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**Shimizu et al.**

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(54) **LIGHT EMITTING DEVICE WITH BLUE LIGHT LED AND PHOSPHOR COMPONENTS**

(58) **Field of Classification Search** ..... 313/498-512;  
428/690; 257/103  
See application file for complete search history.

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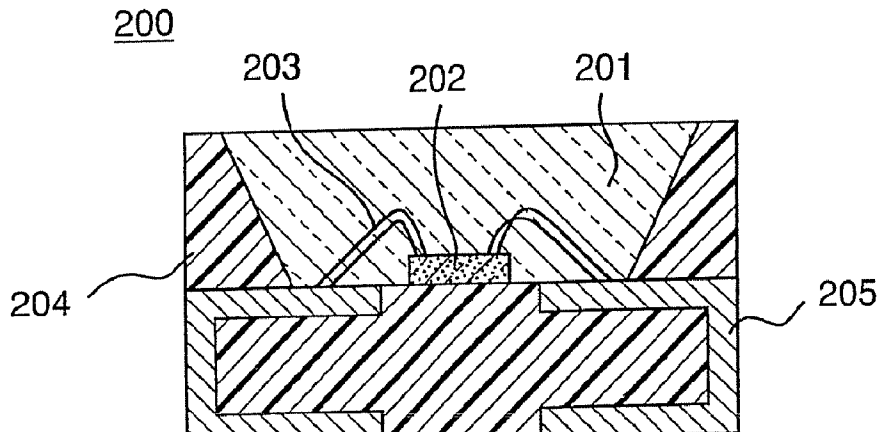
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(57) **ABSTRACT**

A light emitting device includes a light emitting component; and a phosphor capable of absorbing a part of light emitted by the light emitting component and emitting light of a wavelength different from that of the absorbed light. A straight line connecting a point of chromaticity corresponding to a peak of the spectrum generated by the light emitting component and a point of chromaticity corresponding to a peak of the spectrum generated by the phosphor is disposed along with the black body radiation locus in the chromaticity diagram.

(51) **Int. Cl.**  
**H05B 33/00** (2006.01)  
(52) **U.S. Cl.** ..... **313/512; 257/103; 428/690**

