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CHENG et al.(10) **Pub. No.: US 2022/0369447 A1**(43) **Pub. Date: Nov. 17, 2022**(54) **EUV LIGHT SOURCE AND APPARATUS FOR
EUV LITHOGRAPHY**(60) Provisional application No. 62/738,364, filed on Sep.
28, 2018.(71) Applicant: **TAIWAN SEMICONDUCTOR
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LTD.**, Hsinchu (TW)**Publication Classification**(51) **Int. Cl.**
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G05D 7/06 (2006.01)(72) Inventors: **Wei-Shin CHENG**, Hsinchu City
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(2013.01); **H05G 2/006** (2013.01)(21) Appl. No.: **17/875,288**(22) Filed: **Jul. 27, 2022****Related U.S. Application Data**(63) Continuation of application No. 17/135,768, filed on
Dec. 28, 2020, which is a continuation of application
No. 16/426,489, filed on May 30, 2019, now Pat. No.
10,880,980.(57) **ABSTRACT**

A metal reuse system for an extreme ultra violet (EUV) radiation source apparatus includes a first metal collector for collecting metal from vanes of the EUV radiation source apparatus, a first metal storage coupled to the first metal collector via a first conduit, a metal droplet generator coupled to the first metal storage via a second conduit, and a first metal filtration device disposed on either one of the first conduit and the second conduit.

