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The invention relates to electrical engineering and is intended to implement low-power high-voltage sources for various technological applications, namely, for power supply of electrohydrodynamic devices, electrostatic sprayers, electrostatic precipitators.

The stabilized high-voltage converter contains a power supply (3), to one lead of which is connected the collector of a regulating transistor (4), the emitter of which is connected through the primary winding of a step-up high-voltage transformer (2) and a diode, connected in series with the collector of a key transistor (1), the emitter of which is connected to the second lead of the power supply (3) and to the first input of a matching stage (11), whose output is connected to the base of the regulating transistor (4). The secondary winding of the step-up transformer (2) is connected to a voltage multiplier (5) with a load, one output of which is connected to the emitter of the key transistor (1) and to one input of a current sensor (9) of the load, the other input of which is connected to another output of the voltage multiplier (5). The converter also contains a pulse-width modulation controller (7), which includes an error amplifier (8), the inverting input of which is connected to the output of the current sensor (9) of the load, and the noninverting input – to a reference voltage source (10), at the same time the output of the error amplifier (8) is connected to the second input of the matching stage (11) and to the input of the pulse generator (6), the output of which is connected to the gate of the key transistor (1).

Claims: 1
Fig.: 2