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Bonavides et al.

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(54) **ACTUATING DOWNHOLE DEVICES IN A WELLBORE**

(75) Inventors: **Clovis S. Bonavides**, Houston, TX (US);
Donald L. Crawford, Spring, TX (US)

(73) Assignee: **Halliburton Energy Services, Inc.**,
Houston, TX (US)

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patent is extended or adjusted under 35
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(51) **Int. Cl.**
G01V 3/00 (2006.01)

(52) **U.S. Cl.**
USPC **340/855.7; 340/853.3; 340/855.4;**
166/250.01

(58) **Field of Classification Search**
USPC 340/853.3, 855.4, 855.7; 166/250.01
See application file for complete search history.

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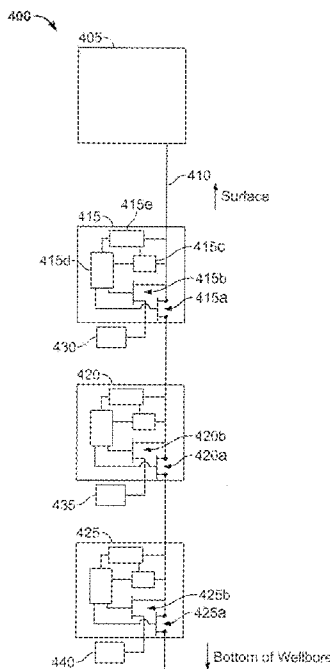
Primary Examiner — Jennifer H Gay
Assistant Examiner — Catherine Loikith

(74) *Attorney, Agent, or Firm* — Paul I. Herman; Fish &
Richardson P.C.

(57) **ABSTRACT**

A downhole tool system includes a first downhole tool and a second downhole tool. The first downhole tool includes a first controller operable to receive an actuation signal including a tone. The first controller actuates the first downhole tool if the tone is a first specified frequency and changes the first downhole tool to communicate the actuation signal to the second downhole tool if first downhole tool is not actuated in response to the actuation signal. A second downhole tool includes a second controller operable to receive the actuation signal. The second controller actuates the second downhole tool if the tone is a second specified frequency. The second frequency is different from the first frequency.

