



(12) **United States Patent**
Smith

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(54) **LASER-DRIVEN LIGHT SOURCE**
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G01J 3/10 (2006.01)
H05G 2/00 (2006.01)

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250/426; 250/493.1; 438/104; 438/301; 438/513;
438/156; 252/301.36; 252/301.16; 252/301.4 F;
385/31; 385/33; 385/38

(58) **Field of Classification Search** 250/504 R,
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438/156; 252/301.16, 301.36, 301.4 F; 385/31,
385/33, 38

See application file for complete search history.

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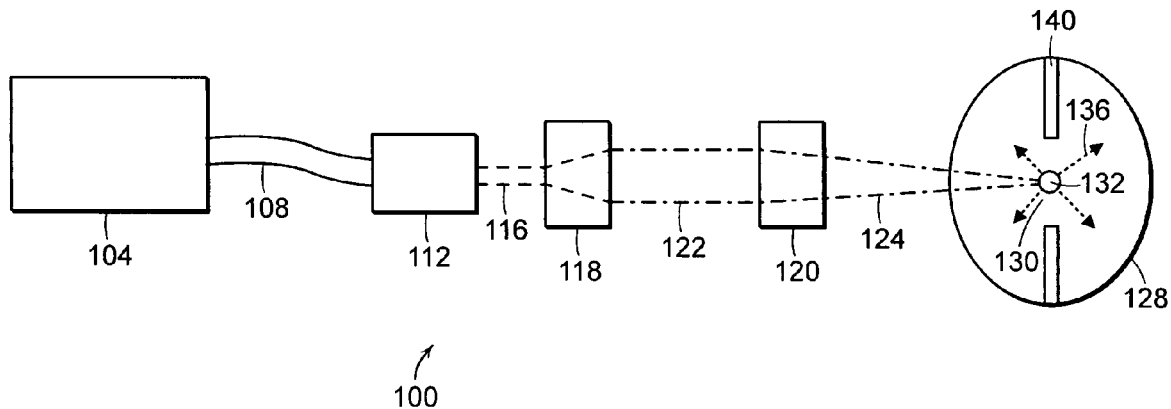
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(57) **ABSTRACT**

An apparatus for producing light includes a chamber and an ignition source that ionizes a gas within the chamber. The apparatus also includes at least one laser that provides energy to the ionized gas within the chamber to produce a high brightness light. The laser can provide a substantially continuous amount of energy to the ionized gas to generate a substantially continuous high brightness light.

81 Claims, 4 Drawing Sheets



ASML 1025

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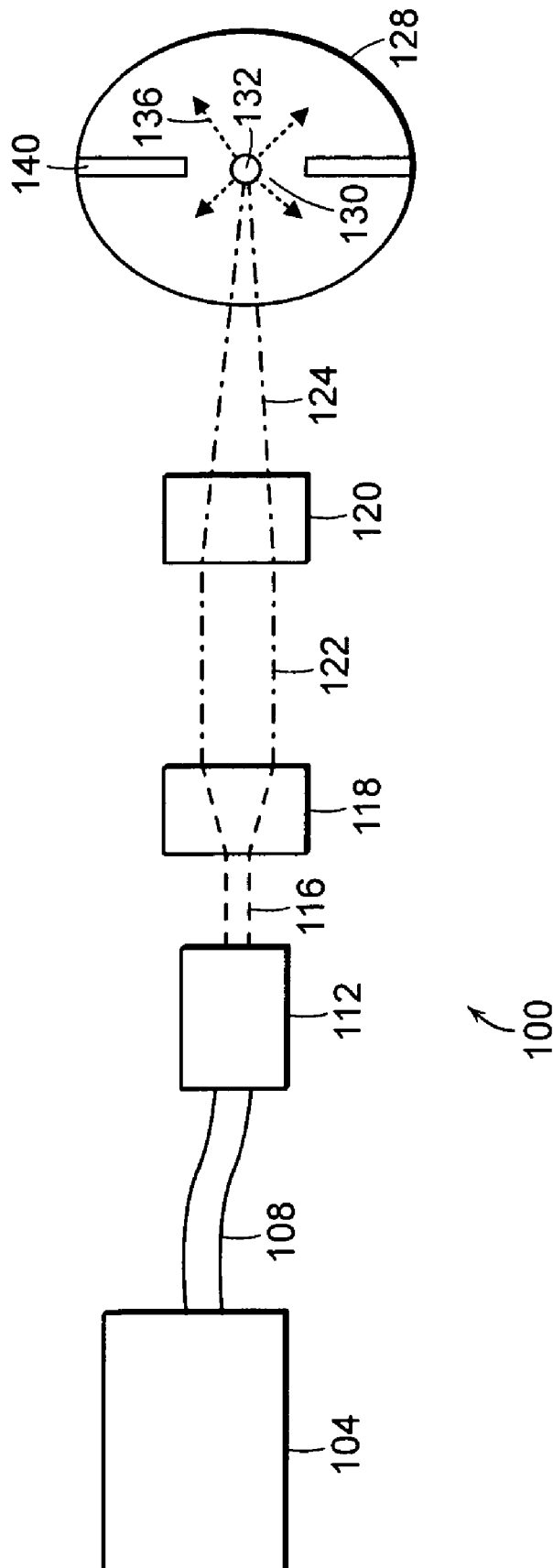


