

Title (en)  
A HIGH-VOLTAGE PULSE GENERATOR

Title (de)  
HOCHSPANNUNGSPULSGENERATOR

Title (fr)  
GENERATEUR D'IMPULSIONS HAUTE TENSION

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Application  
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Abstract (en)  
[origin: WO9949561A1] The present invention provides a high-voltage pulse generator system particularly suited for Pulsed Electric Field (PEF) treatment of food products. The system includes, for example, a power source, an energy storage component (106) in circuit communication with the power source and for storing energy from the power source, a plurality of switches (U11, U12) for opening and closing periodically to discharge the energy storage component (106), and a load (104) comprising at least one Pulse Electric Field (PEF) treatment chamber in which biological cells are subjected to PEF treatment. The power source charges energy storage component (106) and a trigger device (102) appropriately triggers the opening and closing of the switches (U11, U12). The switches (U11, U12) may be arranged in any one of a number of configurations including, for example, an H-bridge switch configuration where the load (104) is in circuit communication with the switches (U11, U12) through the bridge portion of the H-bridge. Additionally, a plurality of energy storage component (106) arrangements are also disclosed.

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