

[12] Patent

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[21] Application No.: GCC/P/2001/1125 [22] Filing Date: 06/01/2001 [30] Priority: [31] Priority No. [32] Priority date [33] State 60/174,433 04/01/2000 US 09/710,998 09/11/2000 US [72] Inventor: William B. Duff, Jr. [73] Owner: William B. Duff, Jr., 22 Shiloh Road, Odessa, TX 79762-8400, USA [74] Agent: Suleiman Ibrahim Al-Ammar	[51] Int. Cl. ⁷ : H02H 7/16 [56] Cited Documents: - DE 1588519 A (LICENTIA PATENT- VERWALTUNGS-GMBH) 10 December 1970 - US 4456880 A (WARNER THOMAS H et al.) 26 June 1984 - US 5672290 A (GHOSH SHYAMAL-KRISHNA et al.) 09 June 1988 - US 5077520 A (SCHWEITZER EDMUND O JR.) 31 December 1991 - US 5777840 A (ONEY THOMAS A) 07 July 2000

[54] METHOD AND CIRCUIT FOR USING POLARIZED DEVICE IN AC APPLICATIONS

[57] Abstract: Polarized electric charge storage device economically provide high available capacitance. The present invention directly employs polarized electrical charge storage (PECS) devices such as polarized capacitors or electrochemical batteries in general AC applications with a novel circuit topology. In one embodiment, an anti-series configuration of first and second PECS devices are used within an AC network for enhancing operation of the AC network. At least one DC source is provided for maintaining the PECS devices forwardly biased while they are subjected to an AC signal. The AC signal, which drives an AC load, is applied to the anti series devices. The devices are sufficiently biased by the at least on DC voltage source so that they remain forwardly biased while coupling the AC signal.

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No. of figures: 30

