

(12) **United States Patent**
Stubbs et al.

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- (54) **EXERCISE MONITORING SYSTEM AND METHODS**
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- (*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

5,622,180 A	4/1997	Tammi et al.	
5,627,548 A	5/1997	Woo et al.	
5,632,279 A	5/1997	Heikkilä	
5,690,119 A	11/1997	Rytky et al.	
5,731,757 A	3/1998	Layson, Jr.	
5,779,631 A	7/1998	Chance	
5,781,155 A	7/1998	Woo et al.	
5,810,722 A	9/1998	Heikkilä	
5,840,039 A	11/1998	Heikkilä	
5,852,401 A	12/1998	Kita	
5,884,198 A	3/1999	Kese et al.	
5,889,493 A	3/1999	Endo	
5,891,042 A	4/1999	Sham et al.	
5,905,460 A	5/1999	Odagiri et al.	
5,919,133 A	7/1999	Taylor et al.	
6,002,982 A	12/1999	Fry	
6,013,007 A	* 1/2000	Roots et al.	482/8
6,032,108 A	* 2/2000	Seiple et al.	702/97
6,083,248 A	7/2000	Thompson	
6,148,262 A	11/2000	Fry	
6,148,280 A	* 11/2000	Kramer	703/153
6,152,856 A	11/2000	Studor et al.	
6,199,550 B1	3/2001	Wiesmann et al.	
6,285,314 B1	* 9/2001	Nagatsuma et al.	482/8

(21) Appl. No.: **09/436,515**

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- (51) **Int. Cl.⁷** **A63B 21/00**
- (52) **U.S. Cl.** **482/8; 482/900; 482/5**
- (58) **Field of Search** 482/1-9, 900-902; 702/127, 141, 142, 150, 153, 97; 701/213-216, 207

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,566,461 A	1/1986	Lubell et al.
5,081,991 A	1/1992	Chance
5,148,002 A	9/1992	Kuo et al.
5,167,230 A	12/1992	Chance
5,318,487 A	6/1994	Golen et al.
5,345,244 A	9/1994	Gildea et al.
5,408,444 A	4/1995	Kita et al.
5,456,262 A	10/1995	Birnbaum
5,458,548 A	10/1995	Crossing et al.
5,464,021 A	11/1995	Birnbaum
5,486,818 A	1/1996	Loponen
5,491,474 A	2/1996	Suni et al.
5,564,417 A	10/1996	Chance
5,575,284 A	11/1996	Athan et al.
5,589,835 A	12/1996	Gildea et al.
5,611,346 A	3/1997	Heikkilä et al.

FOREIGN PATENT DOCUMENTS

WO	WO9812599	3/1998
WO	WO9923524	5/1999
WO	WO9923525	5/1999
WO	WO0141879	6/2001

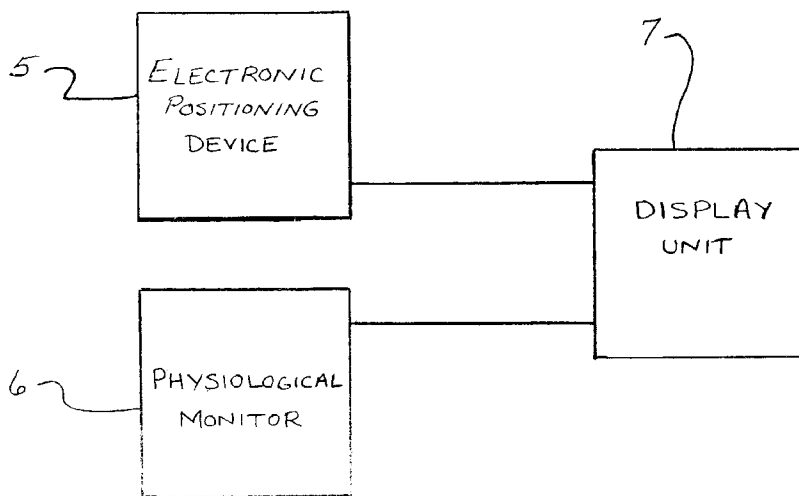
* cited by examiner

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(57) **ABSTRACT**

An exercise monitoring system which includes an electronic positioning device; a physiological monitor; and a display unit configured for displaying data provided by the electronic positioning device and the physiological monitor.