FIG. 1

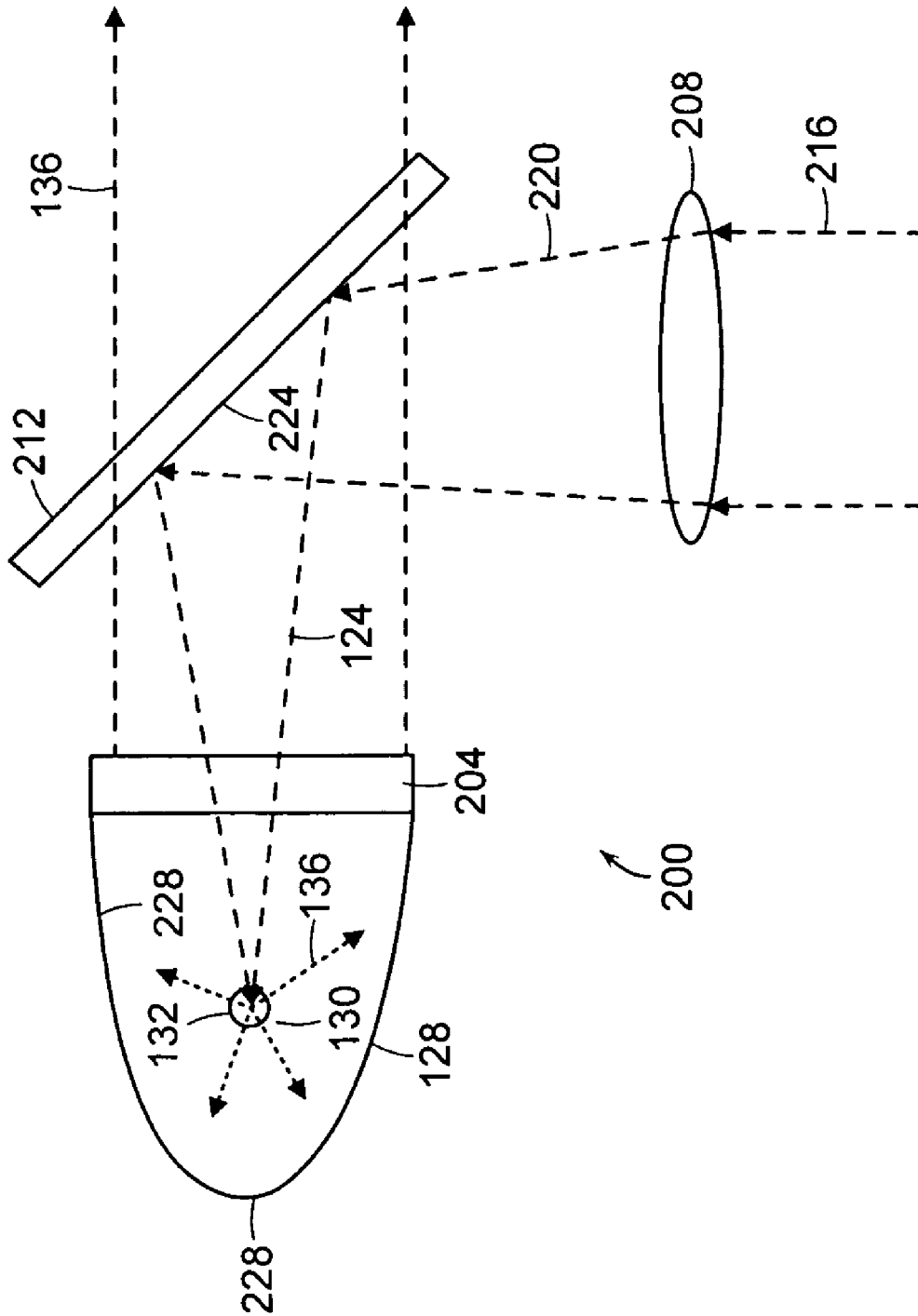


FIG. 2

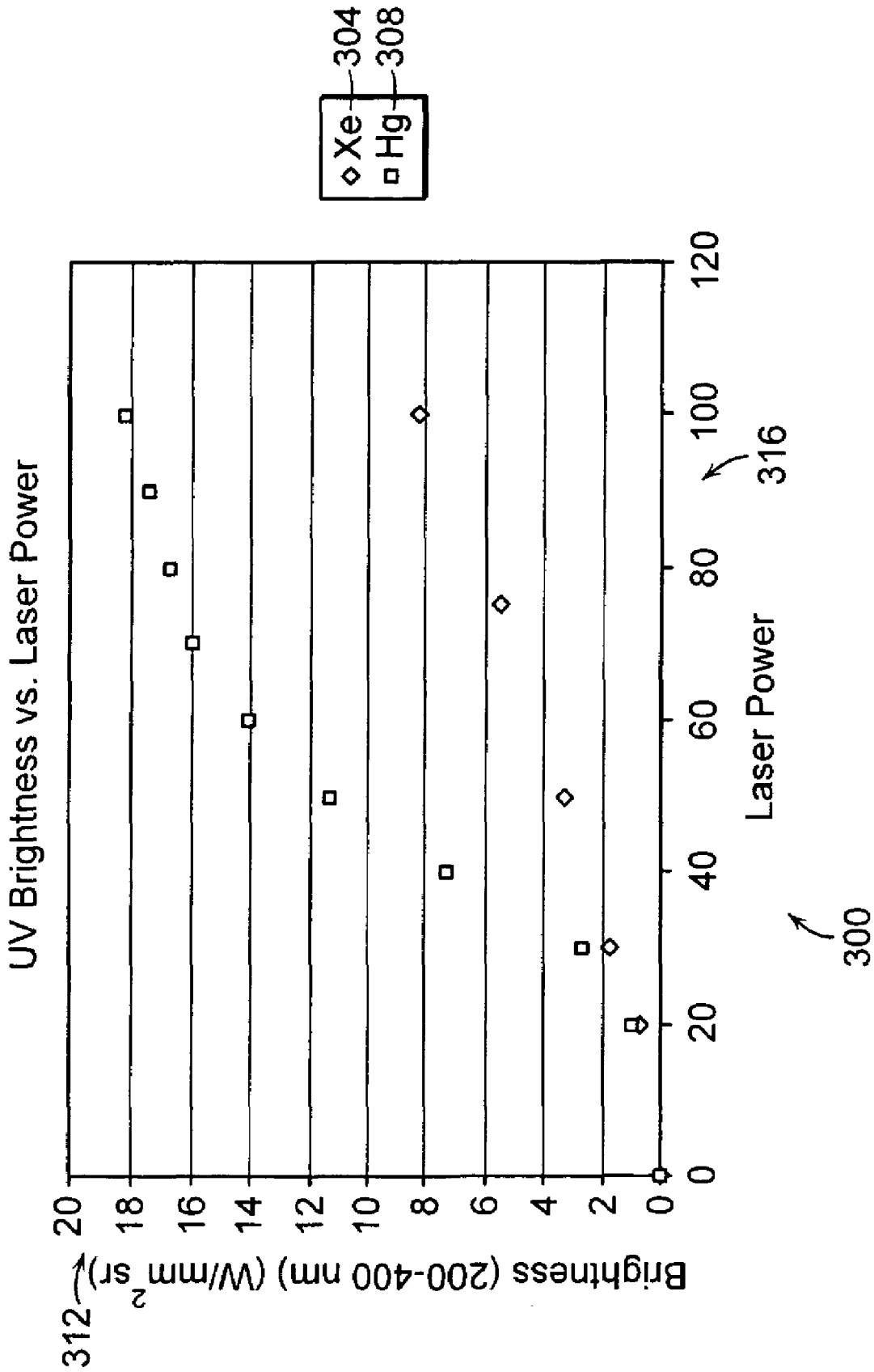


FIG. 3

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