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(12) **United States Patent**  
**Sharrah**

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(54) **PORTABLE LIGHT WITH SELECTABLE OPTICAL BEAM FORMING ARRANGEMENT**

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(51) **Int. Cl.**

**F21V 7/00** (2006.01)  
**F21L 4/00** (2006.01)  
**F21V 5/00** (2015.01)  
**F21V 5/04** (2006.01)  
**F21V 17/02** (2006.01)  
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CPC ..... **F21V 7/0091** (2013.01); **F21L 4/005** (2013.01); **F21V 5/006** (2013.01); **F21V 5/04** (2013.01); **F21V 17/02** (2013.01); **F21V 14/006** (2013.01); **F21V 17/002** (2013.01); **F21V 21/0885** (2013.01); **F21V 23/0428** (2013.01); **F21Y 2101/02** (2013.01)

(58) **Field of Classification Search**

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**F21V 14/006**; **F21V 17/002**; **F21V 17/02**;  
**F21V 21/0885**; **F21V 23/0428**; **F21Y**  
**2101/02**; **F21L 4/005**  
USPC ..... **362/311.02**, **187**, **208**  
See application file for complete search history.

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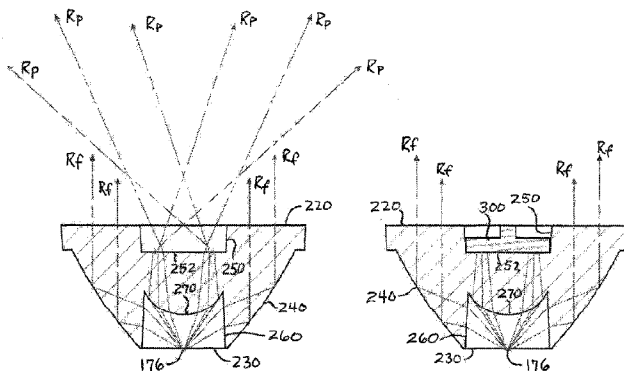
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(57) **ABSTRACT**

A portable light may comprise: a light body and a light source supported thereby and selectively energizable for producing light; a switch for selectively energizing the light source; a TIR optical element disposed in front of the light source for receiving the light produced thereby, and form the light into a collimated beam of light, the TIR optical element having a recess in a forward face thereof; and a selectable beam modification element placeable into and removable from the recess in the forward face of the TIR optical element.

