

[54] **HAND HELD BATTERY OPERATED DEVICE AND CHARGING MEANS THEREFOR**

[75] Inventors: **Leon M. Roszyk, Berwyn; Louis A. Barnas, Jr., Cary, both of Ill.**

[73] Assignee: **Sunbeam Corporation, Chicago, Ill.**

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Related U.S. Application Data

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[52] U.S. Cl. **320/2, 320/57**

[51] Int. Cl. **H02j 7/00**

[58] Field of Search **320/2, 53, 57, 59; 336/83, 336/86, 87, 90, 96, 119, 136, 182; 310/47, 50**

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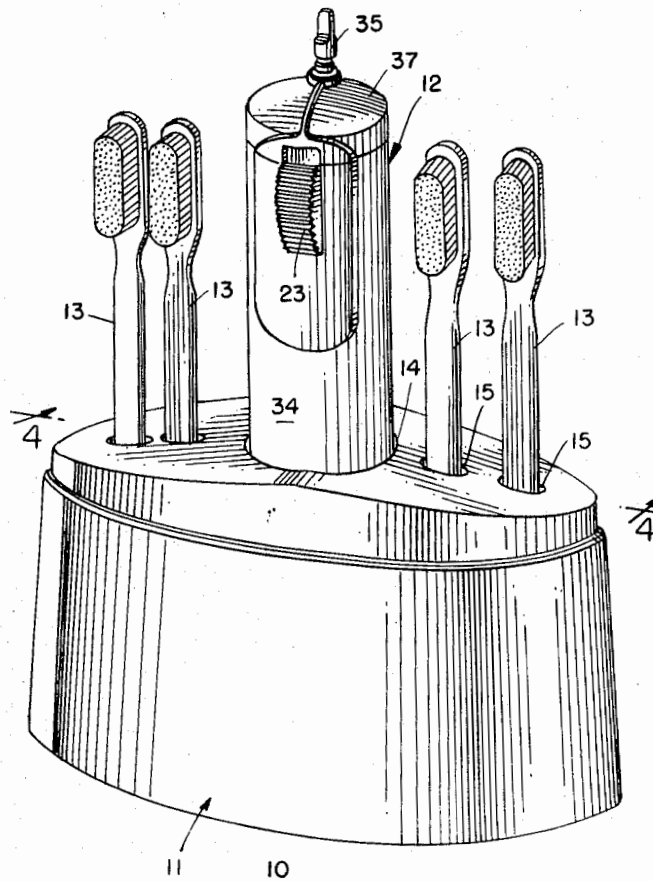
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[57] **ABSTRACT**

A battery operated appliance comprising a power unit having a rechargeable battery therein and a charging unit having a recess for insertion of the power unit therein for recharging the battery within the power unit, a transformer including one winding in the power unit and one winding in the charging unit. In one embodiment the magnetic core structure associated with one of the windings is at least in part defined by the casing of the rechargeable battery. Various core structures may be employed to ensure good inductive coupling between the respective windings.

