

ABSTRACT

POWER SUPPLY SYSTEM FOR AN ELECTRIC DISCHARGE MACHINE

A transformer converts high frequency pulses, transmitted through a coaxial cable from a power supply unit positioned at a distance from a gap formed between a tool electrode and a workpiece and having a direct current power supply and switching element, into high frequency alternating current pulses, and is connected to that gap. The transformer includes a ring core, a primary winding connected to the coaxial cable, and a secondary winding connected to the gap. Preferably, these windings will have a minimum number of turns. Further, a bypass means is provided which selectively passes the direct current pulse from the direct current power supply or the alternating current pulse induced in the transformer to the gap. It is preferable to house the bypass means and the transformer in a single case positioned in the vicinity of the gap.

Figure 1



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