



[54] MEDICAL SENSOR WITH MODULATED ENCODING SCHEME

[51] Int. Cl.⁷ A61B 5/00

[52] U.S. Cl. 600/310; 600/322; 600/323

[58] Field of Search 600/310, 322-324, 600/475-480, 300; 356/41

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[56] References Cited

U.S. PATENT DOCUMENTS

5,645,059 7/1997 Fein 600/323
5,779,630 7/1998 Fein 600/323

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[*] Notice: This patent is subject to a terminal disclaimer.

[57] ABSTRACT

The present invention provides an encoding mechanism for a medical sensor which uses a modulated signal to provide the coded data to a remote analyzer. The modulated signal could be, for instance, a pulse width modulated signal or a frequency modulated signal. This signal is amplitude independent and thus provides a significant amount of noise immunity.

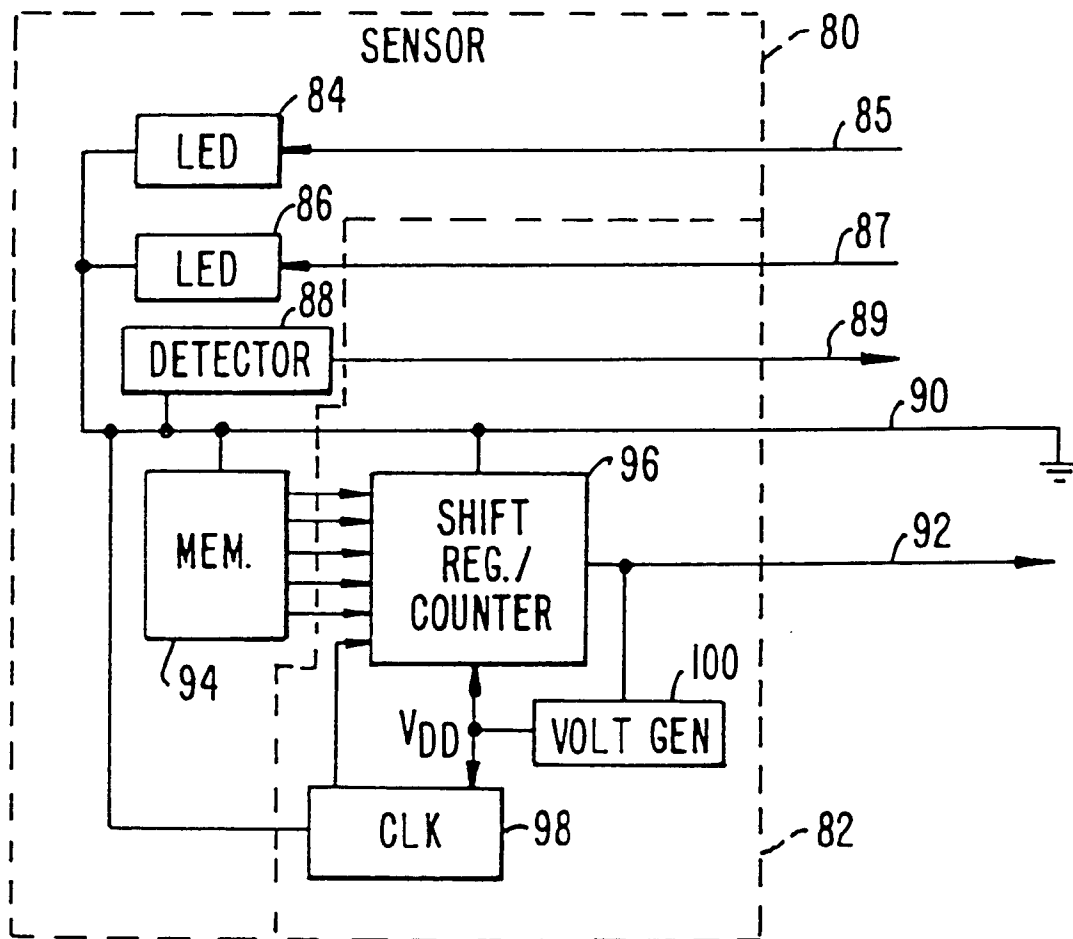
[21] Appl. No.: 09/073,361

[22] Filed: May 6, 1998

24 Claims, 5 Drawing Sheets

Related U.S. Application Data

[60] Continuation of application No. 08/451,630, May 26, 1995, Pat. No. 5,779,630, which is a division of application No. 08/168,449, Dec. 17, 1993, Pat. No. 5,645,059.



