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(54) **Title:** COMBINATION LED FOG LAMP AND DAYTIME RUNNING LAMP

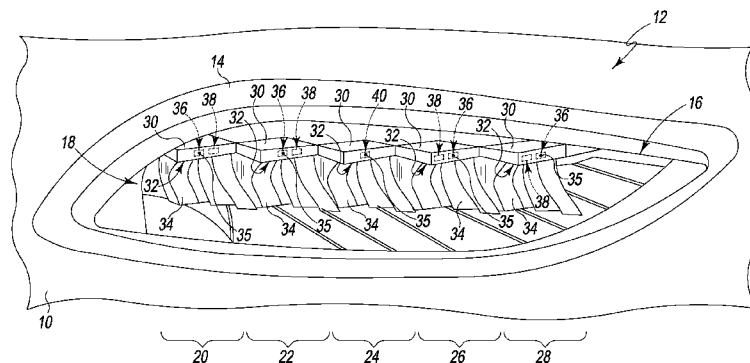


Fig. 1

(57) **Abstract:** A combination lamp for use in a vehicle includes a number of reflector modules, with each reflector module including a reflector, a first light emitting diode ("LED") positioned at a focus of the reflector, and a second LED offset from the focus of the reflector. The lamp may also include another reflector module having a reflector and a single, common LED positioned at a focus of the reflector. When the first LEDs and the common LED are energized, the combination lamp produces a first light pattern. When the second LEDs and the common LED are energized, the combination lamp produces a second light pattern. The first light pattern may be a fog lamp light pattern, and the second light pattern may be a daytime running lamp light pattern. The combination lamp may include four, five, or more reflector modules, including the one reflector module having the single, common LED.



INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 14/49010

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - B60Q 1/04, B60Q 1/06, B60Q 1/076, F21S 8/10 (2015.01)

CPC - B60Q 1/06; F21S 48/115

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)

CPC: B60Q 1/06; F21S 48/115

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
CPC: B60Q 1/04, 1/06; F21S 48/10, 48/1127, 48/115, 48/215; IPC(8): B60Q 1/04, B60Q 1/06, B60Q 1/076, F21S 8/10 (2015.01)

USPC: 362/227, 235, 236, 237, 240, 241, 249.02, 459, 487, 507, 517, 543, 544, 545 (text search - see terms below)

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

PatBase; PubWEST; Google

Search Terms Used: fog, running, light, lamp, led, combo, combination, shared, common, bulb, reflector, mirror, vehicle, automobile, motorcycle, truck, fourth, four, LED

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y -- A	EP 2,187,115 A2 (KOIZUMI) 19 May 2010 (19.05.2010), entire document especially Fig 2; paras [0018]-[0019], [0022], [0024], [0040]	1, 2, 5-10, 18, 19 ----- 3, 4, 11-17, 20
Y -- A	US 2012/0112614 A1 (PICKARD et al.) 10 May 2012 (10.05.2012), entire document especially Fig 3; paras [0005], [0053]	1, 2, 5-10, 18 ----- 3, 4, 11-17
Y -- A	US 2011/0169410 A1 (DASSANAYAKE et al.) 14 July 2011 (14.07.2011), entire document especially Figs 6, 8; paras [0046], [0053]	2, 9, 10, 18, 19 ----- 3, 11-17, 20
Y	US 2010/0053987 A1 (NAKABAYASHI) 04 March 2010 (04.03.2010), entire document paras [0024], [0028]	6
A	GB 1911/2776 A (KRUGER et al.) 26 October 1911 (26.10.1911), entire document especially Fig 2; pg 2, lns 27-41	1-20

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