5 Claims, 9 Drawing Figures



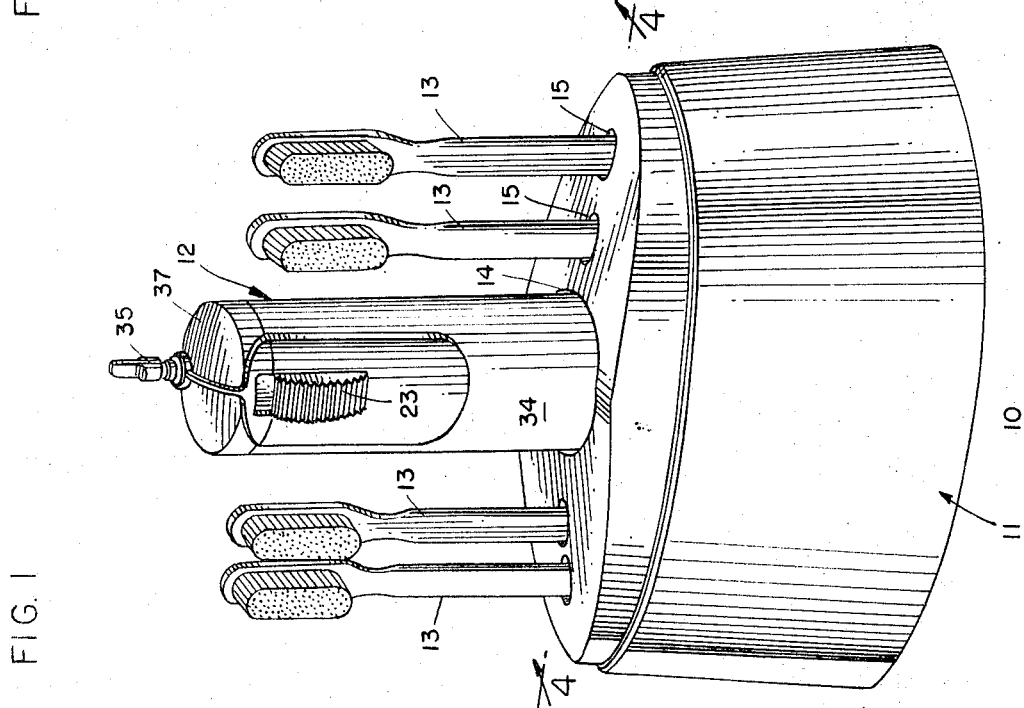
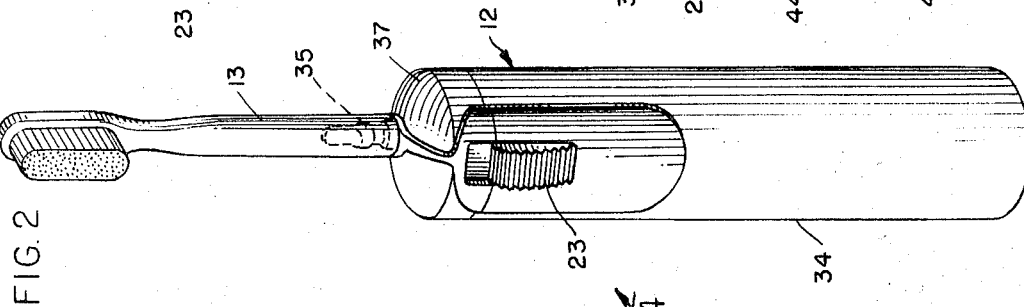
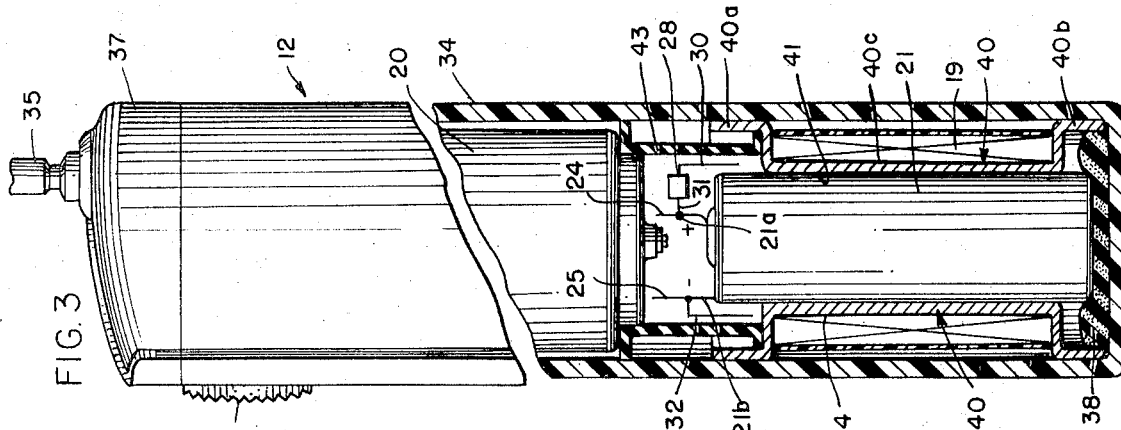


