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(12) **United States Patent**  
**Smith**

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- (54) **LASER-DRIVEN LIGHT SOURCE**
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- (73) Assignee: **Energetiq Technology, Inc.**, Woburn, MA (US)
- (\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 452 days.

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**H05G 2/00** (2006.01)

- (52) **U.S. Cl.** ..... **250/504 R**; 250/423 P;  
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,  
250/423 P, 426, 493.1; 438/104, 301, 513,  
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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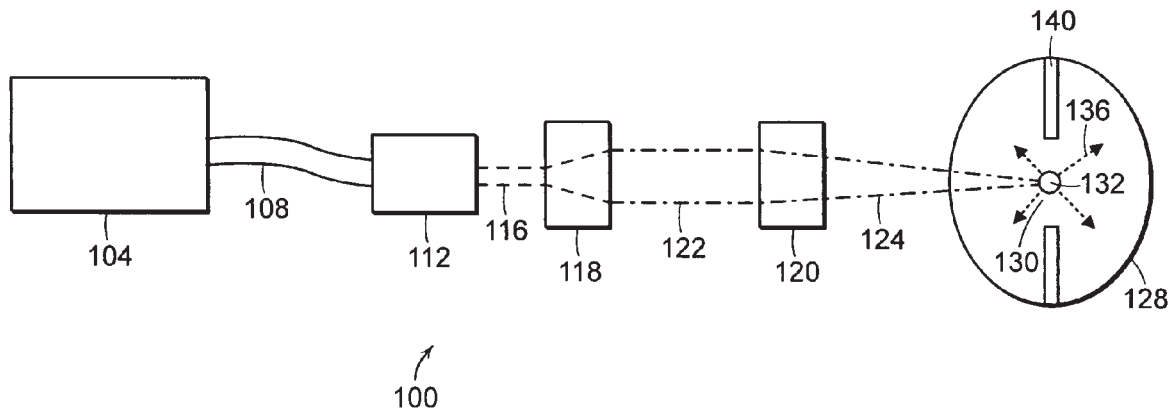
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(57) **ABSTRACT**

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**



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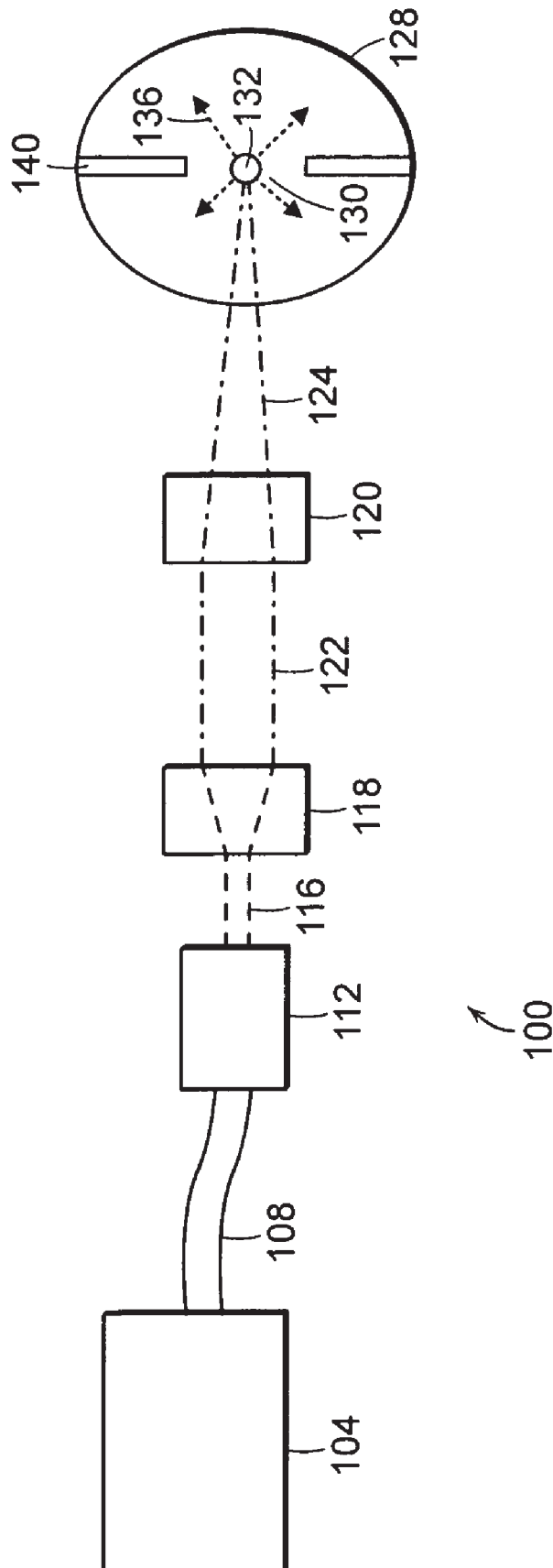