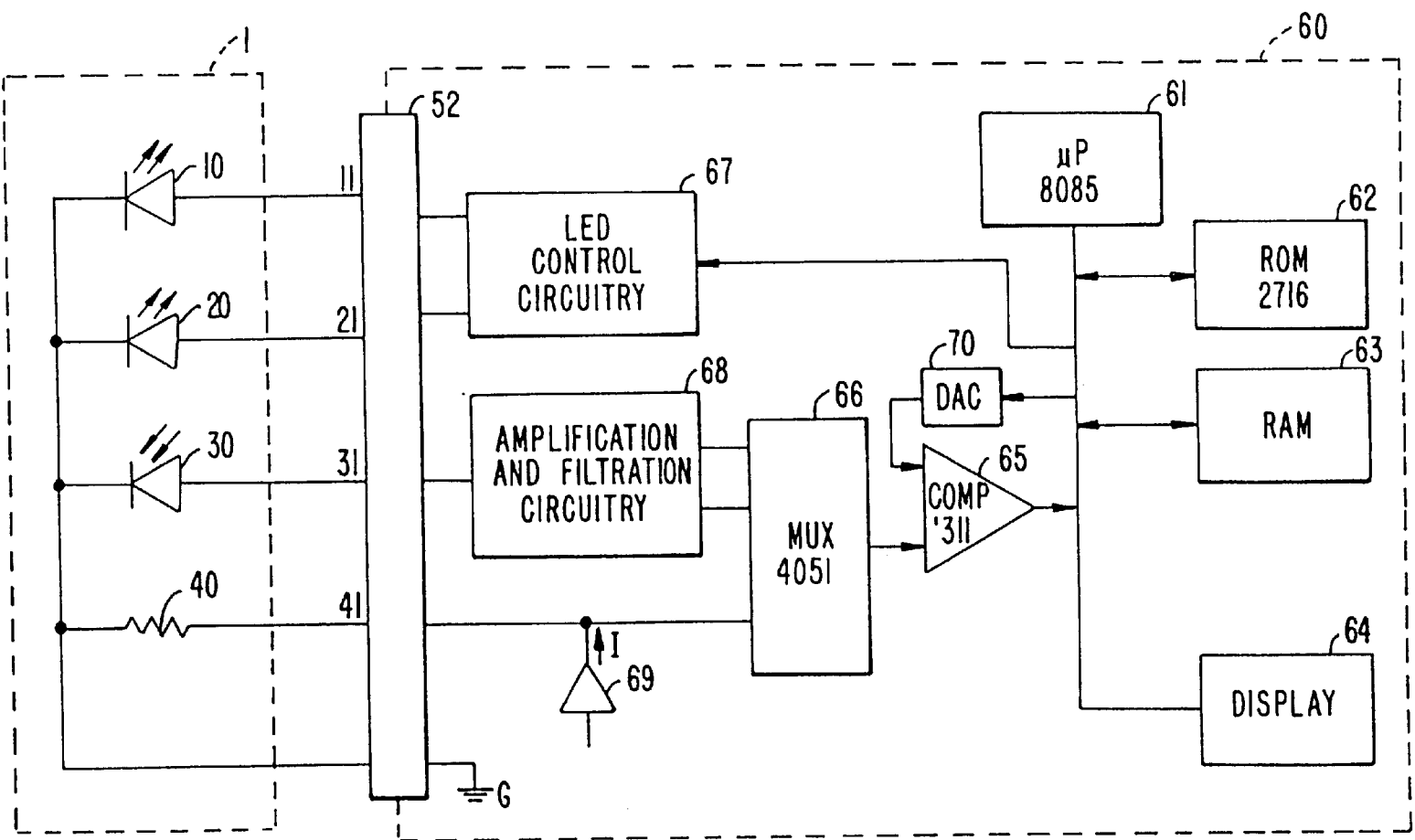


FIG. 1.

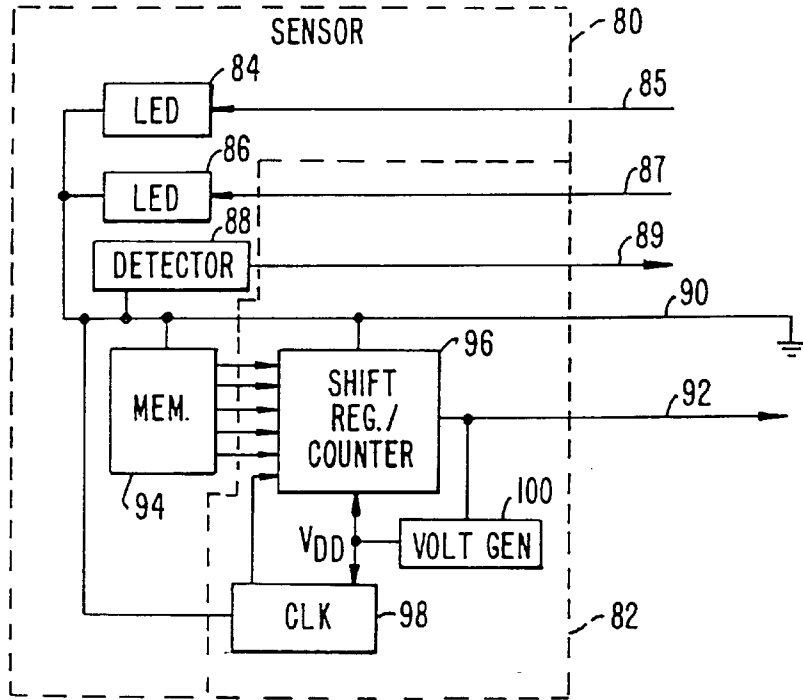


FIG. 2.

