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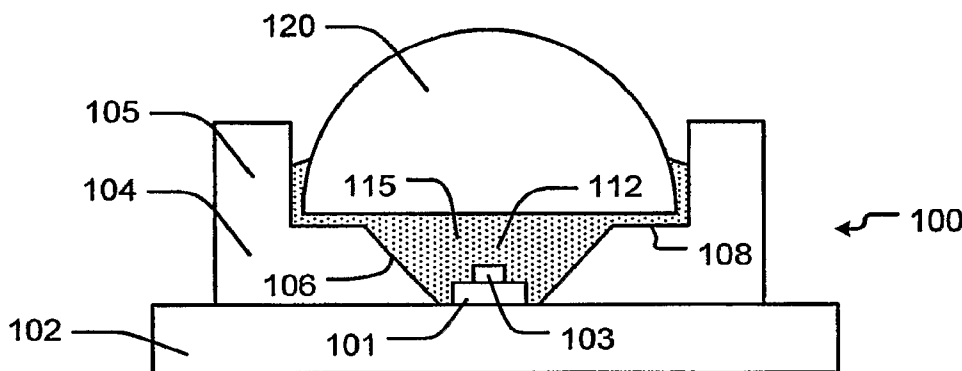
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(54) Title: PACKAGED LIGHT EMITTING DEVICES INCLUDING MULTIPLE INDEX LENSES AND METHODS OF FABRICATING THE SAME



(57) Abstract: A packaged light emitting device includes a substrate, a solid state light emitting device on the substrate, a first generally toroidal lens on the substrate and defining a cavity relative to the solid state light emitting device and having a first index of refraction, and a second lens at least partially within the cavity formed by the first lens and having a second index of refraction that is different from the first index of refraction. The second index of refraction may be higher than the first index of refraction. The lenses may be mounted on the substrate and/or may be formed by dispensing and curing liquid encapsulant materials.

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**INTERNATIONAL SEARCH REPORT**

International application No  
PCT/US2007/011325

**A. CLASSIFICATION OF SUBJECT MATTER**  
INV. H01L33/00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
H01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

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X	US 2004/061120 A1 (MIZUYOSHI AKIRA [JP]) 1 April 2004 (2004-04-01) paragraphs [0065] - [0094]; figure 15B	1-21
X	US 2006/034082 A1 (PARK JUNG K [KR] ET AL PARK JUNG KYU [KR] ET AL) 16 February 2006 (2006-02-16) paragraphs [0036] - [0052]; figure 1	1-15
X	WO 03/069685 A (ENFIS LTD [GB]; BOARD KENNETH [GB]; EVANS GARETH PETER [GB]) 21 August 2003 (2003-08-21)	1,2,4-9, 14,15
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Y	KR 100 580 753 B1 (LG INNOTEK CO LTD [KR]) 9 May 2006 (2006-05-09)	22-31
A	figure 4 -/--	1-21

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See patent family annex.

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- \*&\* document member of the same patent family

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## INTERNATIONAL SEARCH REPORT

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2007/011325
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