



[54] PASSIVE BATTERY CHARGING SYSTEM

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[57] ABSTRACT

[21] Appl. No.: 27,406

[22] Filed: Mar. 8, 1993

[51] Int. Cl.⁵ H02J 7/10

[52] U.S. Cl. 320/15; 320/2; 320/57

[58] Field of Search 320/15, 17, 57, 2

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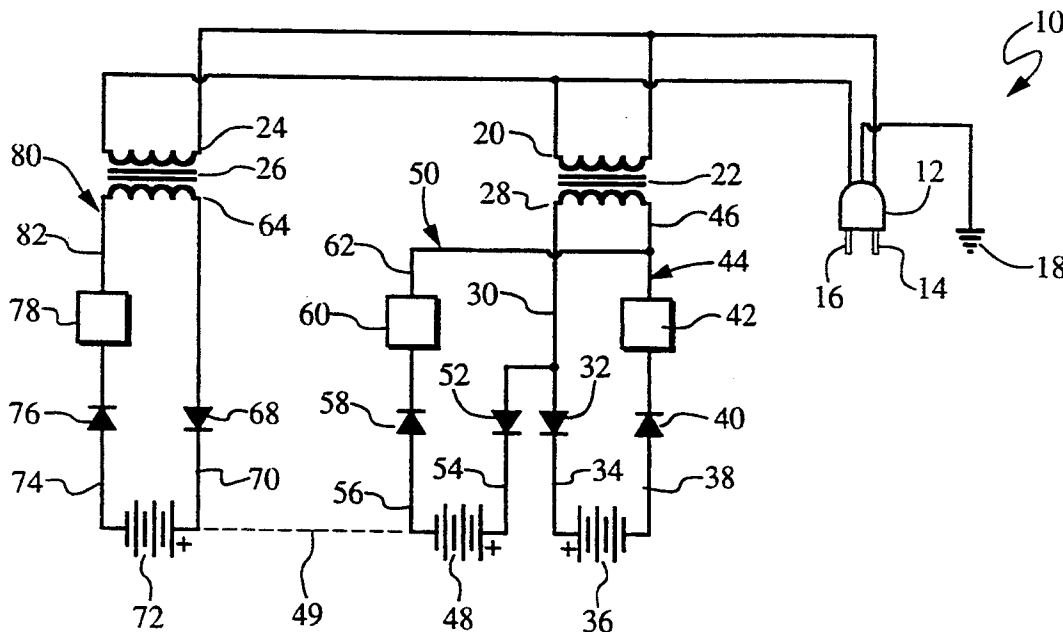
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A battery charger for simultaneously slow charging and thereafter maintaining a charge in a plurality of plate-type batteries includes a first transformer connected through a circuit loop to a first battery wherein the circuit loop includes a rectifier, and a current limiter and visual indicator of the charge level of the battery. A second transformer is connected through another circuit loop to one battery and through a third circuit loop to a second battery. The circuit loop of the first transformer may be connected to a first battery with one of the circuit loops of the second transformer being connected to a second battery connected in series to the first battery thus allowing the two loops to remain isolated from each other and allow for charging of the series connected batteries without removal of the series connection. In a second embodiment of the invention, a switch is connected in the loop to bypass the current limiter to allow a fast charge condition. A small indicator light is connected to the switch to indicate a fast charge condition. Thus, the charger may be switched from a slow passive charge condition to a fast charge condition, and back to a slow charge condition.

