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(54) **ARRANGEMENTS OF NON-DISSIPATIVE ELEMENTS IN NON-DISSIPATIVE ELEMENT-ENABLED CAPACITIVE ELEMENT DRIVERS**

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(57) **ABSTRACT**

A circuit for driving the voltage of a capacitive element between two voltage levels has at least one driver cell with a first pair of switches connected in series between a first terminal of a voltage source and the capacitive element, and a second pair of switches connected in series between a second terminal of the voltage source and the capacitive element. A plurality of non-dissipative elements may be connected in parallel or in series between the first pair of switches and the second pair of switches. Combinations of switches from the driver cells may be activated and deactivated in a defined sequence to provide step-wise transfer of energy to the capacitive element. The defined sequence may have a switching pattern with a voltage change portion arranged to cause a change in an output voltage of the capacitive element driver during application thereof on the capacitive element driver.