33 Claims, 6 Drawing Sheets



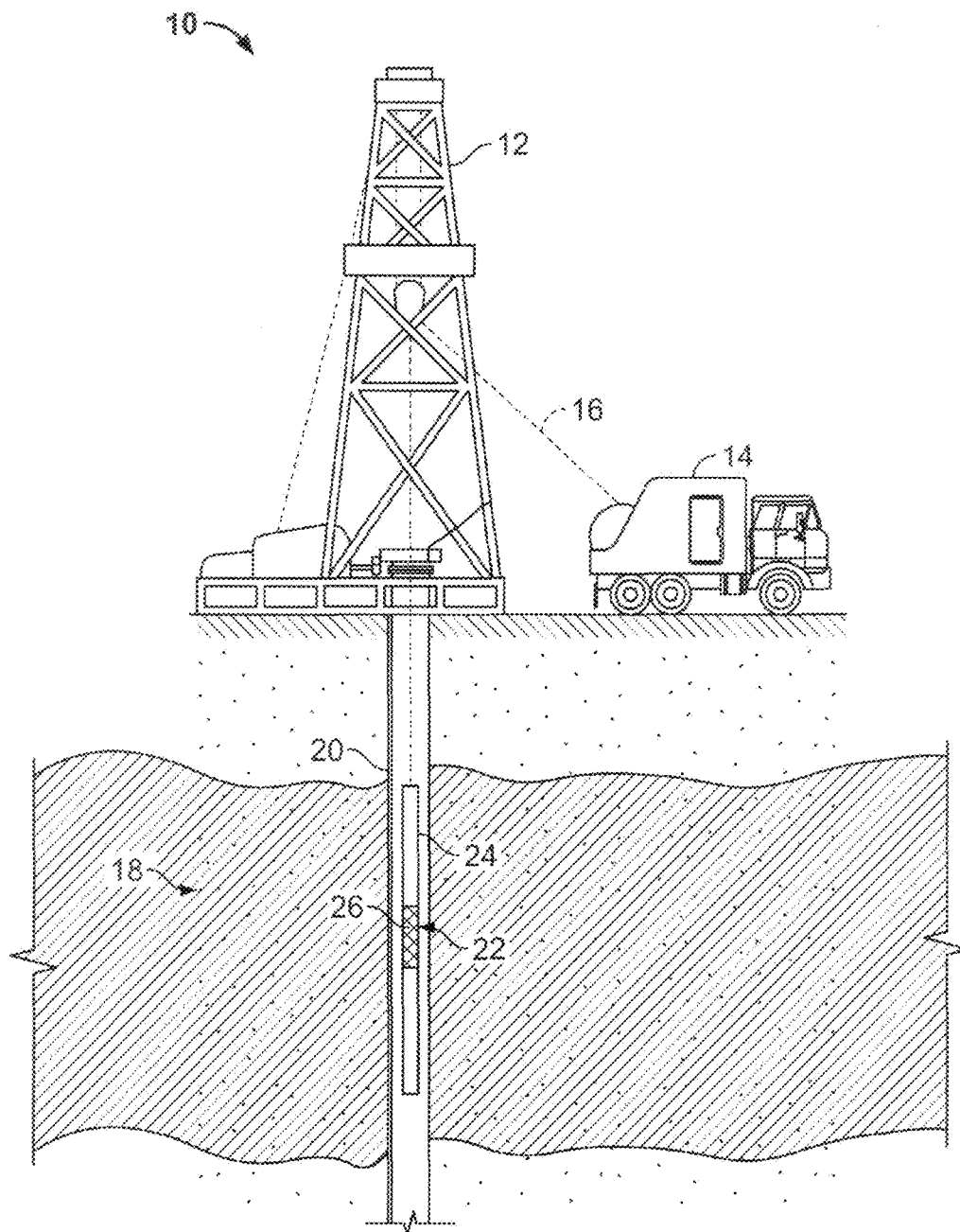


FIG. 1

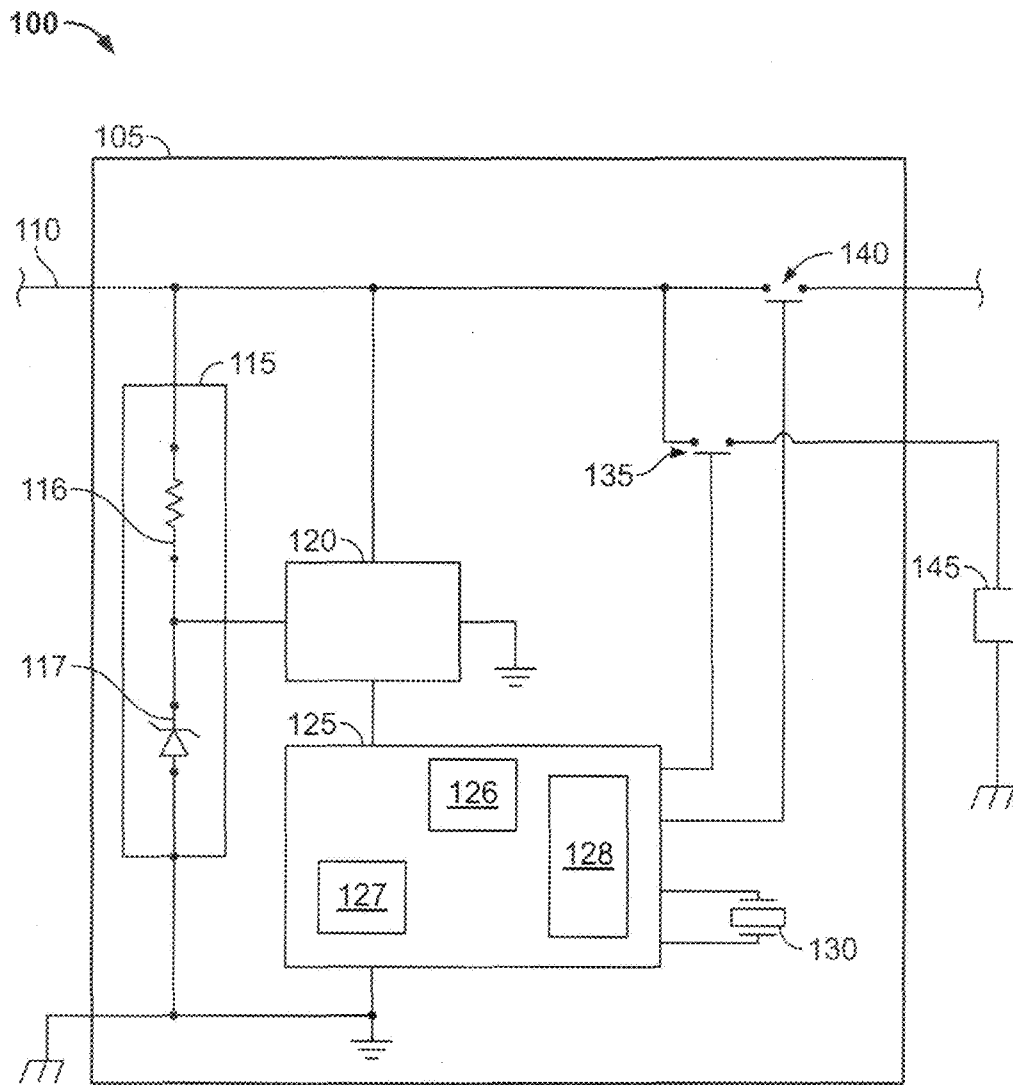