32 Claims, 12 Drawing Sheets



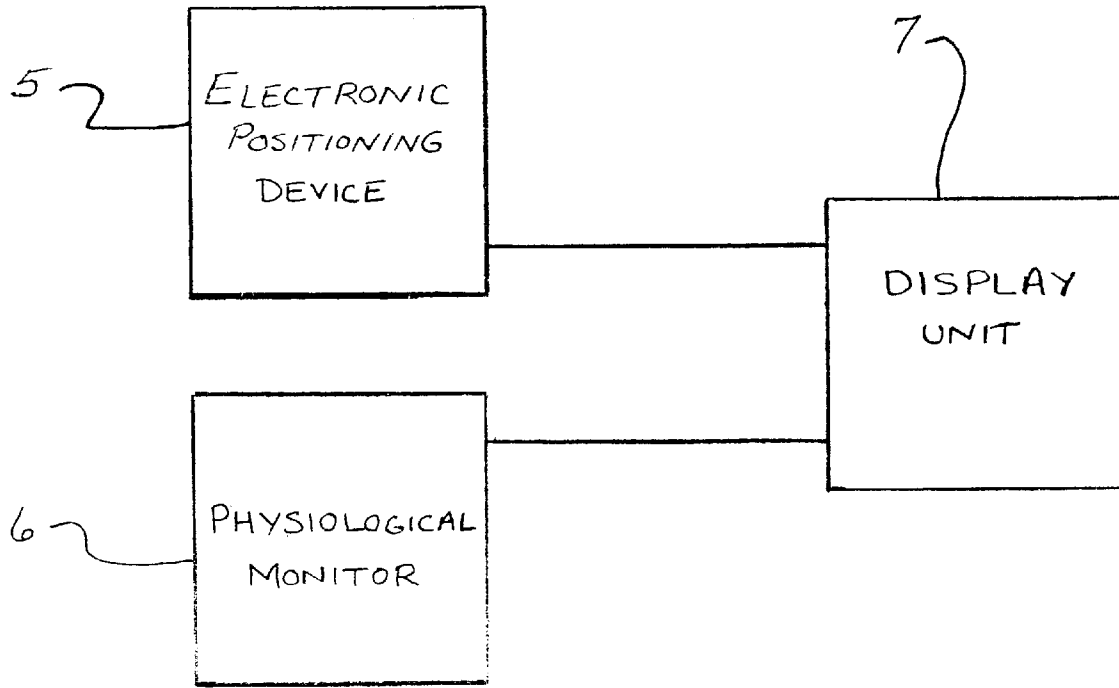