FIG. 1

FIG. 2

FIG. 3

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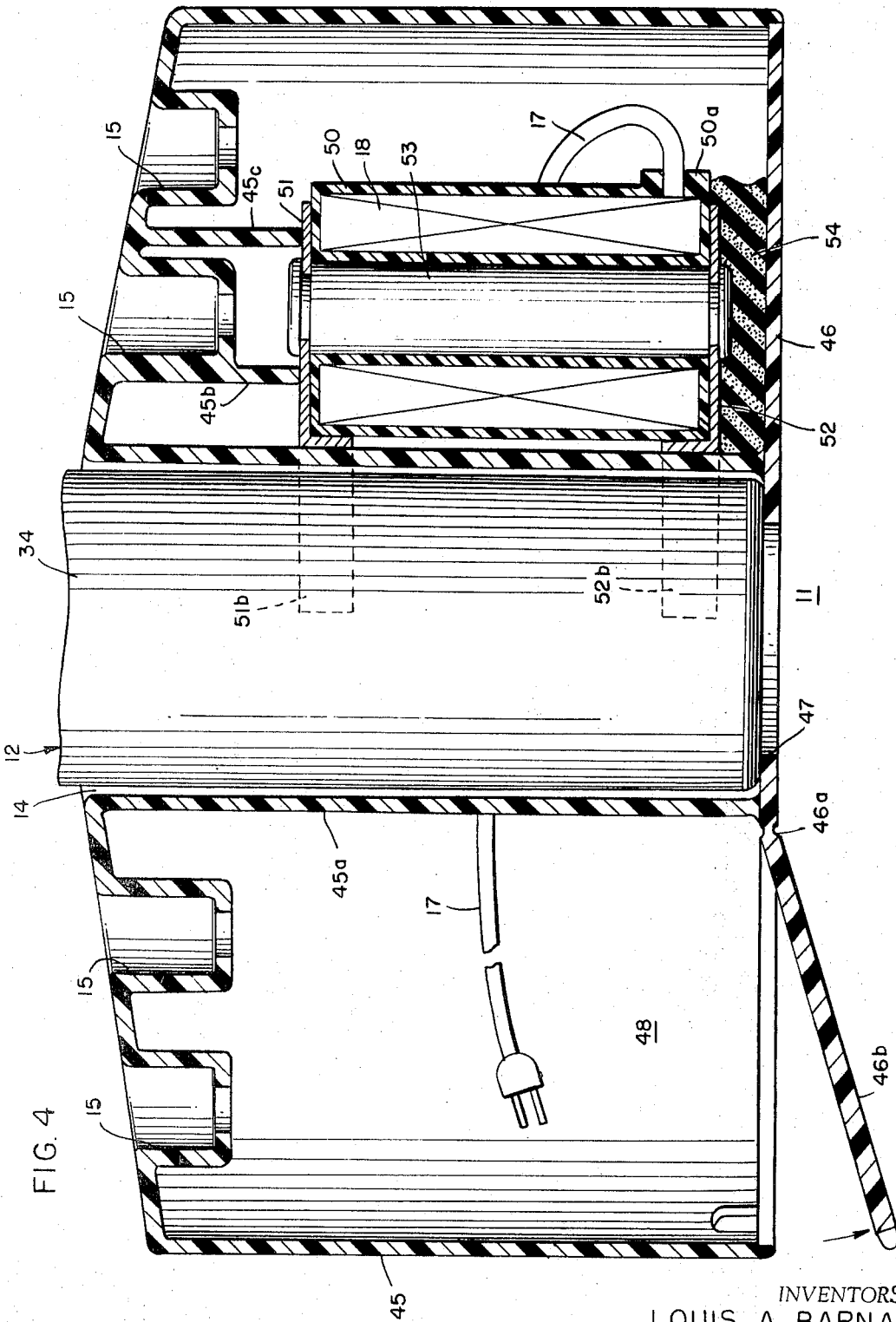
