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(12) **United States Patent**  
**Barr**

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- (54) **GUIDANCE SYSTEM FOR RADIO-CONTROLLED AIRCRAFT**
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- (73) Assignee: **Spirit International, Inc.**, Carrollton, TX (US)
- (\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 774 days.

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(21) Appl. No.: **09/611,177**

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(51) **Int. Cl.**  
**B64C 13/18** (2006.01)

(52) **U.S. Cl.** ..... **244/190**

(58) **Field of Classification Search** ..... 244/189,  
244/190, 17.13; 701/2  
See application file for complete search history.

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(74) *Attorney, Agent, or Firm*—Knobbe Martens Olson & Bear LLP

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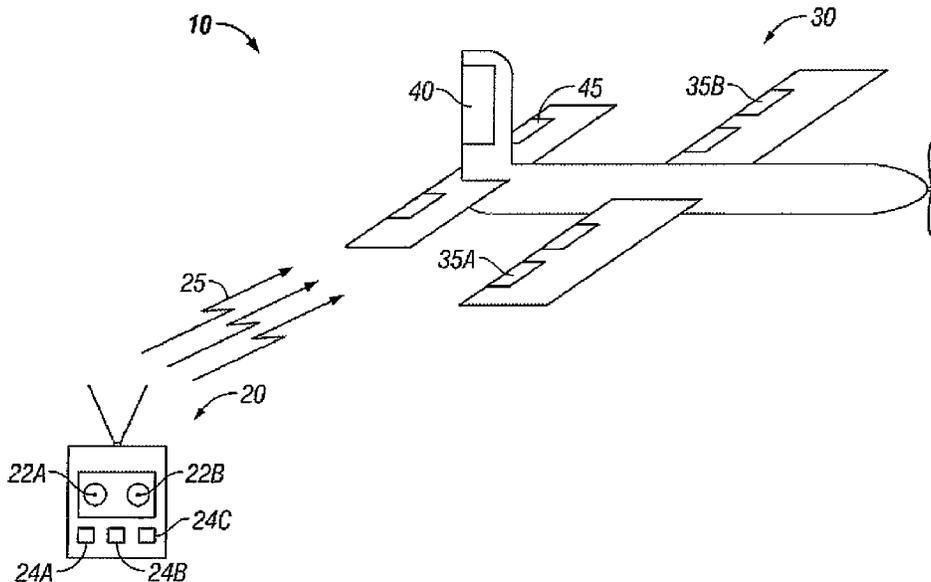
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(57) **ABSTRACT**

A method and system are described for controlling the flight pattern of a remote controlled aircraft. The system includes a microcontroller that is linked to an accelerometer for determining the attitude of the aircraft and modifying signals to the aircraft's flight control system in order to prevent a crash. In addition, several preset flight patterns are stored in a memory so that upon activation, the aircraft will enter a preset flight pattern.