**23 Claims, 19 Drawing Sheets**



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Fig. 1

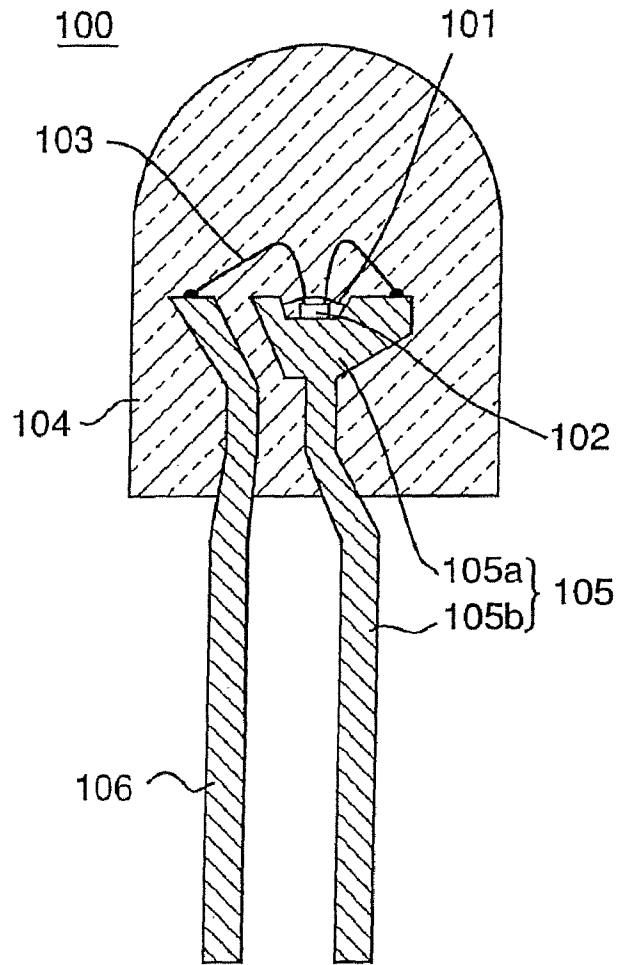


Fig. 2

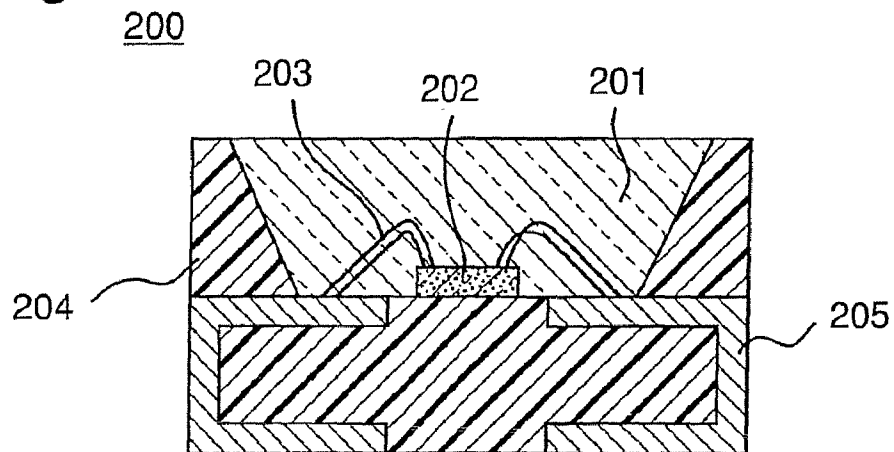


Fig.3A

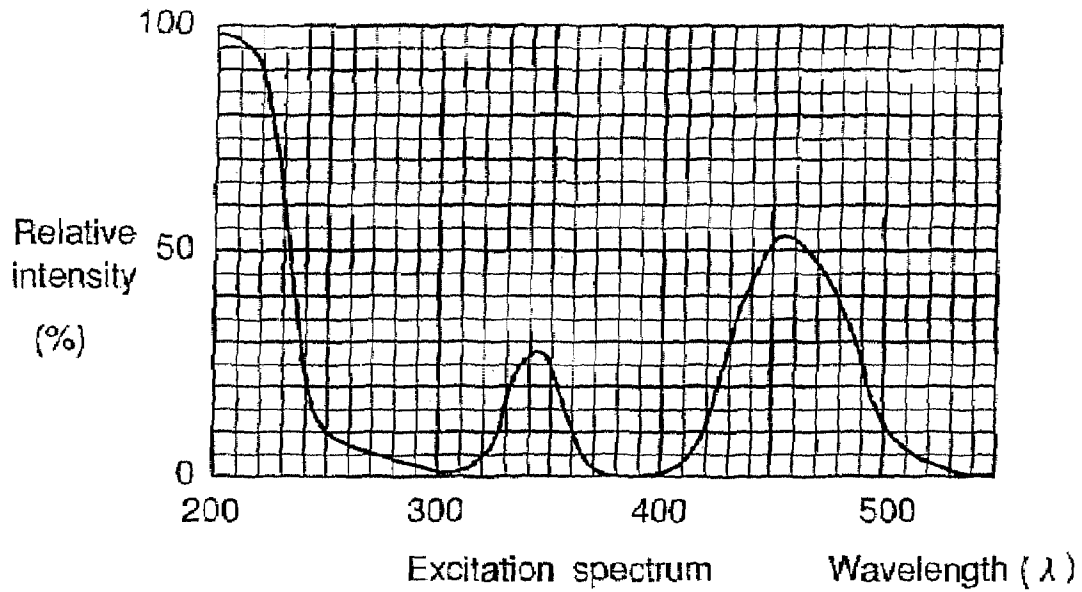
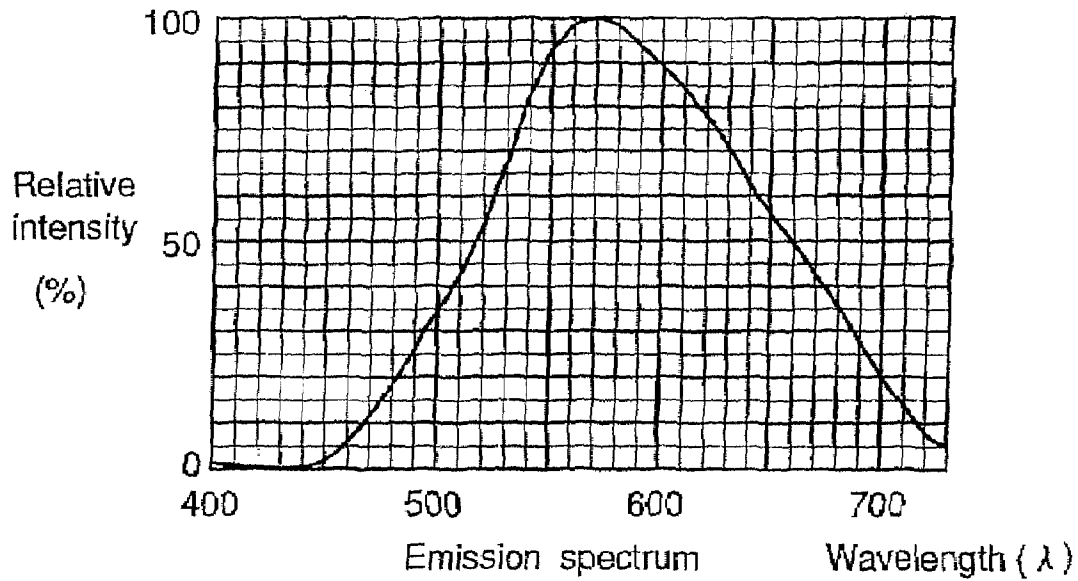


Fig.3B



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