Primary Examiner—Robert J. Hickey

14 Claims, 5 Drawing Sheets



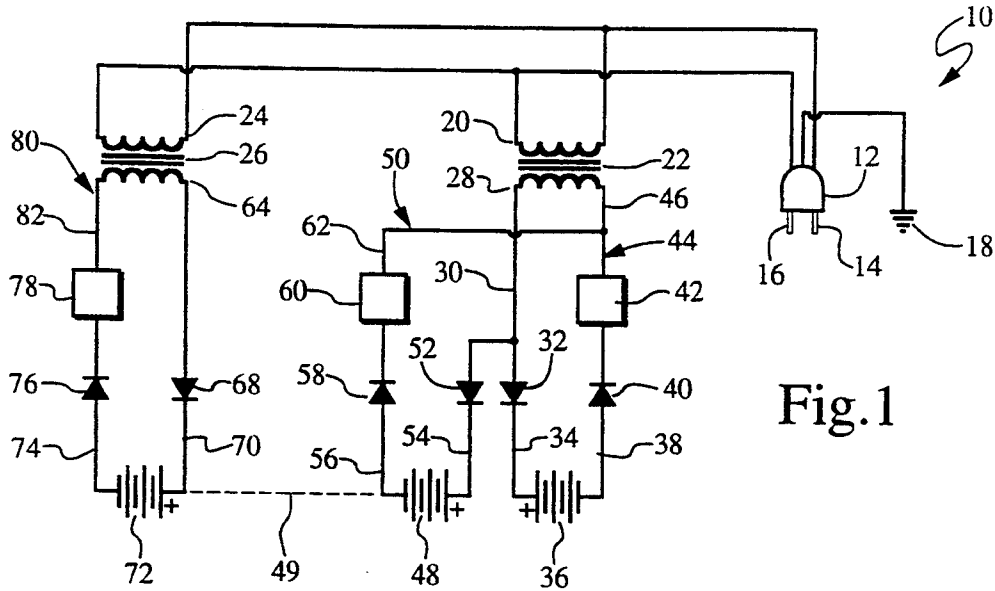


Fig. 1

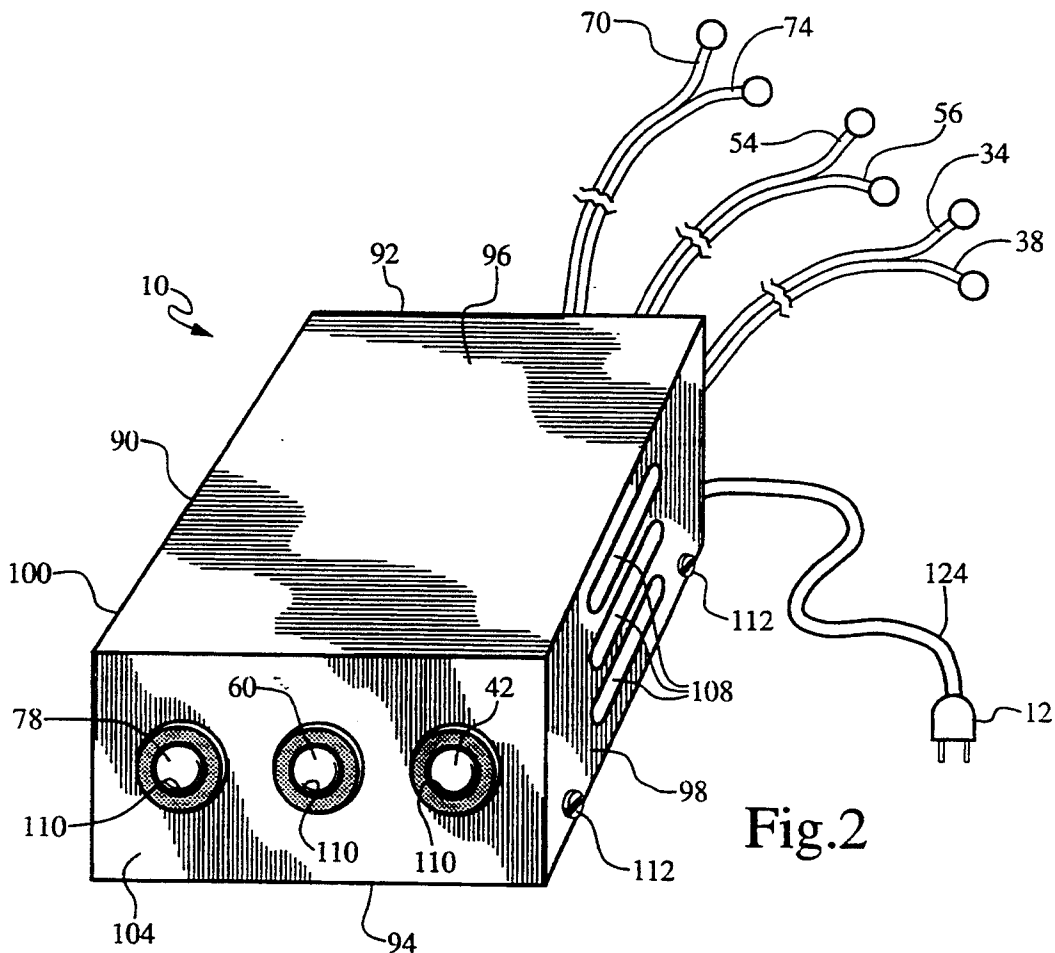


