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**Smith et al.**

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(54) **LASER-DRIVEN LIGHT SOURCE**

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patent is extended or adjusted under 35  
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**Related U.S. Application Data**

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Jul. 2, 2008, now Pat. No. 7,989,786, which is a  
continuation-in-part of application No. 11/695,348,  
filed on Apr. 2, 2007, now Pat. No. 7,786,455, which is  
a continuation-in-part of application No. 11/395,523,  
filed on Mar. 31, 2006, now Pat. No. 7,435,982.

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**H01J 63/08** (2006.01)  
**H05H 1/24** (2006.01)  
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(52) **U.S. Cl.** ..... **250/493.1; 250/504 R; 250/503.1;**  
**250/365; 315/149; 315/111.21; 313/231.31**

(58) **Field of Classification Search** ..... **250/503.1;**  
**250/504 R; 365, 493.1; 315/149, 111.21;**  
**313/231.31**

See application file for complete search history.

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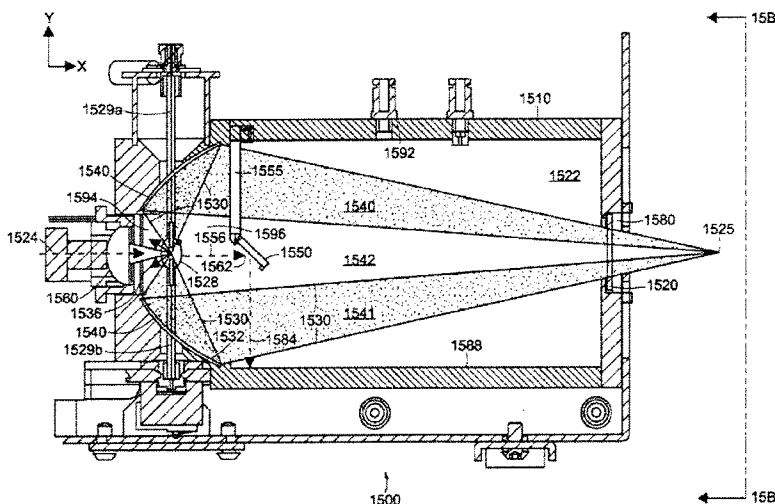
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(57) **ABSTRACT**

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 contin-  
uous amount of energy to the ionized gas to generate a  
substantially continuous high brightness light.

**21 Claims, 17 Drawing Sheets**



ASML 1201

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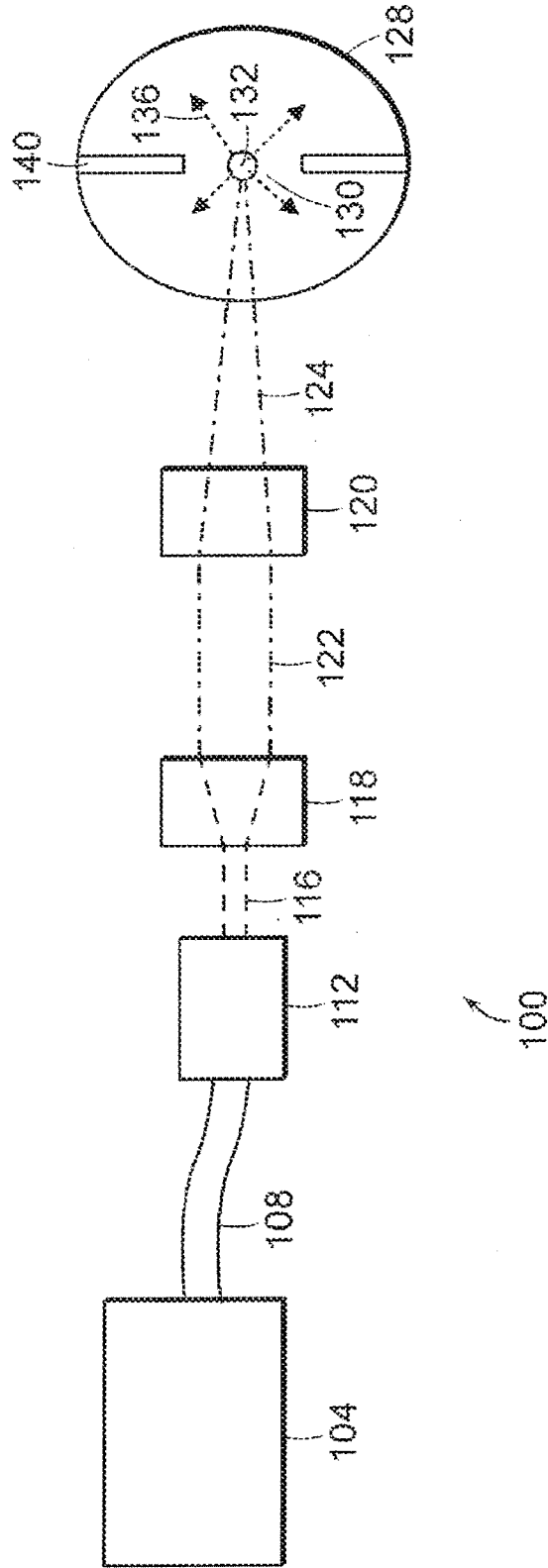