FIG. 1

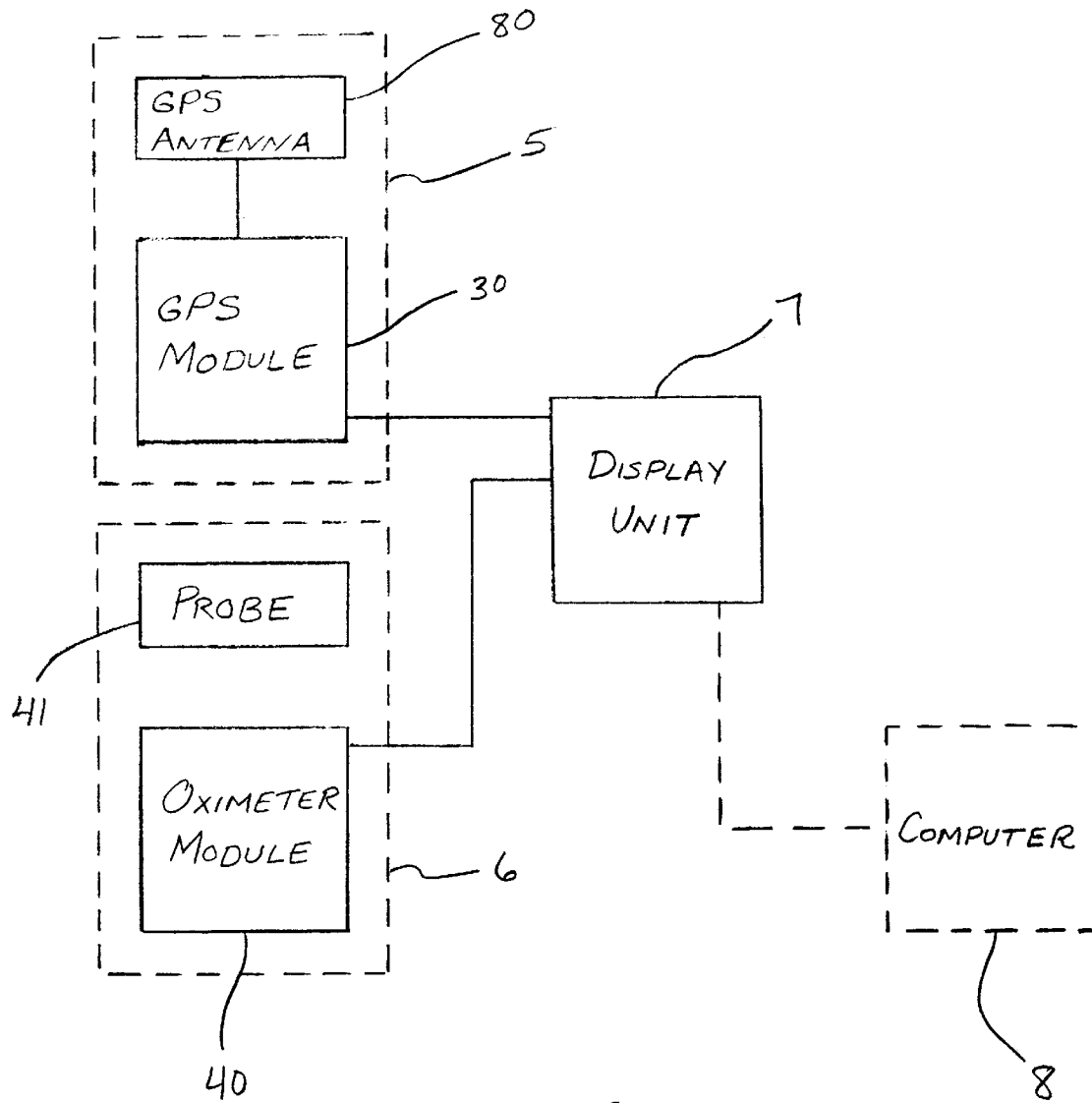


FIG. 2

