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A. CLASSIFICATION OF SUBJECT MATTER***F21V 9/10(2006.01)i, F21V 17/00(2006.01)i, F21V 29/00(2006.01)i, F21Y 101/02(2006.01)n***

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)

F21V 9/10; G06F 15/16; H04J 3/22; H04B 7/02

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: light, envelope, down convert, heat sink

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US 2009-0141474 A1 (BORIS KOLODIN) 04 June 2009 See abstract; paragraphs [16]-[22] and [65]-[69]; claims 1-6; figure 4A.	1,32,34,38-40 2-31,33,35-37
A	US 2008-0084700 A1 (ANTONY PAUL VAN DE VEN) 10 April 2008 See abstract; paragraphs [11]-[42] and [125]-[127]; claims 1-7; figures 1 and 7.	1-40
A	US 2006-0072314 A1 (JACK C. RAINS) 06 April 2006 See abstract; paragraphs [8]-[13], [32]-[36] and [39]-[43]; claims 1-12; figures 2 and 5.	1-40
A	US 2007-0012887 A1 (MARTIN LETZ et al.) 18 January 2007 See abstract; paragraphs [10]-[17], [27]-[31] and [52]; claims 1-5; figure 1.	1-40



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

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"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2010/037965

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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		CA 2686613-A1	13.04.2006
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