ABSTRACT

Radiation Source, Lithographic Apparatus, and Device Manufacturing Method.

A radiation source comprises an anode and a cathode that are configured and arranged to create a discharge in a gas or vapor in a space between anode and cathode and to form a plasma pinch so as to generate electromagnetic radiation. The gas or vapor may comprise xenon, indium, lithium and/or tin.

To improve heat dissipation, the radiation source comprises a plurality of discharge elements, each of which is only used for short intervals, after which another discharge element is selected.

To improve the exact timing of the pinch formation and thus the pulse of EUV radiation, the radiation source comprises a triggering device.

To improve the conversion efficiency, the radiation source is constructed to have a low inductance, and operated in a self-triggering regime.

Fig. 2A