LEAD ACID

5632173

APPARATUS AND METHOD FOR COLD FORMING A RING ON A LEAD ALLOY BATTERY TERMINAL

Spiegelberg Bernard N; Brown Dennis J Germantown, WI, UNITED STATES assigned to Tulip Corporation

A method and apparatus utilizing a ring forming head to cold form a ring on a lead battery terminal. The apparatus includes a fixture, a rolling head having a plurality of rollers, and a drive system for engaging and rotating the rolling head and lead battery terminal relative to each other.

5635815

BATTERY EXERCISING PACER AND/OR EMERGENCY START MONITORING SYSTEM

Whitchurch Norton; Thayer James New Brighton, MN, UNITED STATES assigned to Whitchurch Norton

A battery pacer apparatus and method are configured for extending the life of lead-acid batteries. A high current discharge is applied for a limited time of about 10-40 seconds to remove lead sulphate deposits on the electrodes. Following discharge, the battery is fully recharged. The pacing discharge is initiated at least about once daily by a timing circuit. During the pacing discharge, the battery voltage is measured. A decrease in battery voltage to below a preset non-steady state failure value is indicative of imminent battery failure, setting off an alarm enabling replacement or servicing before the battery fails in service.

5637419

UP AND THROUGH BATTERY INTERCELL WELD

Hooke John W; Elwing Mary J F Warrensburg, MO, UNITED STATES assigned to Hawker Energy Products Inc

An up-and-through battery intercell connection for electrochemical batteries or cells is disclosed featuring battery partition wall extensions formed on battery partition walls located within a battery container through which lead intercell connector nuggets are secured to provide electrical connection between battery intercells. A battery container top is formed with recesses to accept the battery partition wall extensions. The container top is further formed with adhesive channels to accept a paste adhesive that allows the battery container top to be secured to the battery container without having to invert the battery during manufacture.

5645612

WELDING AND COVER SEALING MACHINE APPARATUS FOR BATTERY ASSEMBLY AND AN IMPROVED METHOD OF MANUFACTURING STORAGE BATTERIES

Shannon John; Shannon James Racine, WI, UNITED STATES assigned to Enersafe Corporation

Method and apparatus for manufacturing storage batteries. The method is directed toward manufacture of a storage battery with a single weld between intercell connectors, positive and negative plates and external terminals. The apparatus comprises a frame, holding and positioning components, a lead dispensing assembly and an edge-heater assembly for sealing the battery case. The apparatus and inventive method permit dispensing of molten lead into selective segments of the battery case substantially simultaneously with sealing of the battery case.