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(71) Applicant: **MKS INSTRUMENTS, INC.** [US/US]; 2
Tech Drive, Suite 201, Andover, Massachusetts 01810
(US).

(72) Inventors: **FISK, Larry J., II**; 25 Brimfield Circle, Fair-
port, New York 14450 (US). **GITLIN, Benjamin, J.**;
700 East Avenue, Apt. 8B, Rochester, New York 14607
(US). **OLDZIEJ, Mariusz**; 1790 Athena Drive, Avon, New
York 14414 (US). **BURRY, Aaron, M.**; 687 Clevenger
Road, Ontario, New York 14519 (US). **HARRINGTON,**
Matthew, G.; 348 April Way, Campbell, California 95008
(US). **RADOMSKI, Aaron, T.**; 6275 Marrowback Road,
Conesus, New York 14435 (US).

(74) Agent: **LAFATA, Joseph, M.**; Harness, Dickey & Pierce,
P.L.C., 5445 Corporate Drive, Suite 200, Troy, Michigan
48098 (US).

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(54) Title: SYSTEM AND METHOD FOR ARC DETECTION USING A BIAS RF GENERATOR SIGNAL

(57) Abstract: An arc detector for a RF power supply system, where the RF power supply includes a first RF power supply and a second RF power supply. A signal applied to a non-linear load varies in accordance with an output from one of the first RF power supply or the second RF power supply. The signal has a frequency. During an arc or arc condition in the non-linear load, the frequency of the signal changes, and if the frequency is outside of a selected range, an arc or arc condition is indicated. The frequency can be determined by digitizing the signal into a series of pulses and measuring a time or period between pulses.

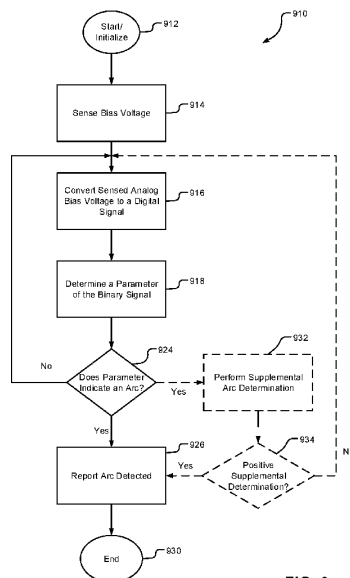


FIG. 9

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