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(54) Title: NON-IMAGING LIGHT CONCENTRATOR

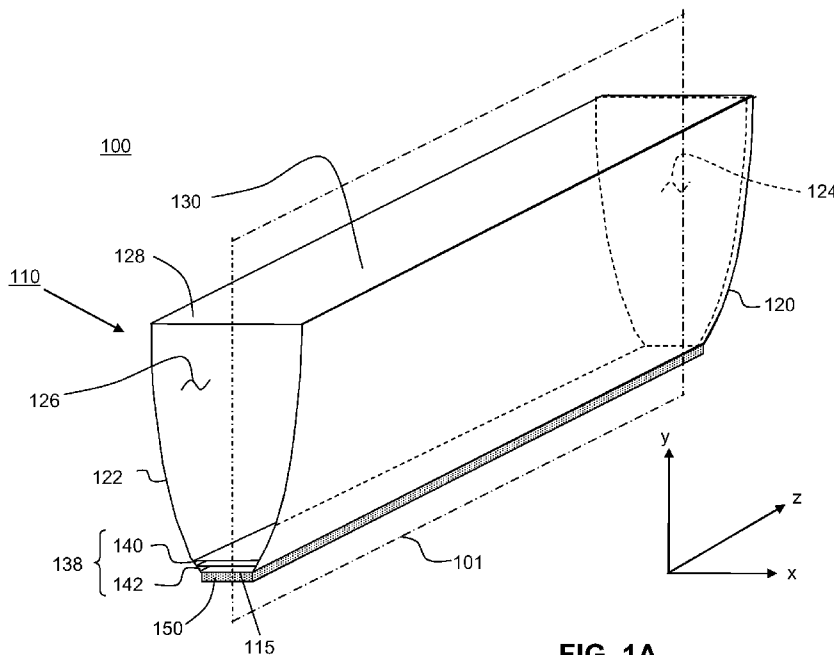


FIG. 1A

(57) Abstract: An apparatus includes a light concentrator, which during operation directs light from an entrance aperture and an exit aperture, and a photovoltaic device positioned relative to the exit aperture to receive the light. The light concentrator includes a hollow body formed from a pair of spaced-apart sidewalls and an exit wall connecting the sidewalls, each sidewall being formed from a material having a first refractive index, n_1 the exit wall includes a first element having an exit surface positioned at the exit aperture, the first element being formed from a material having second refractive index, n_2 , and the hollow body contains a liquid having a refractive index n_3 , where $n_3 < n_1$ and $n_3 < n_2$.



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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: concentrator, solar, refractive

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 4045246 A1 (MLAVSKY; ABRAHAM I. et al.) 30 August 1977 See columns 1-7 and figures 1-8.	1-17, 20-37, 39-40 18-19, 38
A	US 6653551 B2 (CHEN; LEON L. C.) 25 November 2003 See abstract and figures 1-3.	1-40
A	US 6252155 B1 (ORTABASI; UGUR) 26 June 2001 See abstract and figures 1-4.	1-40

 Further documents are listed in the continuation of Box C. See patent family annex.

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4045246 A1	30.08.1977	None	
US 6653551 B2	25.11.2003	AU 2002-364500 A1 DE 10296508 T5 TW 232594 A TW 234635 A US 2003-0075213 A1 US 2003-075212 A1 US 6717045 B2 WO 2003-054317 A3 WO 2003-054317 A3	09.07.2003 22.04.2004 11.05.2005 21.06.2005 24.04.2003 24.04.2003 06.04.2004 18.12.2003 03.07.2003
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