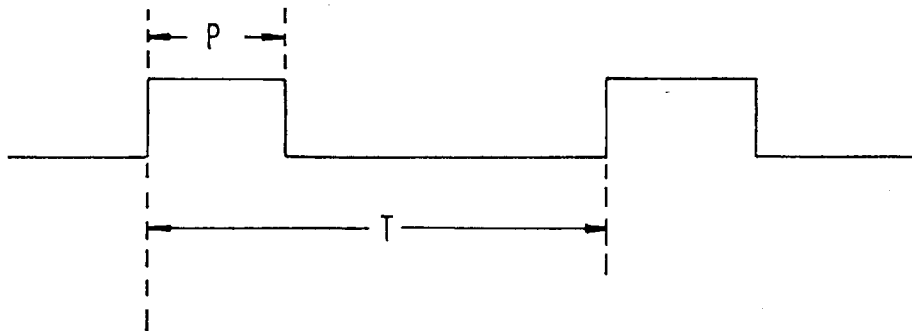


FIG. 3.

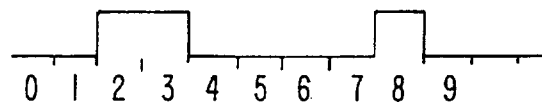


FIG. 4.

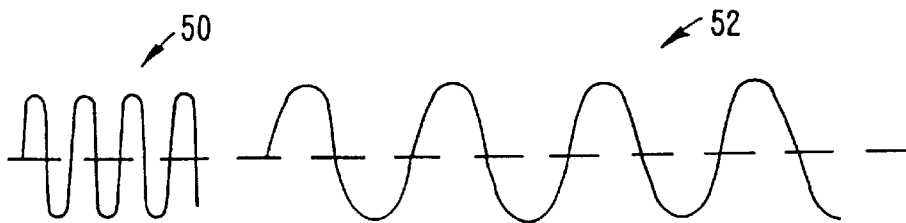


FIG. 5.

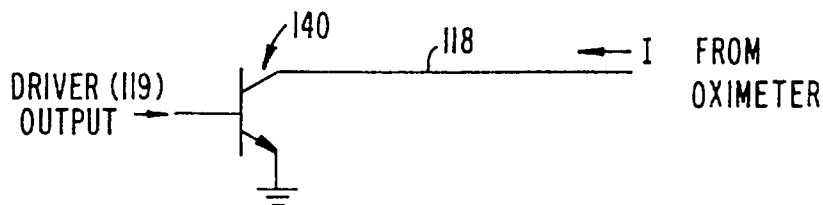


FIG. 7.

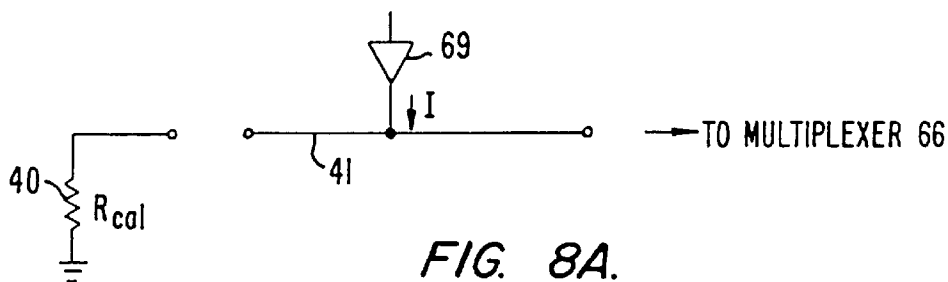


FIG. 8A.