**19 Claims, 10 Drawing Sheets**



Parhelion, Inc.  
EXHIBIT  
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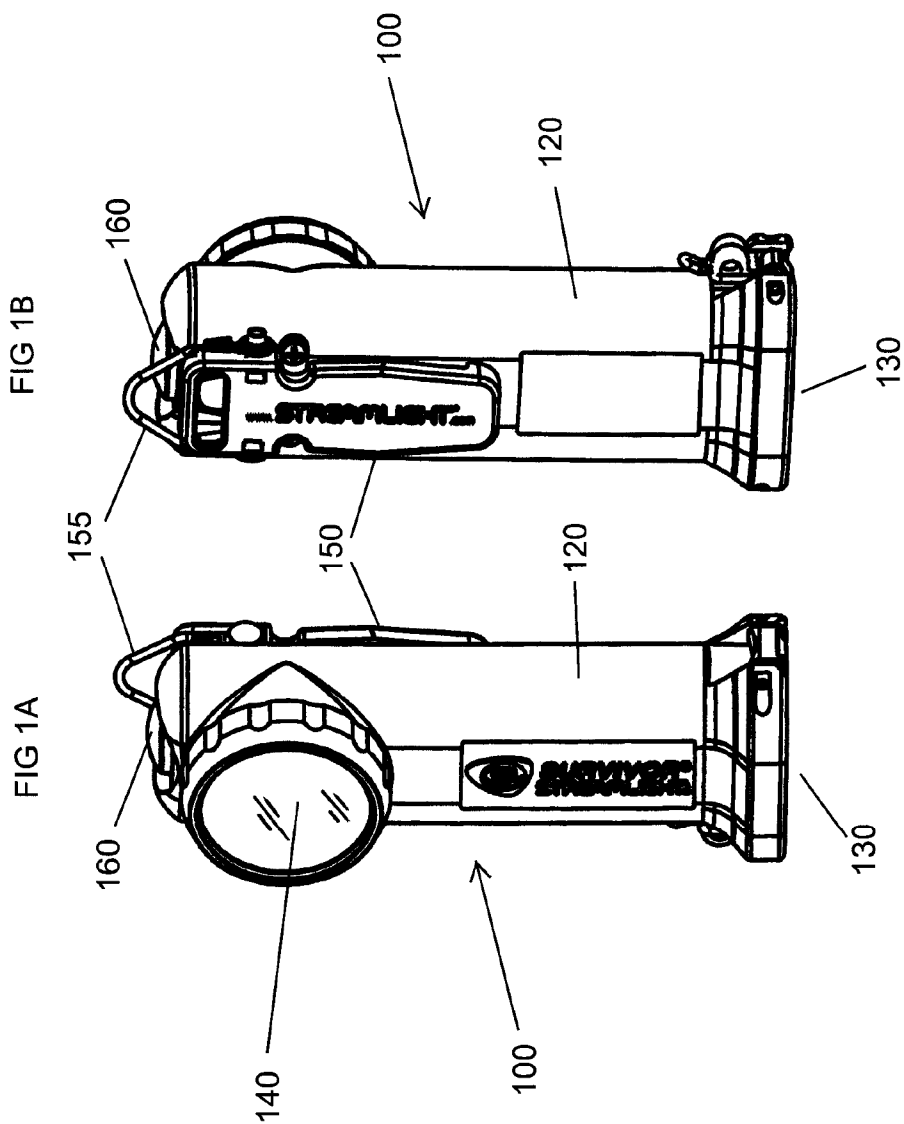
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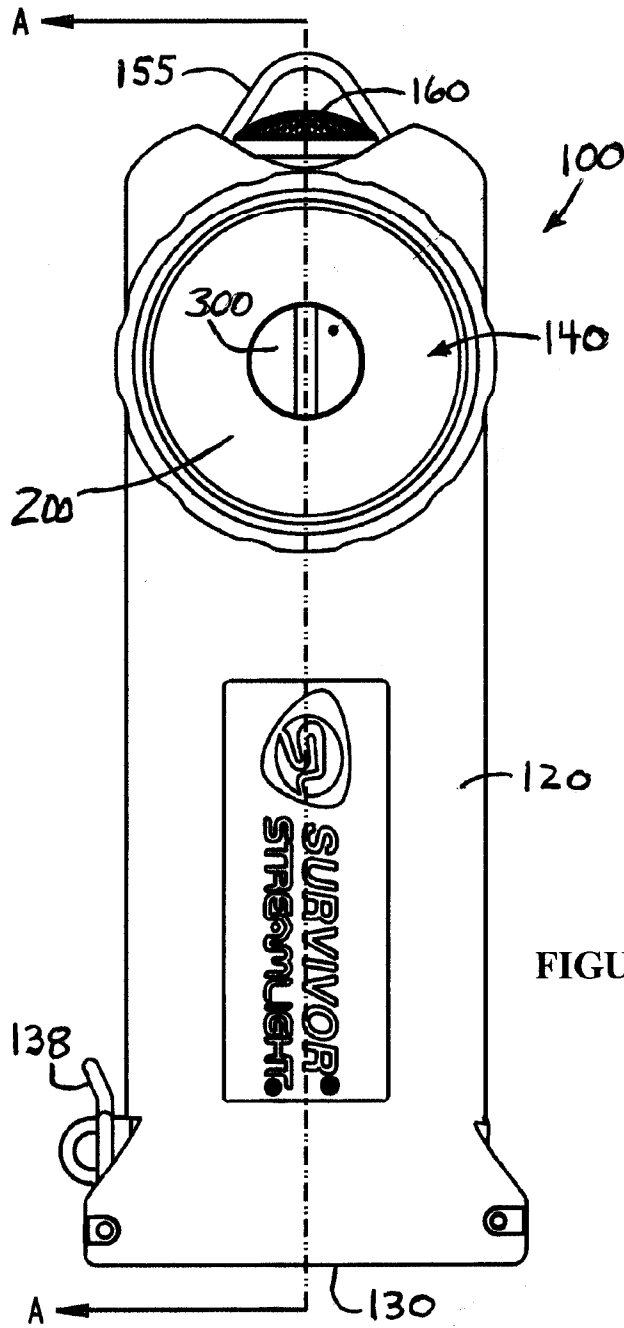