**23 Claims, 6 Drawing Sheets**



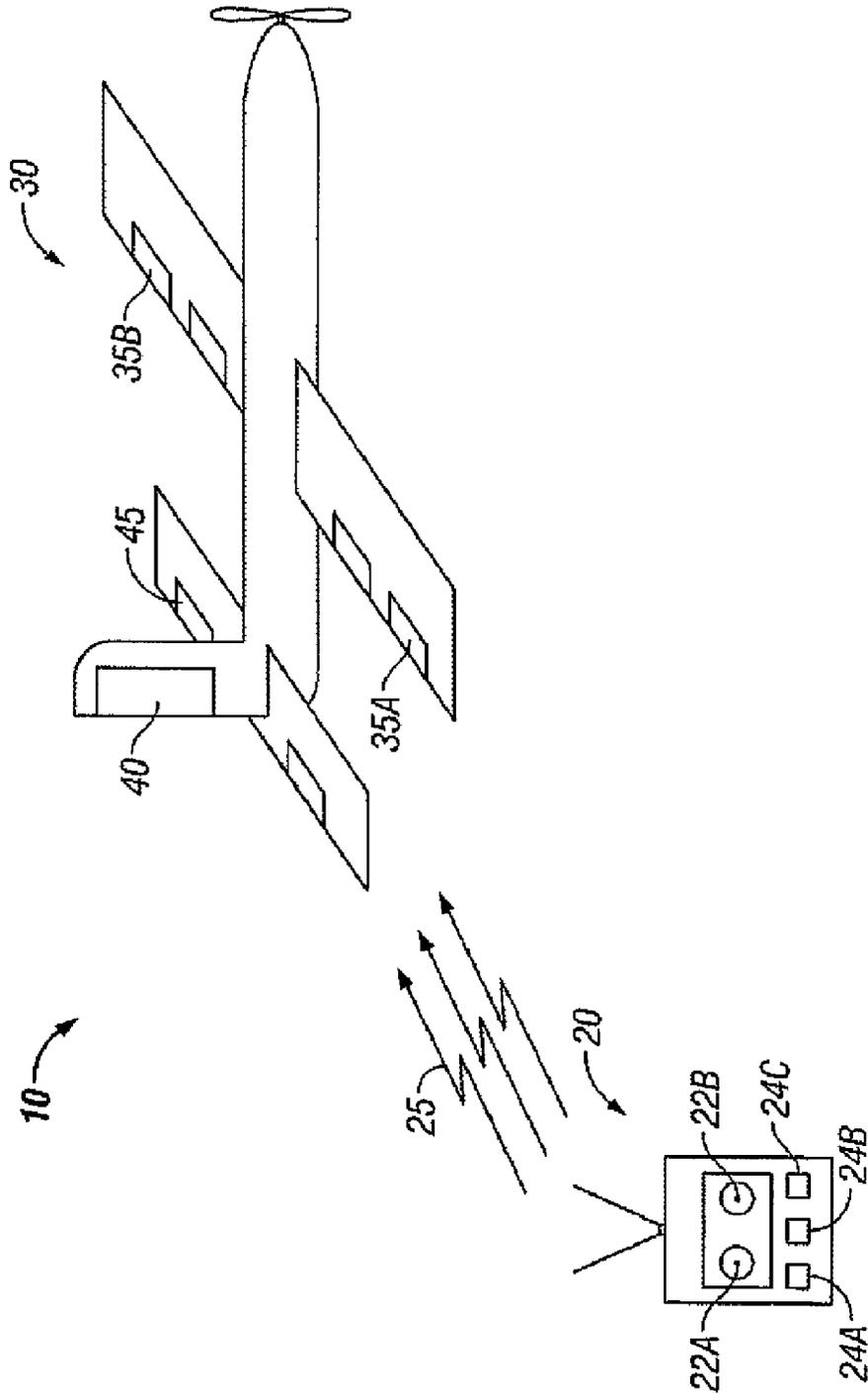


FIG. 1

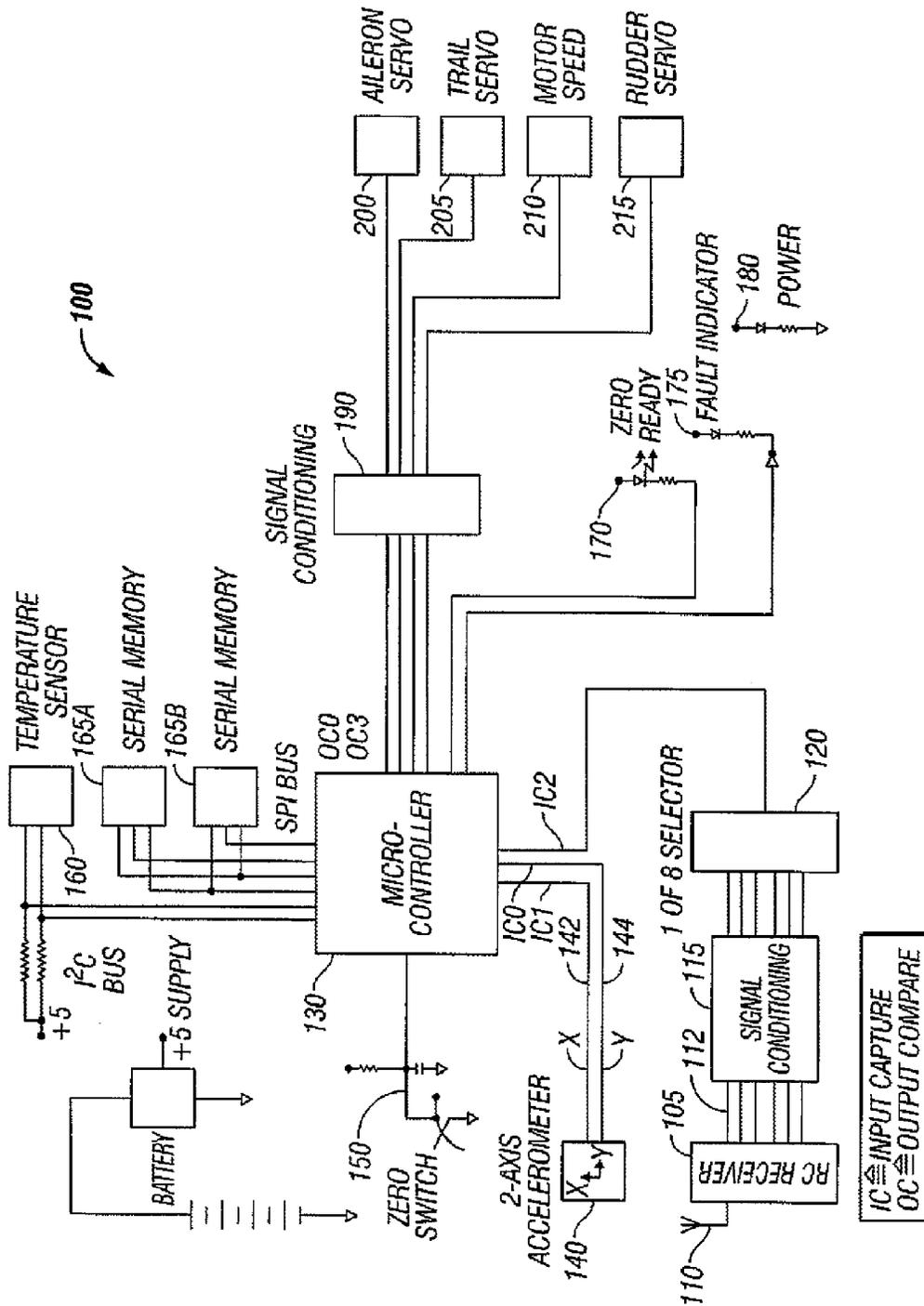