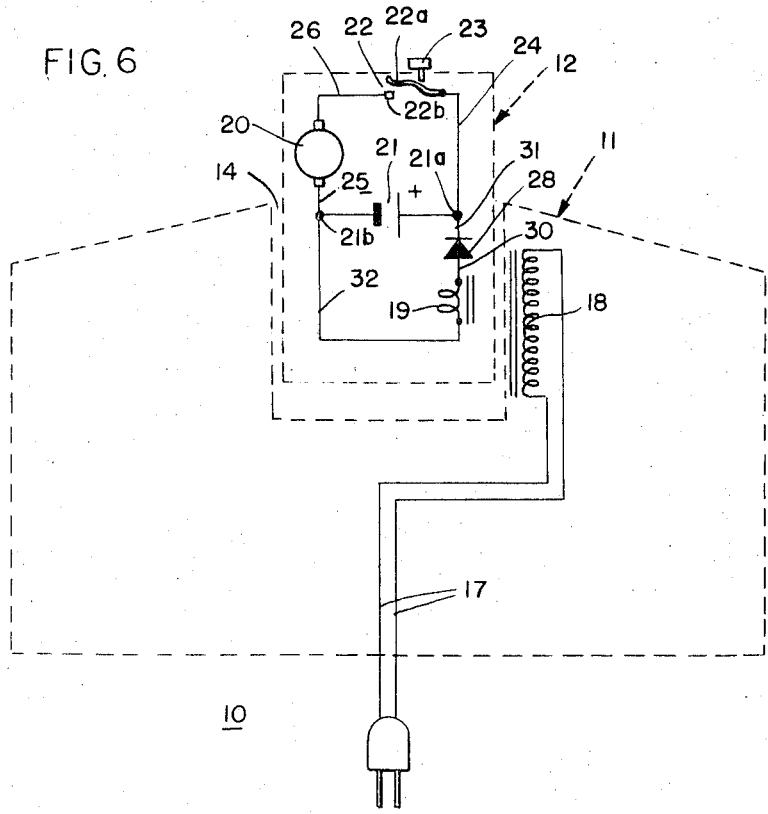
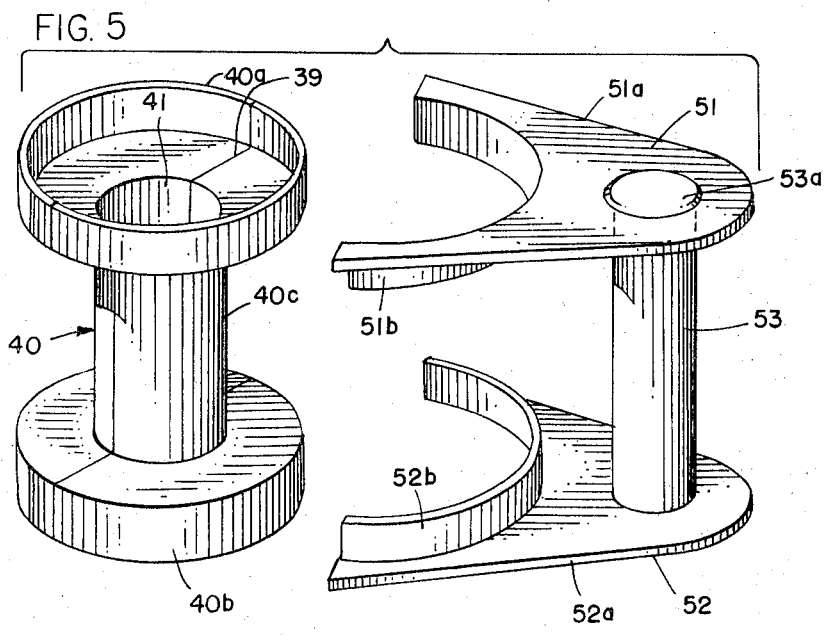


