

Title (en)
X-RAY SOURCE ASSEMBLY WITH MULTIPLE FILAMENTS

Title (de)
RÖNTGENQUELLENANORDNUNG MIT MEHREREN FILAMENTEN

Title (fr)
ENSEMBLE SOURCE DE RAYONS X À FILAMENTS MULTIPLES

Publication
EP 4344358 A1 20240327 (EN)

Application
EP 22197800 A 20220926

Priority
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Abstract (en)
The present invention relates to an imaging X-ray source assembly (200) with multiple filaments (FL, FS). The X-ray source assembly comprises a plurality of filaments (FL, FS, FX) configured to emit electrons when a respective current passes through the filament (FL, FS, FX); a filament transformer (T1) configured to transfer electrical energy to the plurality of filaments (FL, FS, FX); a filament driver (FD1) configured to supply electrical energy to the plurality of filaments (FL, FS, FX) via the filament transformer (T1); a plurality of switches (S1, S2, SX) each connected to a respective one of the filaments (FL, FS, FX) and configured to regulate the respective current through the respective filament (FL, FS, FX); and a control unit (CTRL) connected to the plurality of switches (S1, S2, SX) and the filament driver (FD1), wherein the control unit (CTRL) is configured to control the plurality of switches (S1, S2, SX) by respective switch control signals.

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