FIG. 2

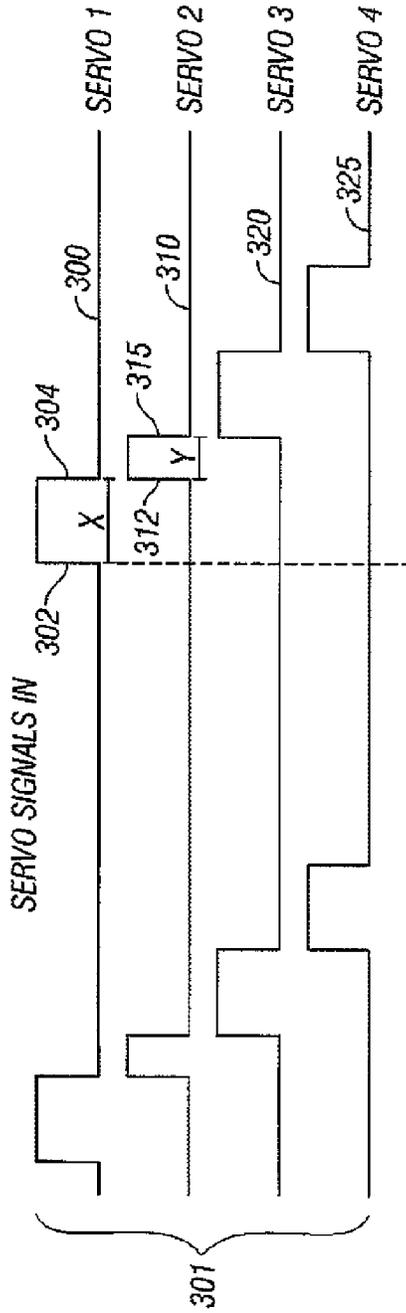


FIG. 3A

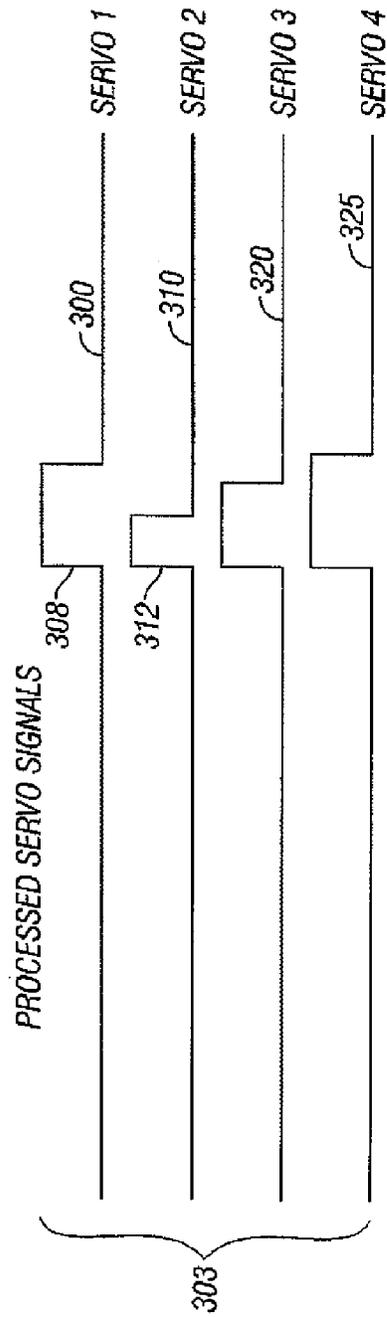