FIG. 2

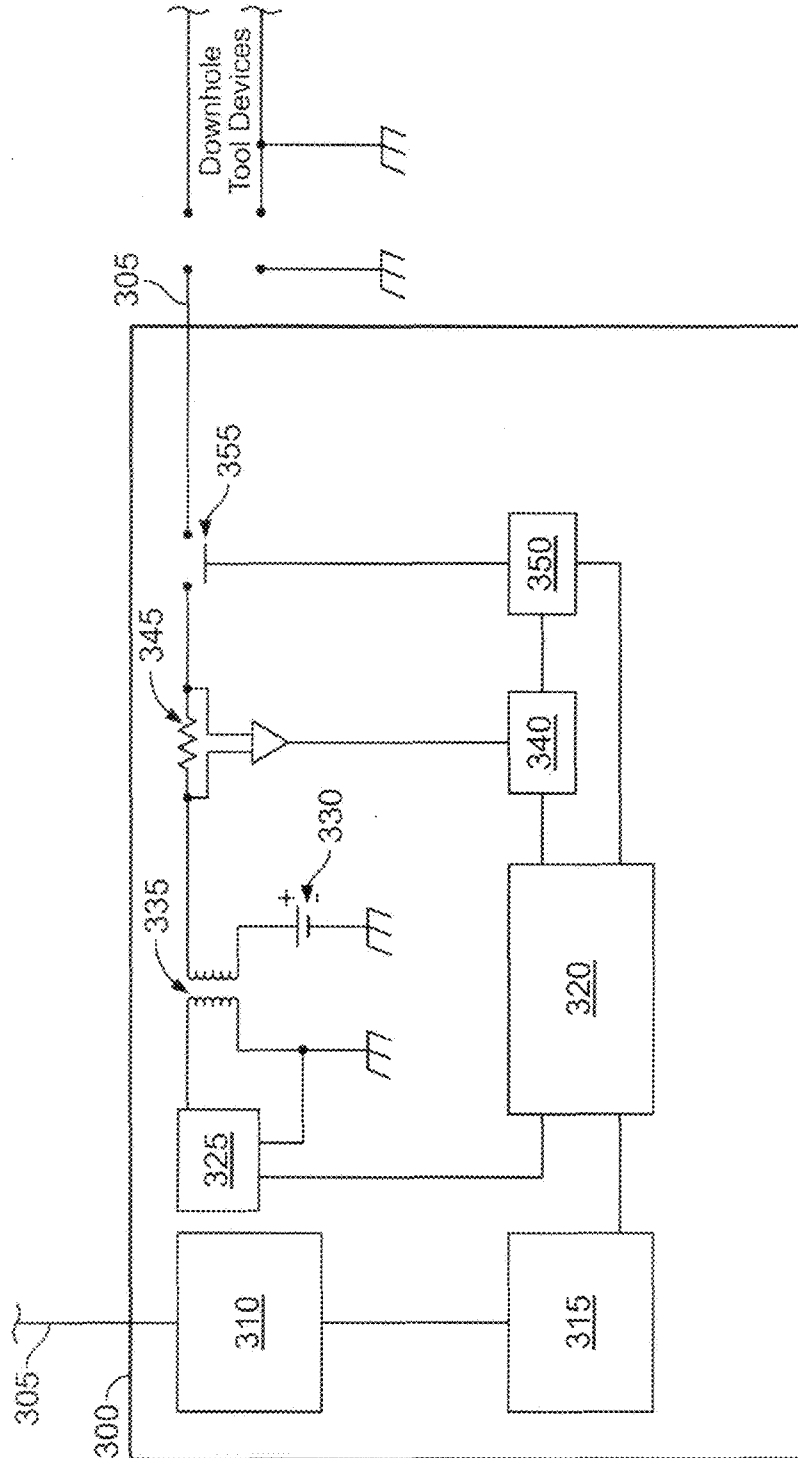


FIG. 4

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