FIG. 1

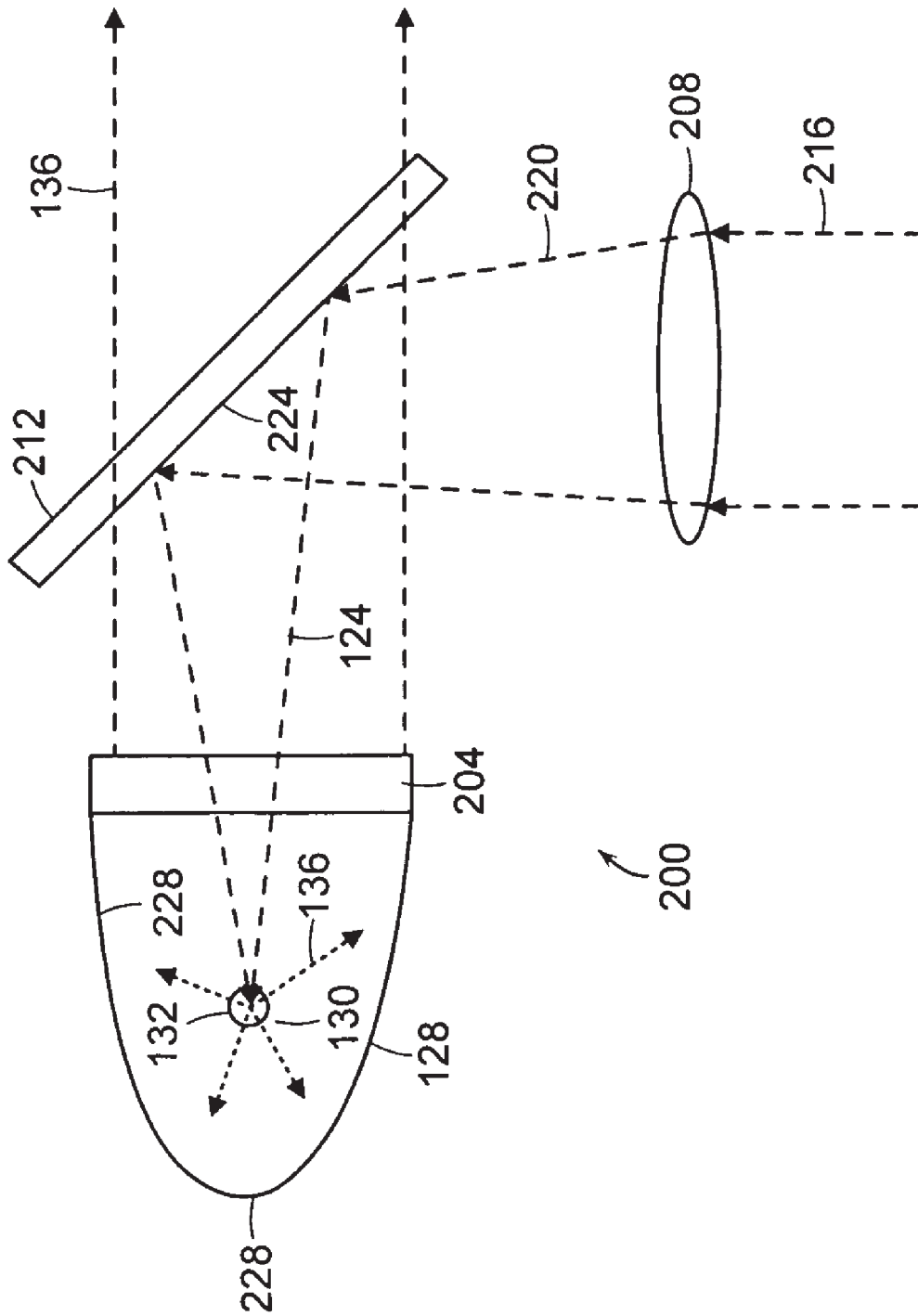


FIG. 2

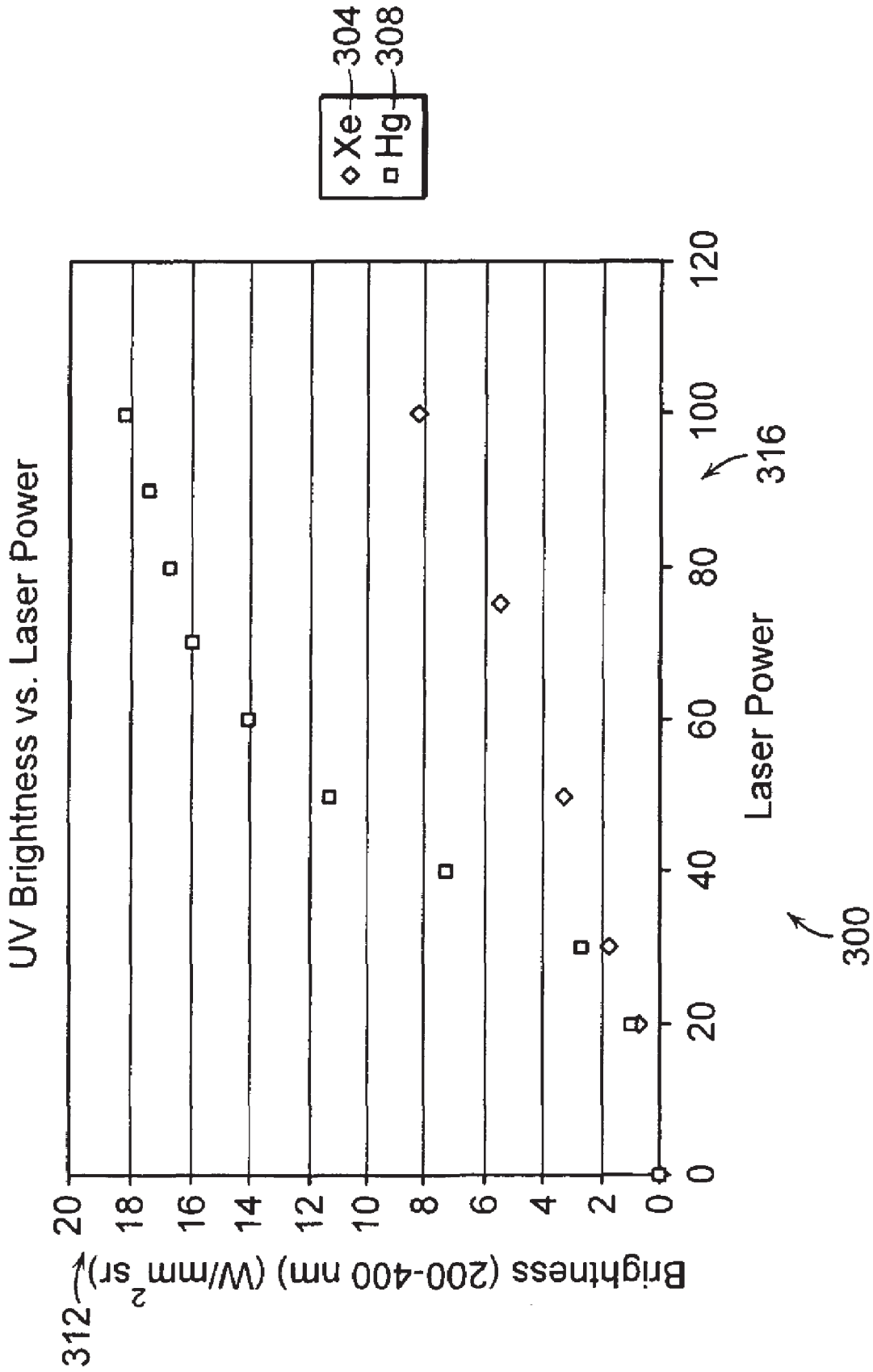


FIG. 3

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