Fig. 2

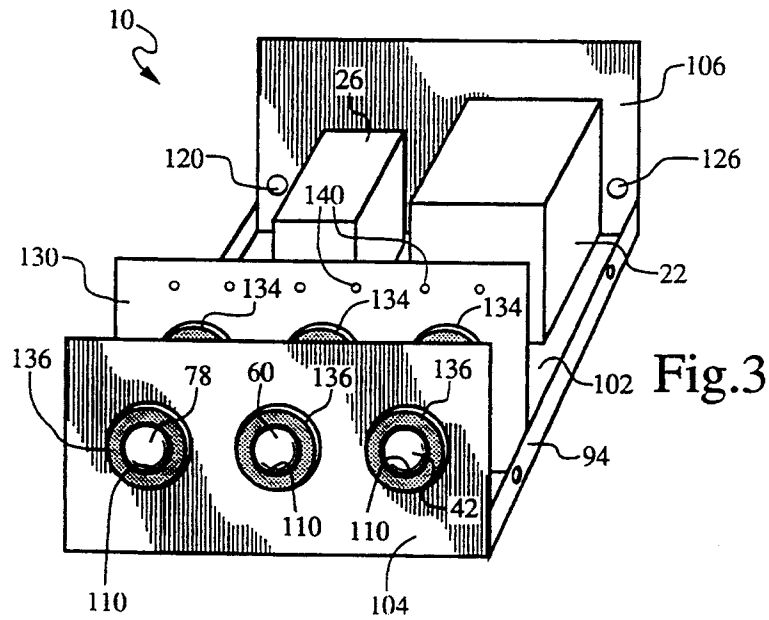


Fig. 3

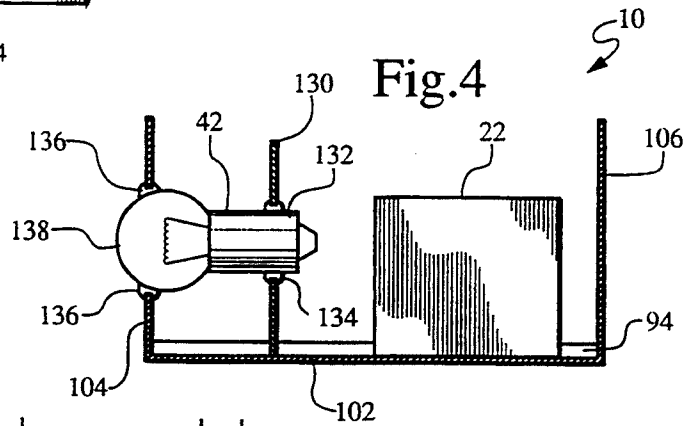


Fig. 4

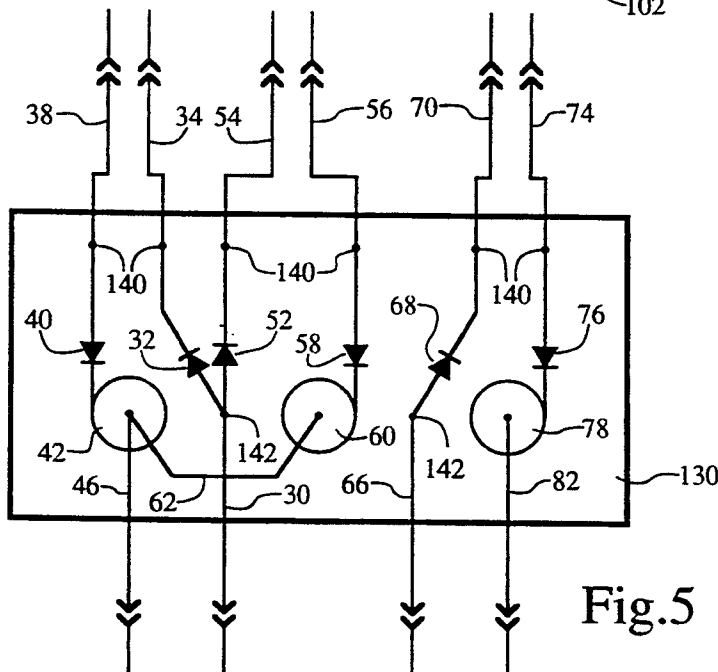
