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**Durant et al.**

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(54) **SURGICAL INSTRUMENT WITH CONTROL FOR DETECTED FAULT CONDITION**

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See application file for complete search history.

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(52) **U.S. Cl.**

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(58) **Field of Classification Search**

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(57) **ABSTRACT**

A medical device may include a surgical instrument and a controller. The surgical instrument may include an end effector component configured to move from a first position to a second position and the controller may be operatively coupled to control movement of the end effector component. The controller may further be configured to command the end effector component to move from the first position toward the second position, and automatically oscillate the end effector component if the controller has not received a signal indicating the end effector has reached a preset location within a predetermined time period after the controller commands the end effector component to move from the first position toward the second position.

**16 Claims, 14 Drawing Sheets**