FIG. 1

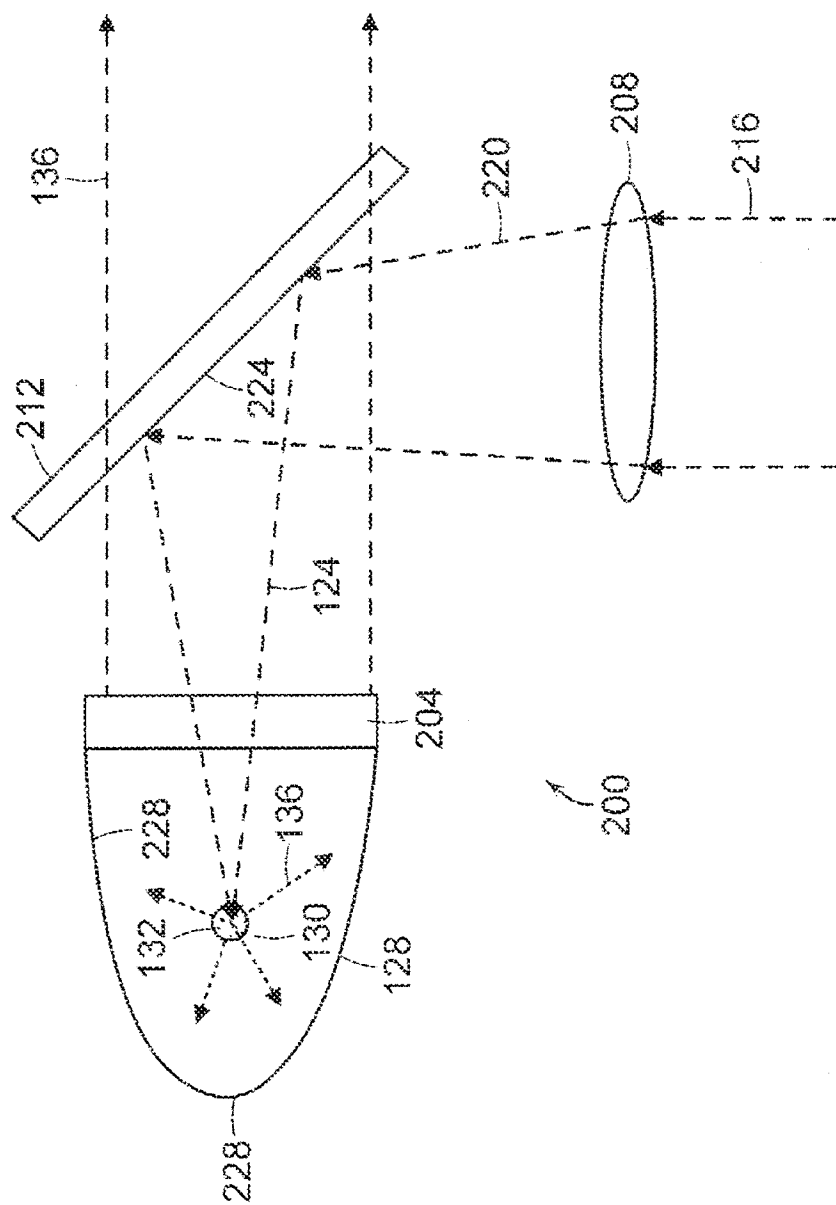


FIG. 2

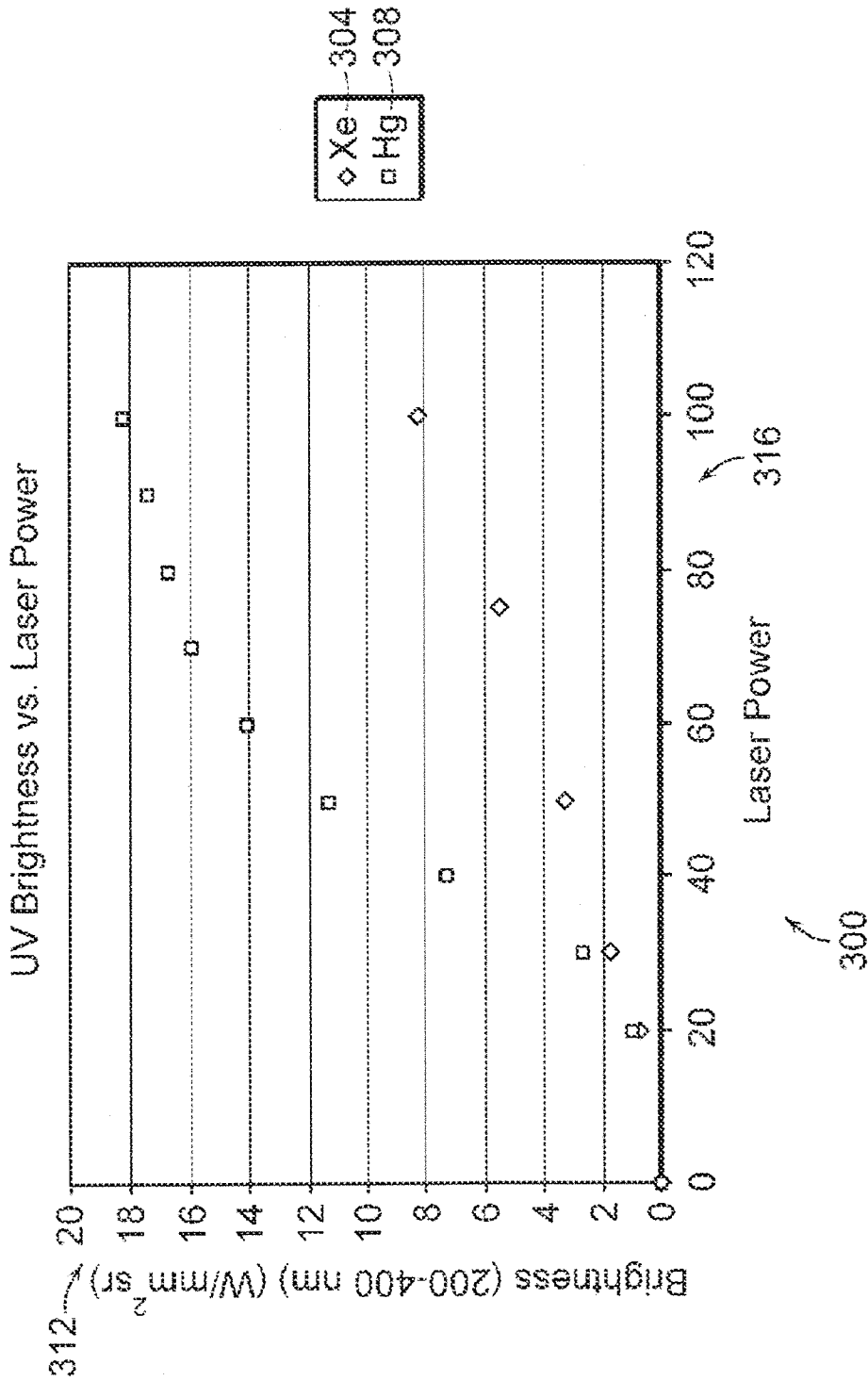


FIG. 3

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