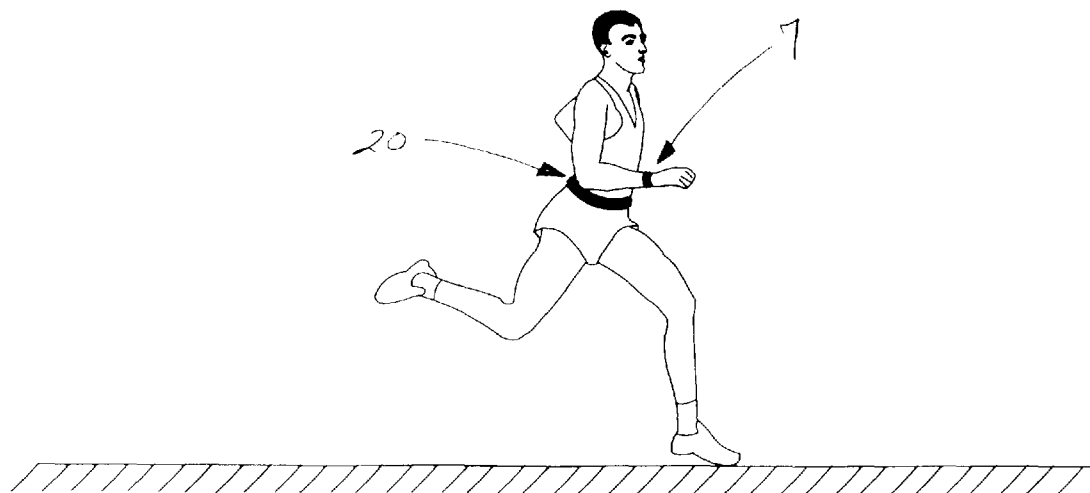
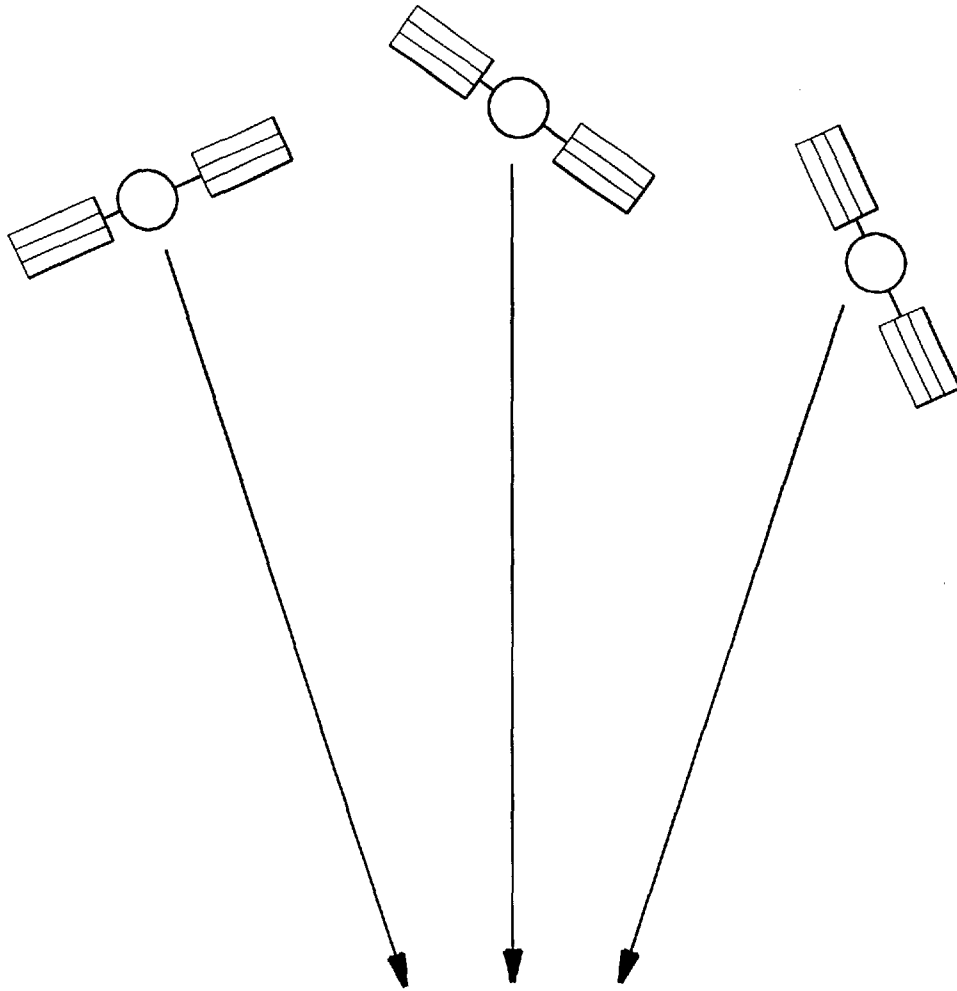


