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(54) **MAGNETIC FLUX SUPPRESSION SYSTEM**

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(*) Notice: This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).

Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(52) **U.S. Cl.** 361/212; 361/213; 361/818; 307/91

(58) **Field of Search** 361/212, 213, 361/816, 818, 217, 218; 307/89, 91; 333/172; 102/202.2

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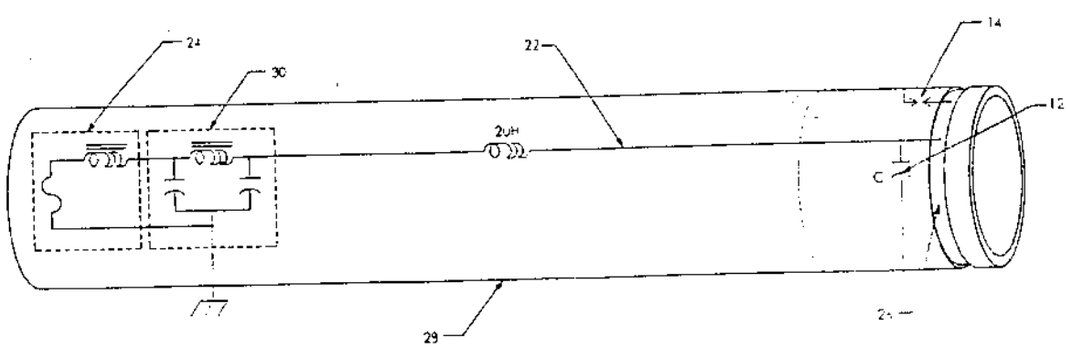
(57) **ABSTRACT**

An electromagnetic flux suppression includes a three stage filtering system to protect against electromagnetic interference and electrostatic discharge and has a first stage high voltage section that filters a high voltage pulse by providing a spark gap to ionize the ambient air and thus effectively form a shunt. A second stage filter has a front end capacitive interface followed by an inductive line to filter out radio frequency arcing that occurs between two bodies thus exposing them to radio frequency radiation. A third stage filter includes a radio frequency low pass filter to reinforce the capacitive inductance filter.

15 Claims, 5 Drawing Sheets



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