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(54) **RADIATION SYSTEM AND LITHOGRAPHIC APPARATUS**

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See application file for complete search history.

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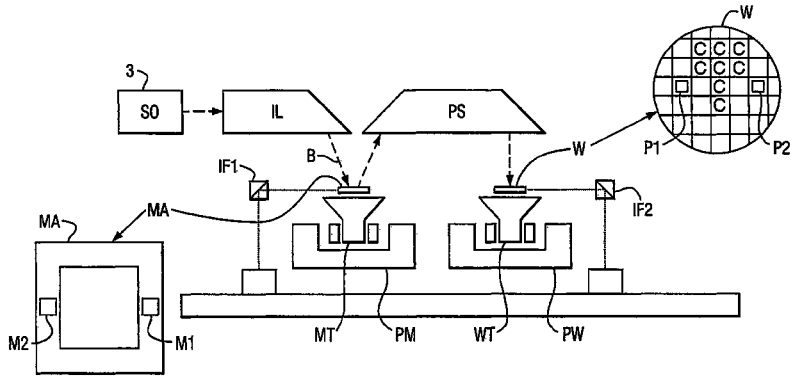
(57) **ABSTRACT**

A radiation system is configured to generate a radiation beam. The radiation system includes a radiation source configured to generate a plasma that emits radiation and debris, and a radiation collector configured to direct collected radiation to a radiation beam emission aperture. A magnetic field generator is configured to generate a magnetic field with a gradient in magnetic field strength to direct the plasma away from the radiation collector.

41 Claims, 7 Drawing Sheets