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Schallhorn et al.

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(54) **SELECTIVE ACTIVATION OF ELECTRODES WITHIN AN INPLANTABLE LEAD**

(75) Inventors: **Rick S. Schallhorn**, Lake Elmo; **Gary W. King**, Fridley; **Gregory A. Hrdlicka**, Plymouth, all of MN (US)

(73) Assignee: **Medtronic, Inc.**, Minneapolis, MN (US)

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(21) Appl. No.: **09/517,422**

(22) Filed: **Mar. 2, 2000**

Related U.S. Application Data

(63) Continuation-in-part of application No. 09/024,162, filed on Feb. 17, 1998, now Pat. No. 6,038,480, which is a continuation-in-part of application No. 08/627,576, filed on Apr. 4, 1996, now abandoned.

(51) **Int. Cl.**[7] **A61N 1/05**

(52) **U.S. Cl.** **607/116**; 607/117; 600/393

(58) **Field of Search** 607/116, 117, 607/119, 122, 123, 129, 148; 600/373, 374, 377, 378, 393

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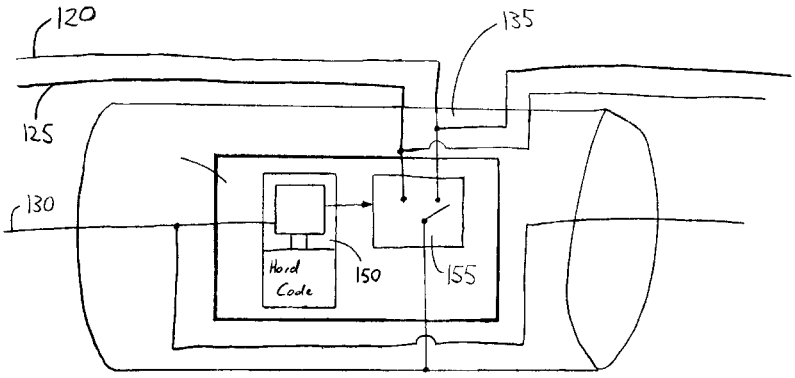
Primary Examiner—Kennedy Schaetzle
(74) *Attorney, Agent, or Firm*—Banner & Witcoff, Ltd.

(57) **ABSTRACT**

Percutaneously implantable multi-electrode lead adapted to interact with electrically excitable tissue. Electrodes are selected by a signal generator having a main controller that identifies via unique key values electrodes to be activated to stimulate electrically excitable tissue. Electrodes and their associated controllers are coupled such that relatively few wires are used to couple each electrode to the main controller.

15 Claims, 10 Drawing Sheets



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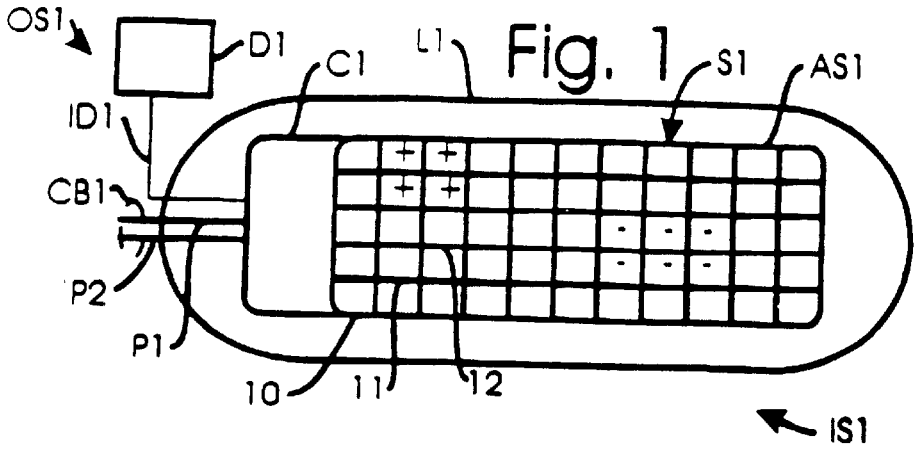


