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Blincoe et al.

(54) LIGHT-EMITTING DIODE (LED) FLOODLIGHT

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- (58) **Field of Classification Search**USPC 362/249.02–249.06, 294, 311.02, 373, 362/800

See application file for complete search history.

(56) References Cited

(10) Patent No.:

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U.S. PATENT DOCUMENTS

D136,799 S D625,870 S			Vendope Feigenbaum	
7,854,534 H 7,918,591 H	32 1		Liu	
.,		(Continued)		

FOREIGN PATENT DOCUMENTS

KR	10-2008-0000034	1/2008
KR	20-0447539	2/2010
KR	100945420	8/2010
KR	10-0997746	12/2010
	OTHER	PUBLICATIONS

Cooper Crouse-Hinds, "VMVIG and DMVIG Series CHAMP Induction Luminaires with Induction Lighting System", Product Brochure, Jun. 2005, pp. 1-8, Cooper Crouse-Hinds, USA.

(Continued)

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(57) ABSTRACT

A light emitting diode (LED) floodlight is described herein. The LED floodlight can include a LED housing assembly coupled to a driver assembly. The LED housing can include a number of LEDs mounted on a front side of a LED housing and a number of heat sink protrusions extending from a back side of the LED housing. The driver assembly can include a driver mounted within a driver housing, where the front side of the driver housing couples to the end of the heat sink protrusions that extend from the back side of the LED housing. The LEDs may be coupled to a number of reflectors. The reflectors can include a reflector body having a top portion and a bottom portion. The top portion can form a shape that is an elongated version of the shape formed by the bottom portion.

20 Claims, 12 Drawing Sheets

