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(54) **X-RAY GENERATOR AND X-RAY APPARATUS**

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ABSTRACT

(73) Assignee: **Siemens Healthcare GmbH**, Erlangen (DE)

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One or more example embodiments relates to an X-ray generator comprising a high-voltage transformer, the high-voltage transformer including a core; a primary winding module including the primary windings enclosing a core in a primary section in a shape of a coil; and a secondary winding module including secondary windings and a plastic section made from a plastic, the secondary windings enclosing the core in a secondary section in the shape of the coil, the plastic section at least one of enclosing or comprising the secondary windings, the plastic forming an electrical insulator, wherein the primary section and the secondary section have a common overlap area, and the high-voltage transformer is configured to at least one of generate a voltage of at least 70 kV with respect to ground or act as a unipolar high-voltage transformer to output a voltage of at least 70 kV.