Fig. 1

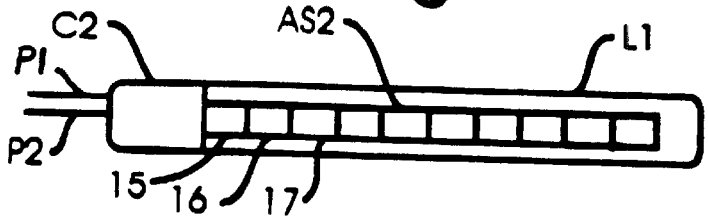


Fig. 2

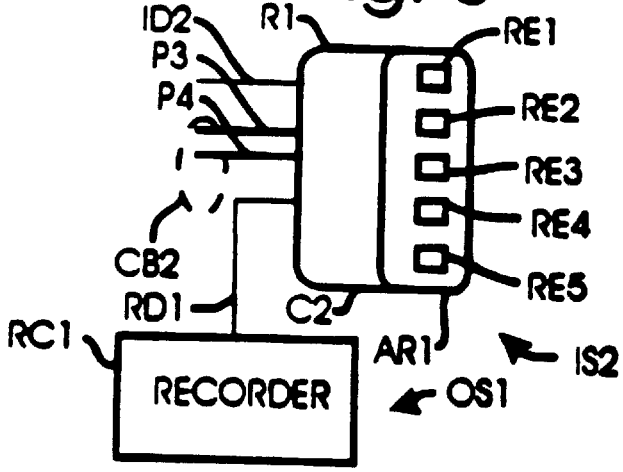
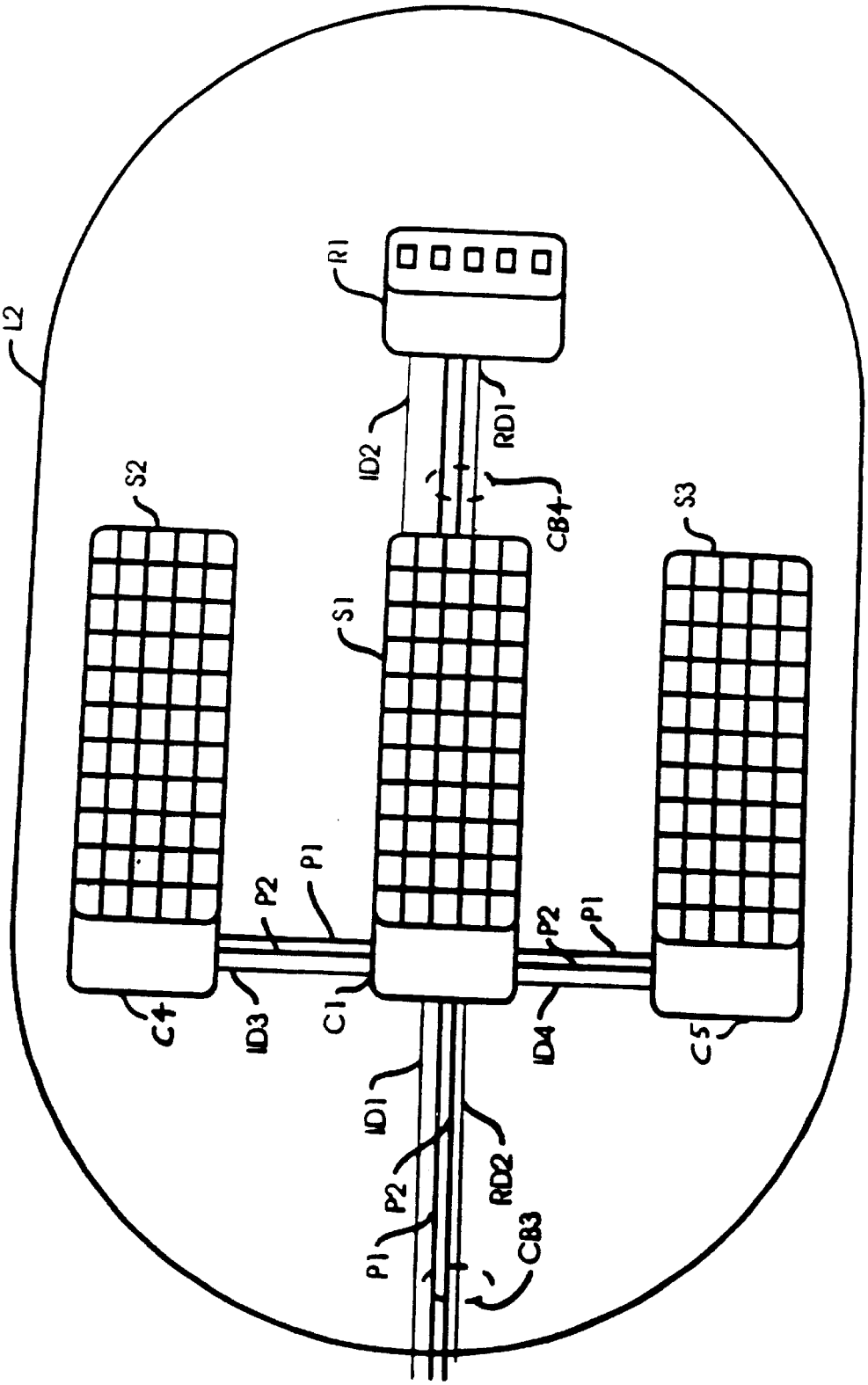


