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(71) Applicant (for all designated States except US):
AMOLUXE CO., LTD. [KR/KR]; 579-10, Manho-ri,
PoSeng-eup, Pyeongtaek-si, Gyeonggi-do 451-821 (KR).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **GILL, Jason Jae**
[US/KR]; 550-28, Banpo 4-dong, Seocho-gu, Seoul
137-807 (KR).

(74) Agent: **LEE, Jae Hwa**; 4th Floor Duckchun B/D.,
718-10 Yoksam 1-dong, Kangnam-ku, Seoul 135-081
(KR).

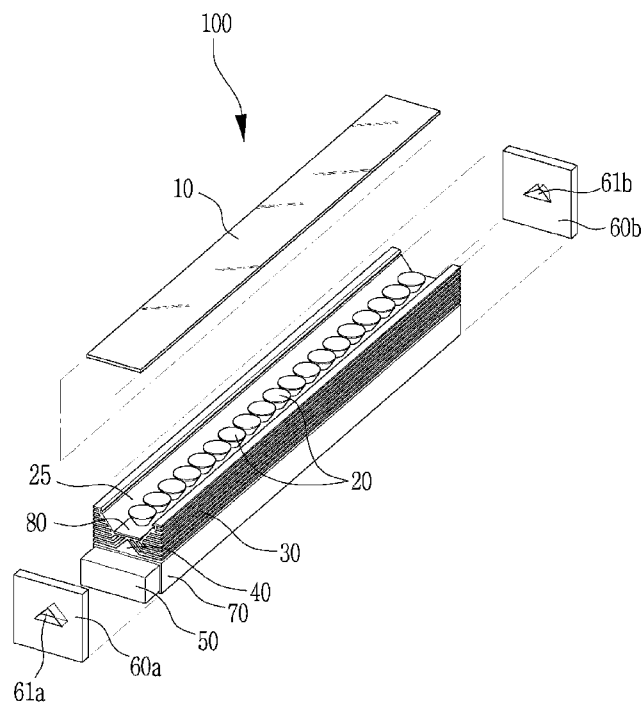
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[Continued on next page]

(54) Title: LIGHTING APPARATUS USING LIGHT EMITTING DIODES

[Fig. 2]



(57) Abstract: Provided is a lighting apparatus using light emitting diodes (LEDs) having a lateral heat radiation unit structure that can maximize heat radiation effect by employing an air vent structure causing atmospheric pressure difference between both side ends of an air circulation path. The lighting apparatus comprising a housing having a power supply accommodation space therein, a heat radiation unit that comprises an LED module accommodation groove that is installed on the top of the housing and having at least one inclined surface or mounting surface on which the LED module is mounted, and a number of fins that are formed on the outer circumferential surface of the LED module accommodation groove, an air circulation path that is lengthily formed between the housing and the heat radiation unit.



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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) & Keywords: "LED, PCB, housing, heat, radiation, air circulation path, cover"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	KR 10-2009-0081852 A (송명석 et al.) 29 July 2009 See abstract, paragraph [0024] - paragraph [0035], figures 2-3.	1-19
A	KR 10-2008-0077758 A (두림시스템 주식회사) 26 August 2008 See abstract, paragraph [0046] - paragraph [0064], figures 1-4.	1-19



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