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(54) Title: PLASMA-BASED EUV LIGHT SOURCE

(57) Abstract: Various mechanisms are provided relating to plasma-based light source that may be used for lithography as well as other applications. For example, a device is disclosed for producing extreme ultraviolet (EUV) light based on a sheared plasma flow. The device can produce a plasma pinch that can last several orders of magnitude longer than what is typically sustained in a Z-pinch, thus enabling the device to provide more power output than what has been hitherto predicted in theory or attained in practice. Such power output may be used in a lithography system for manufacturing integrated circuits, enabling the use of EUV wavelengths on the order of about 13.5 nm. Lastly, the process of manufacturing such a plasma pinch is discussed, where the process includes providing a sheared flow of plasma in order to stabilize it for long periods of time.



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