Fig. 3

Fig. 4



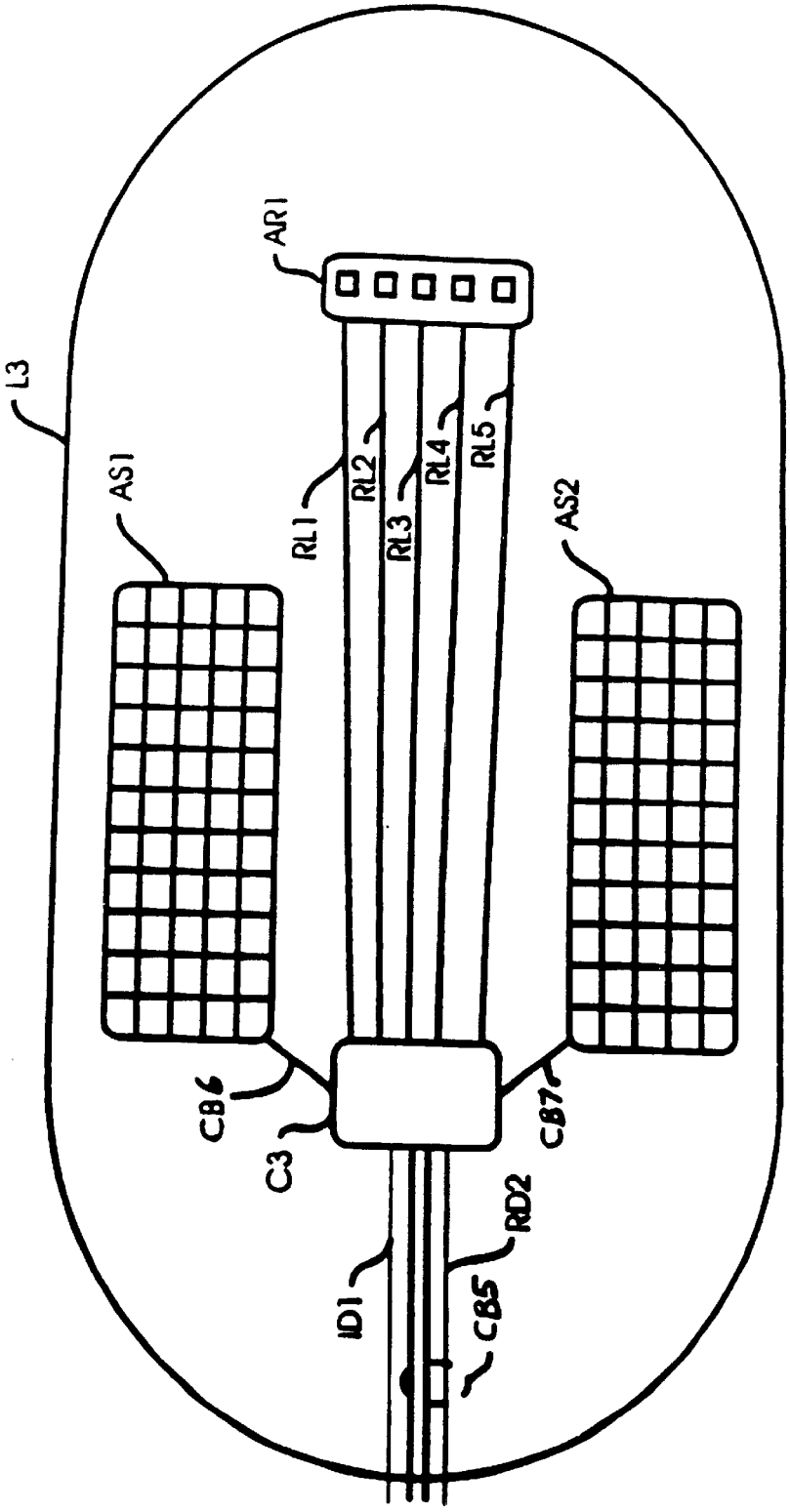


Fig. 5

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