FIG. 3B

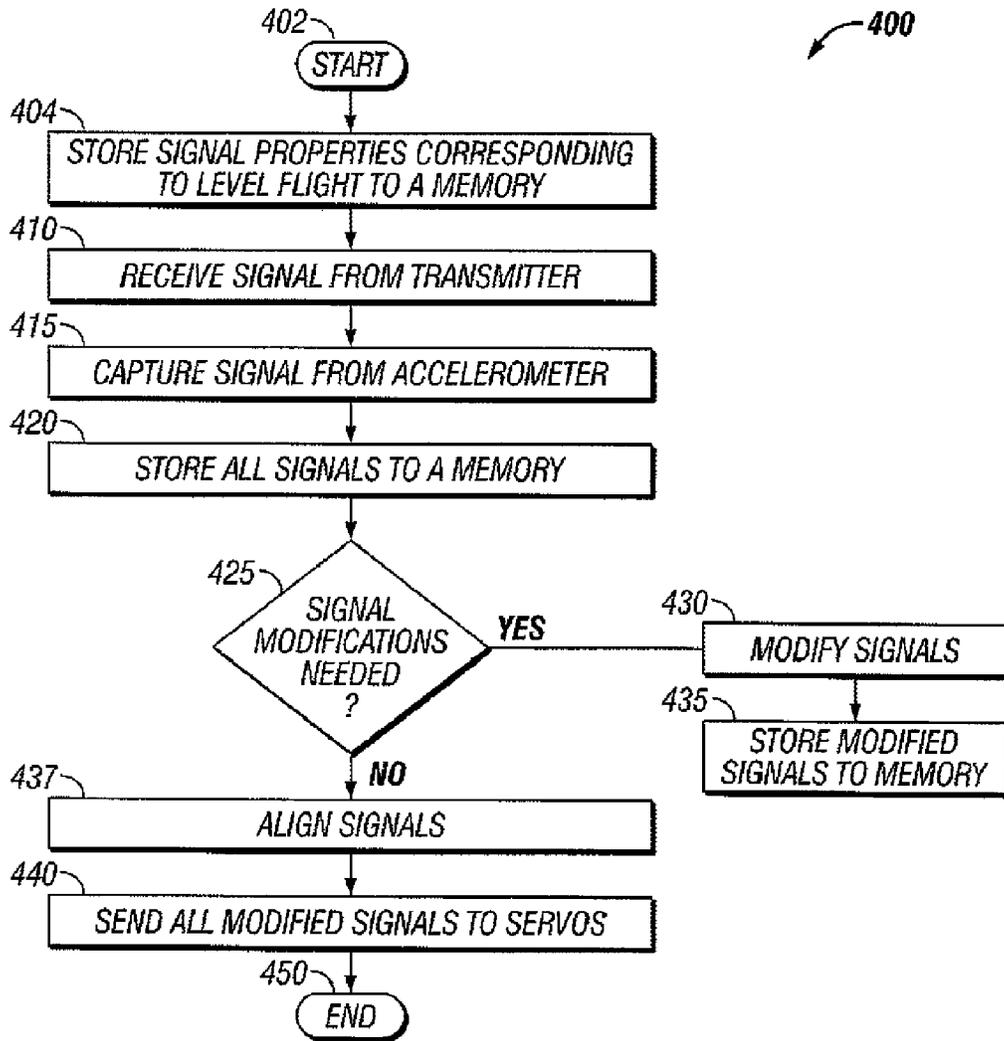


FIG. 4

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