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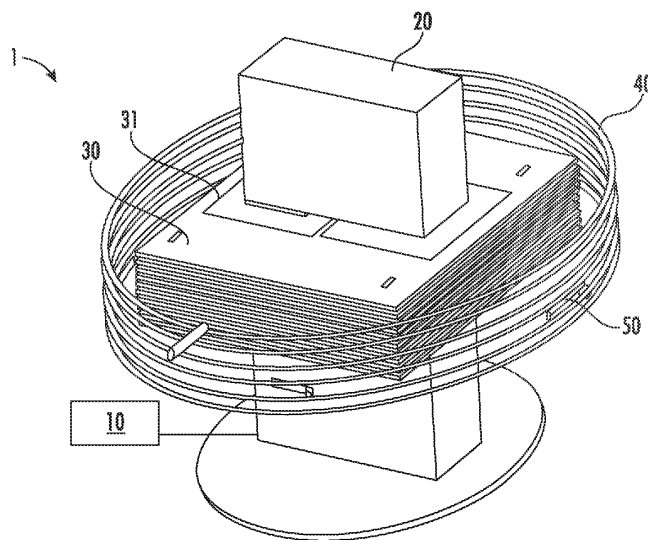


FIG. 1

(57) Abstract: An Insulated Core Transformer (ICT) high voltage DC power supply is disclosed. The power supply comprises a plurality of printed circuit boards, each comprising a secondary winding and a voltage doubler circuit. These voltage doubler circuits are arranged in series. The stacked printed circuit boards are surrounded by a plurality of grading rings. The last grading ring is electrically connected to the output voltage. High voltage resistors are then disposed between adjacent grading rings to form a voltage divider. The voltage of the first grading ring may be used as part of a feedback system to regulate the output of the AC power supply. By disposing the high voltage resistors on the grading rings, a more uniform voltage gradient may be created.

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