FIGURE 1C

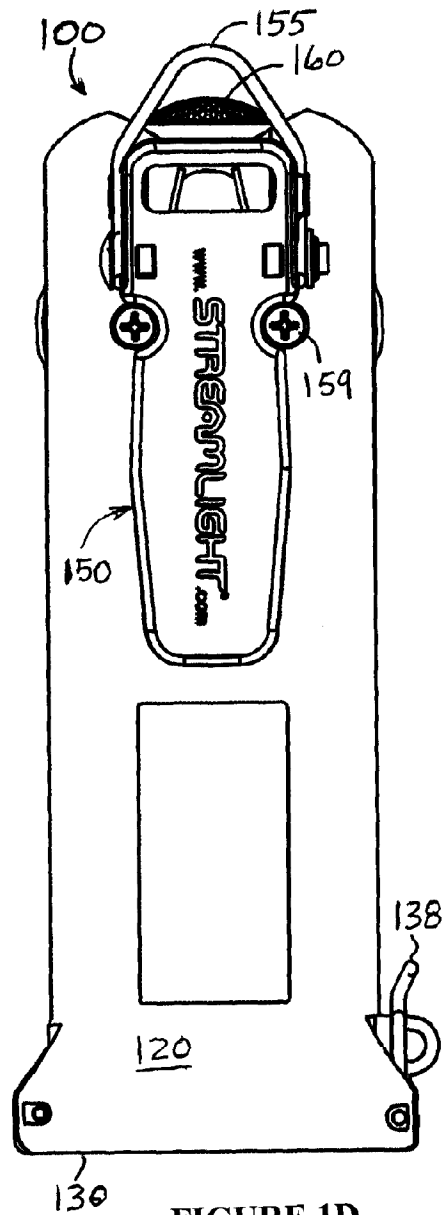


FIGURE 1D

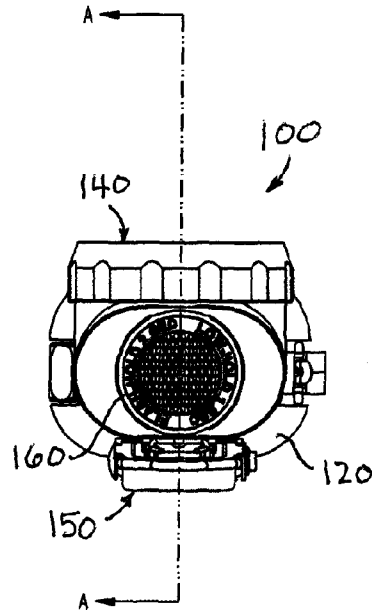


FIGURE 1E

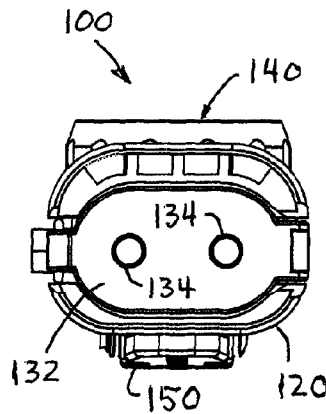


FIGURE 1F

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