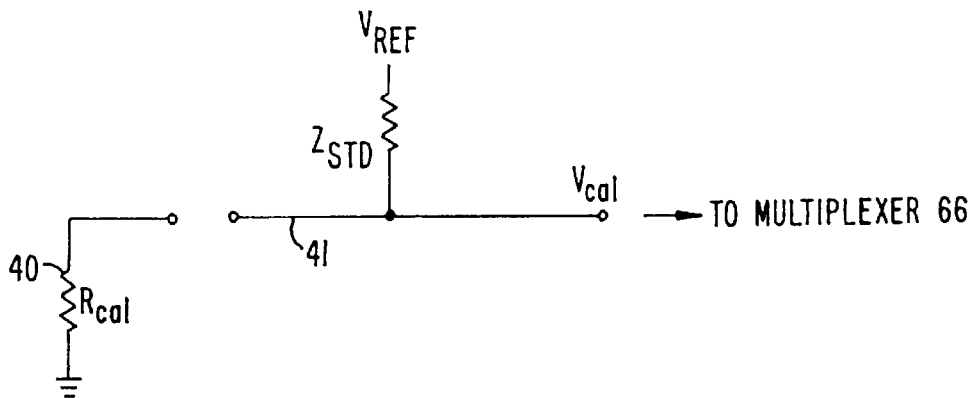


FIG. 8B.

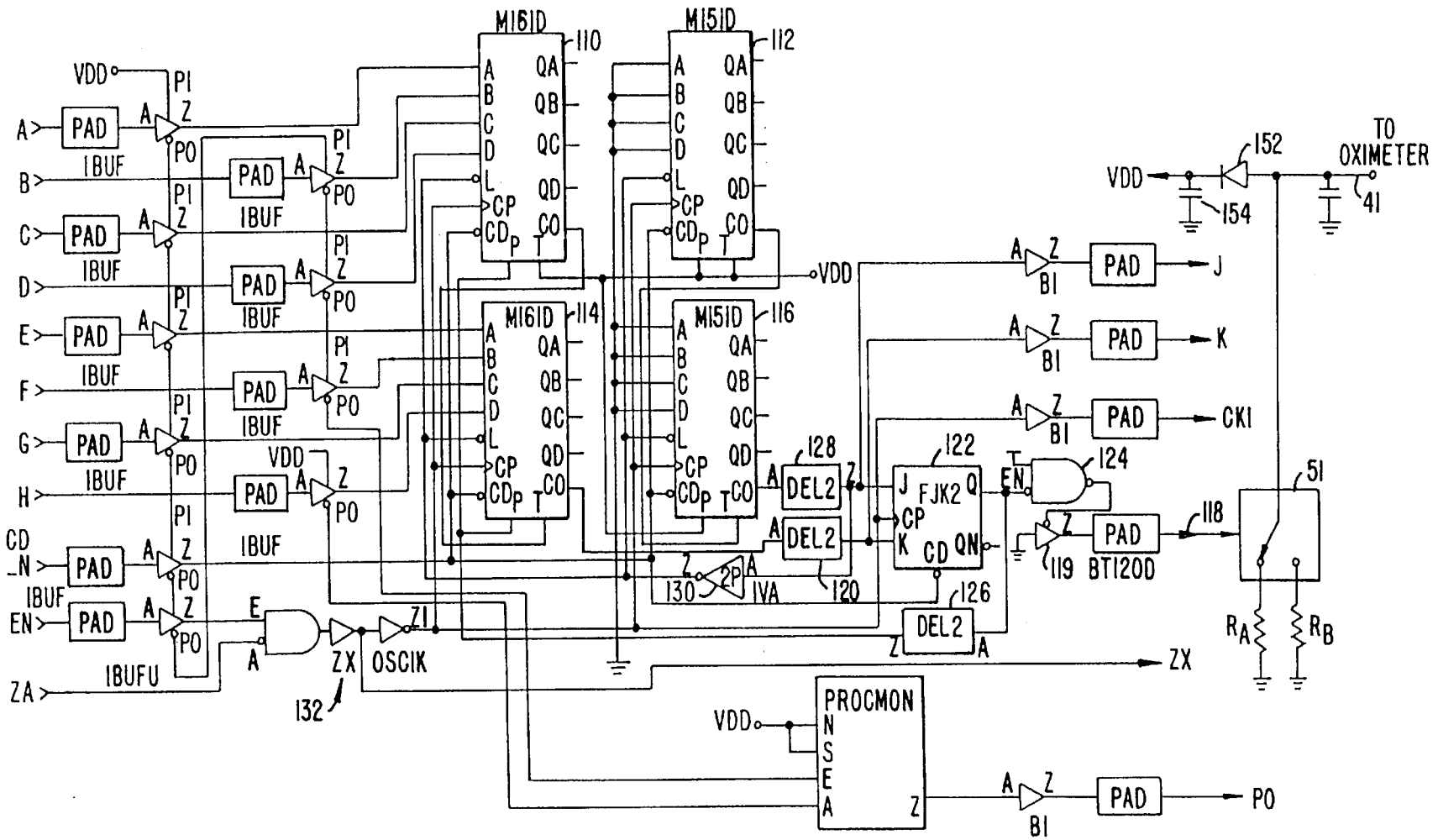


FIG. 6.

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