FIG. 3

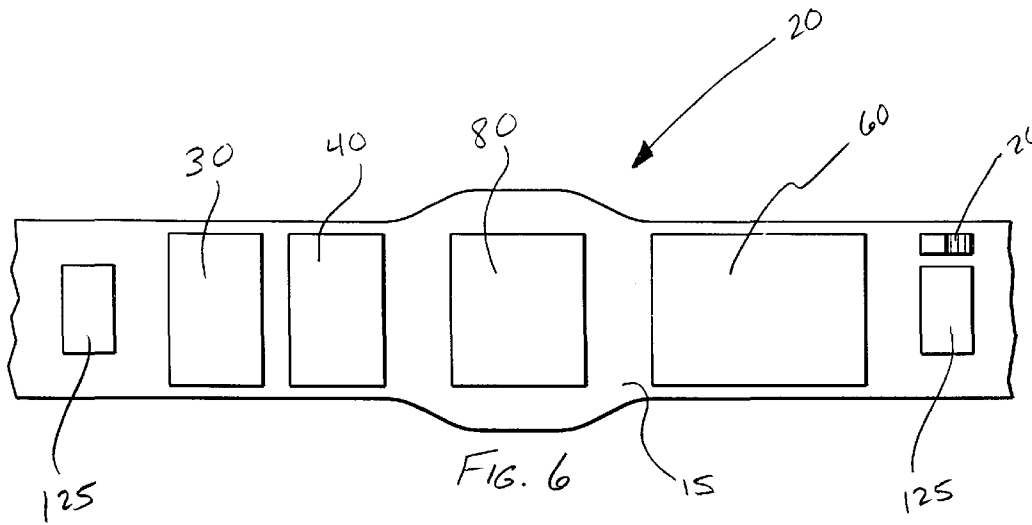


FIG. 6

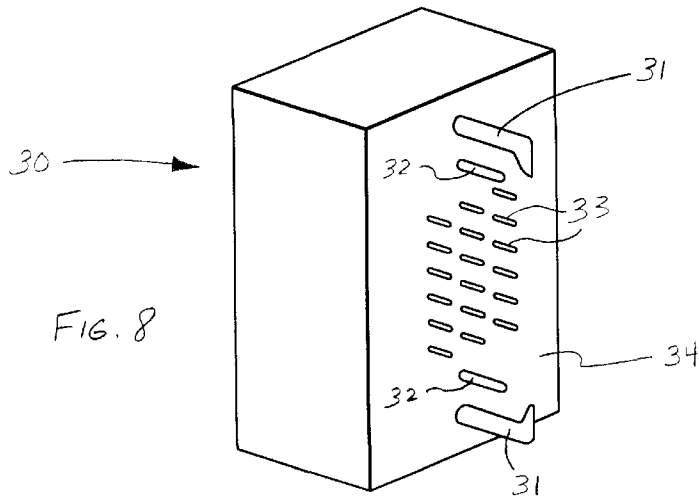


FIG. 8

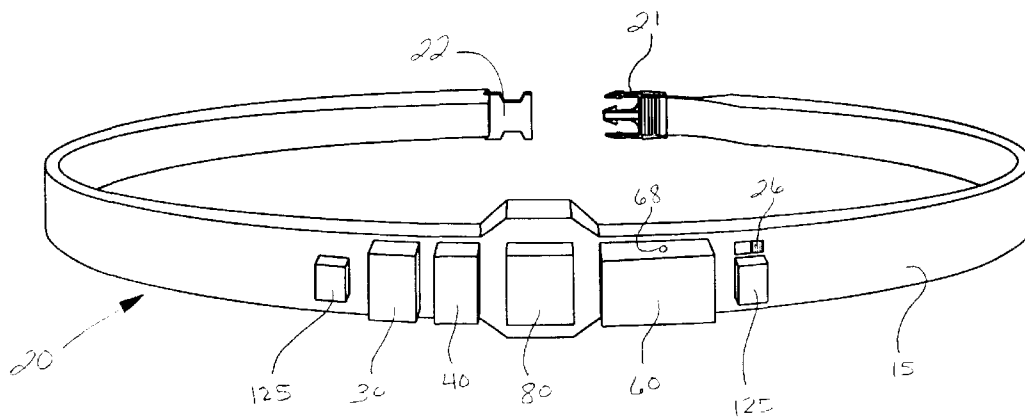


FIG. 4

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