FIG. 4

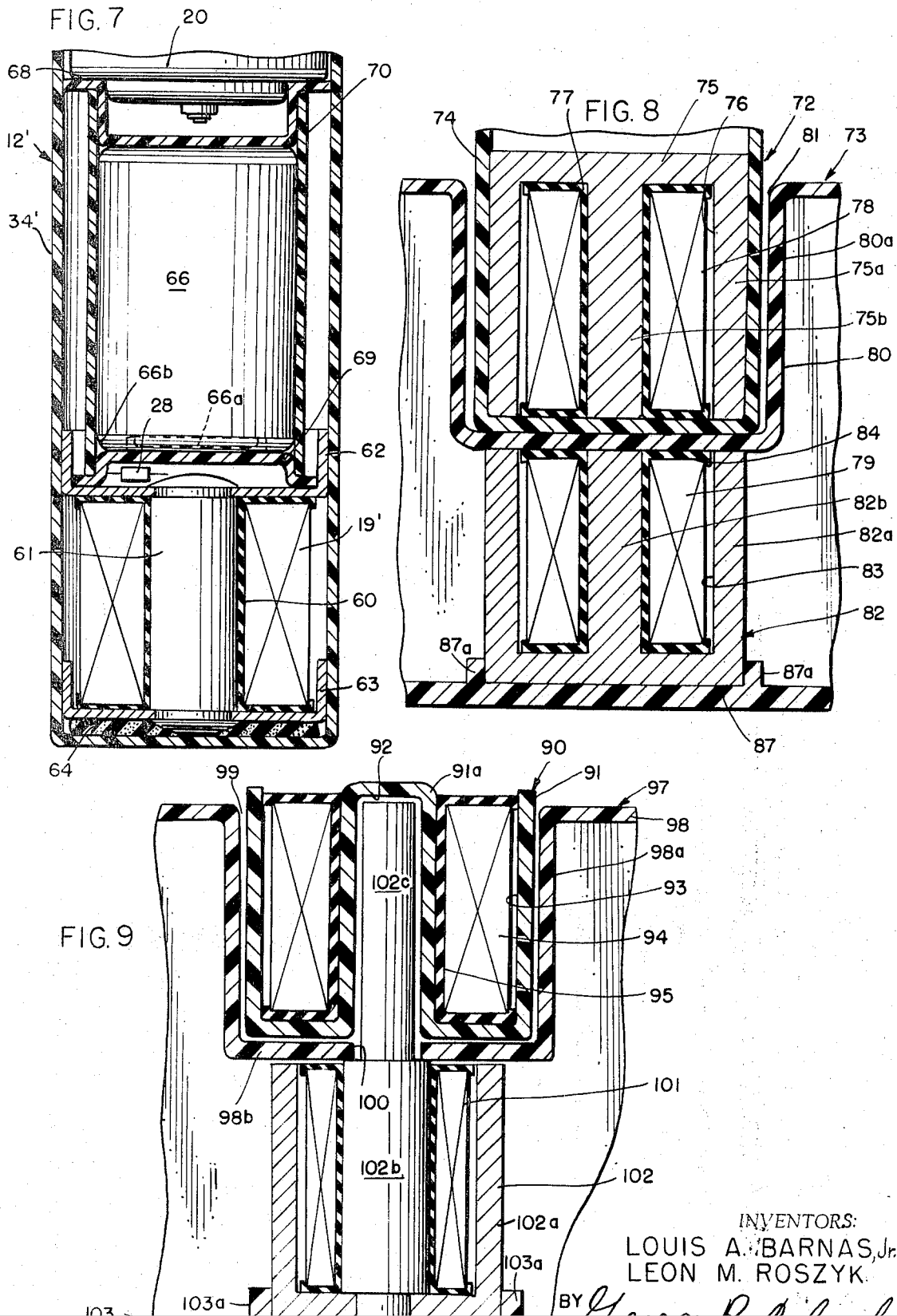
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