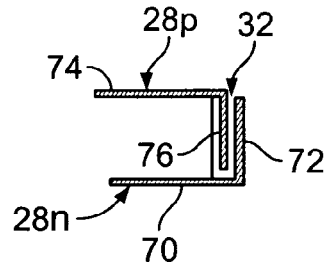


FIG. 7B

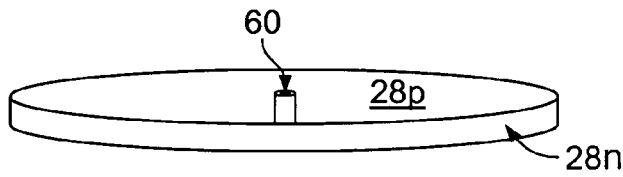


FIG. 7C

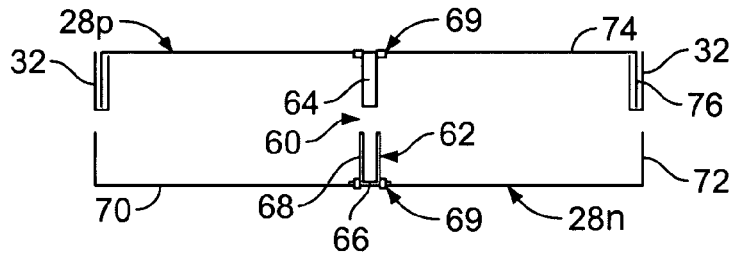


FIG. 7D

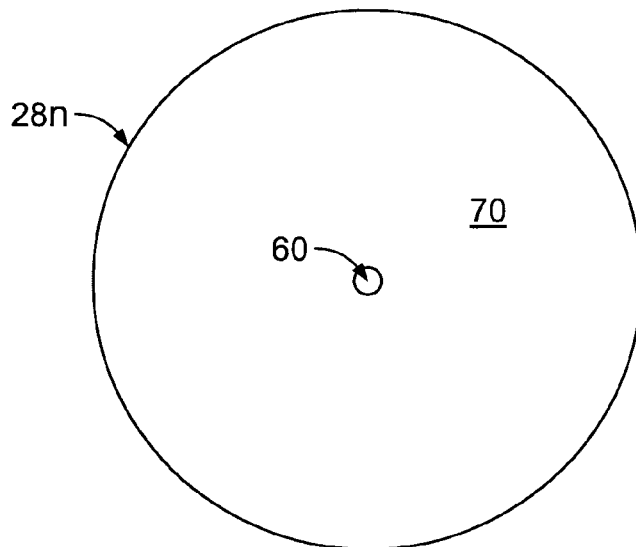


FIG. 8

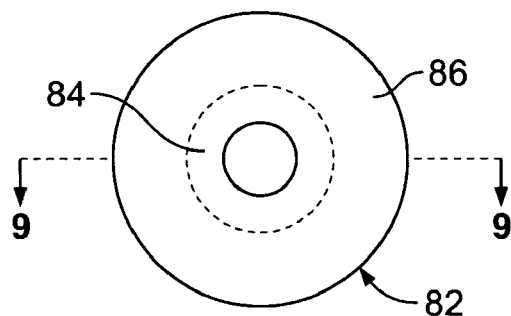


FIG. 9A

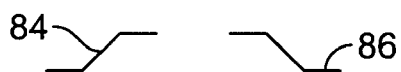


FIG. 9B

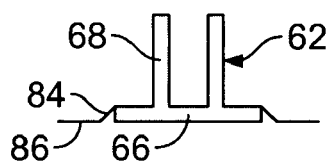


FIG. 9C

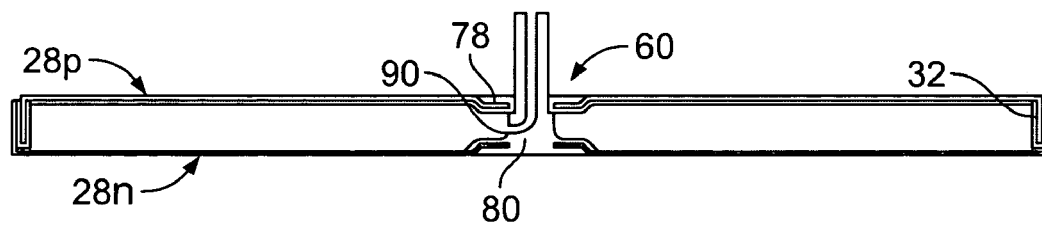


FIG. 10A

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