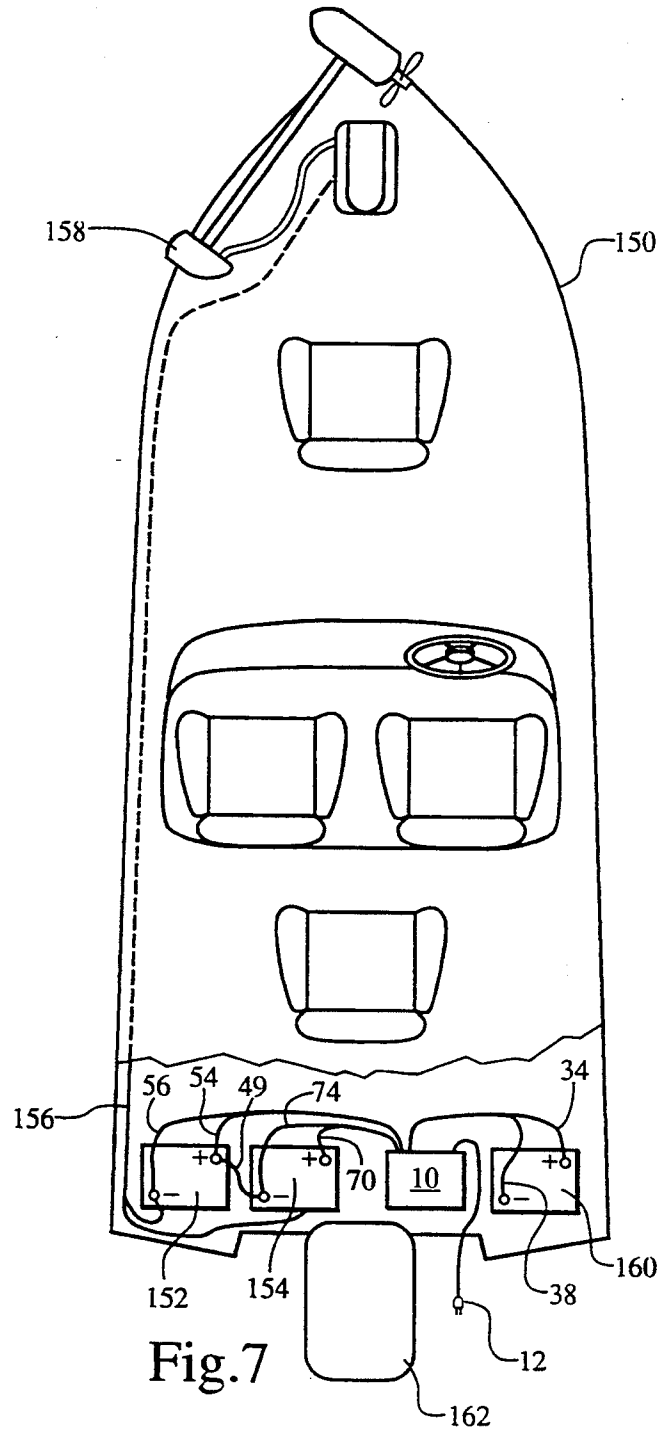
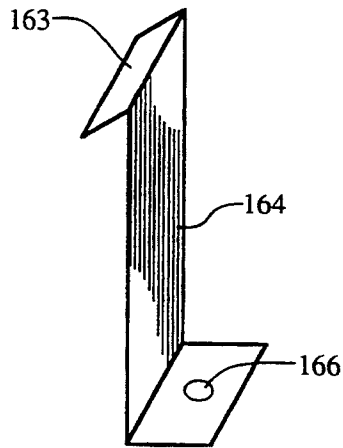
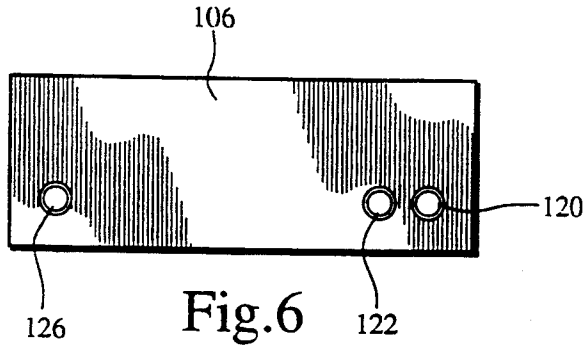


Fig. 5



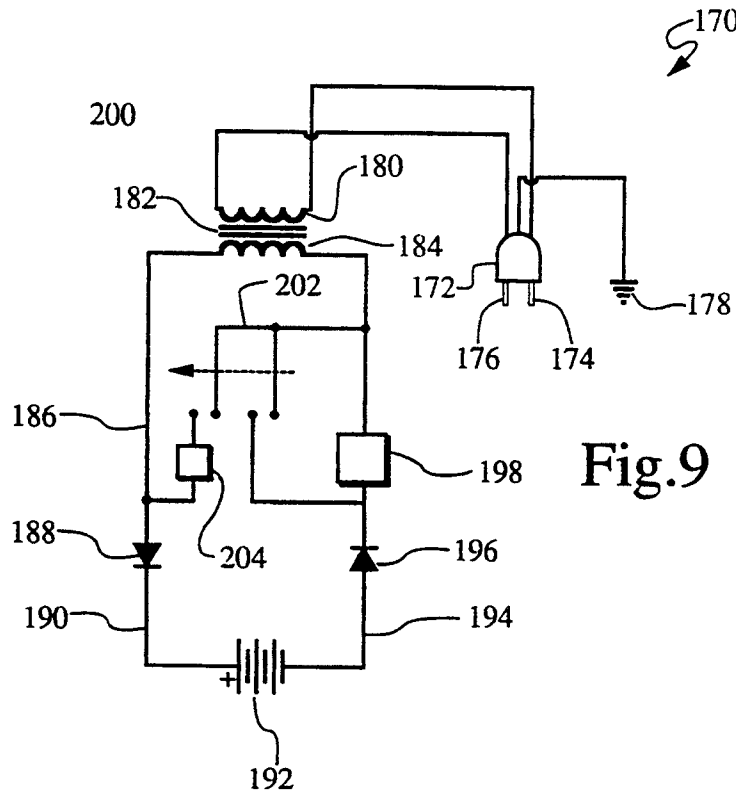


Fig.9

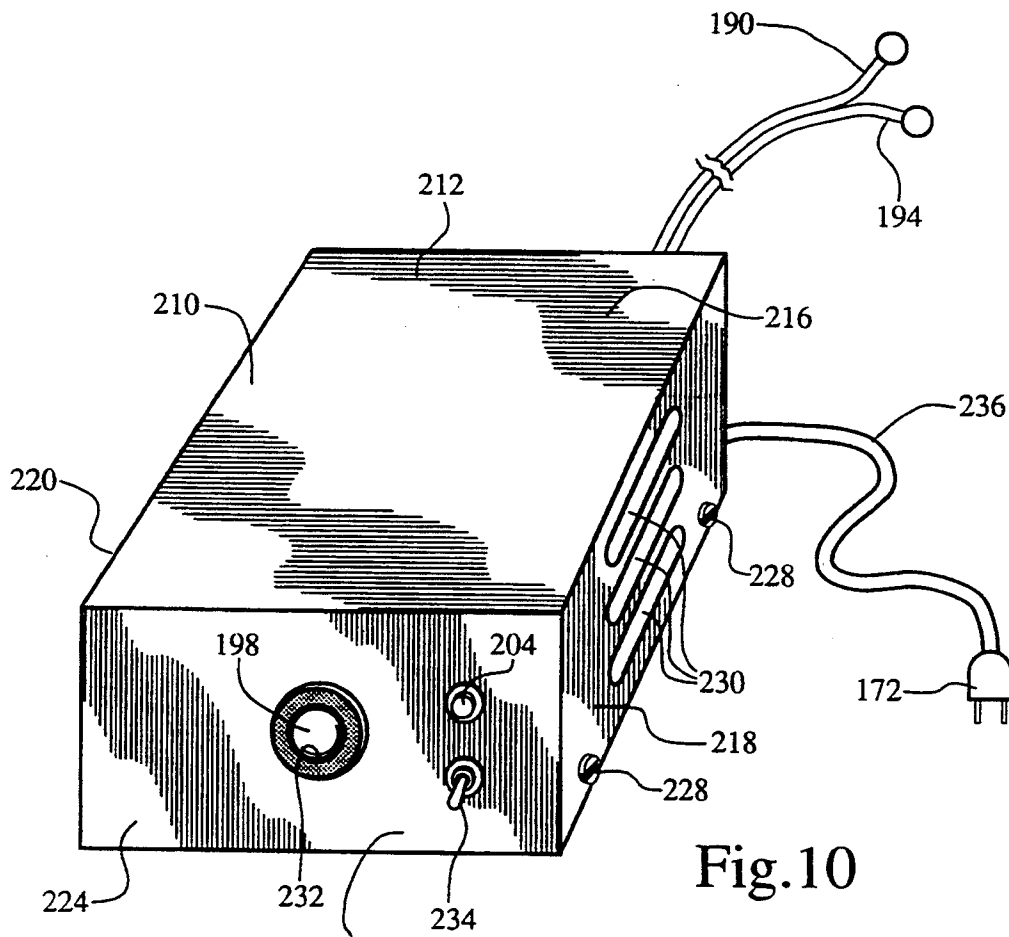


Fig.10

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