

US008672518B2

(12) United States Patent

Boomgaarden et al.

(54) LOW PROFILE LIGHT AND ACCESSORY KIT FOR THE SAME

- (75) Inventors: Mark Penley Boomgaarden, Satellite Beach, FL (US); Michael Balestracci, Satellite Beach, FL (US); Rick LeClair, Melbourne, FL (US); Wei Sun, Indialantic, FL (US); David Henderson, Indialantic, FL (US); Shane Sullivan, Indialantic, FL (US)
- (73)Assignee: Lighting Science Group Corporation, Satellite Beach, FL (US)
- Subject to any disclaimer, the term of this (*) Notice: patent is extended or adjusted under 35 U.S.C. 154(b) by 44 days.
- (21) Appl. No.: 13/476,388
- (22)Filed: May 21, 2012

(65)**Prior Publication Data**

US 2012/0262921 A1 Oct. 18, 2012

Related U.S. Application Data

- Continuation-in-part of application No. 12/775,310, (63) filed on May 6, 2010, now Pat. No. 8,201,968.
- (60) Provisional application No. 61/248,665, filed on Oct. 5, 2009.
- (51) Int. Cl. F21V 29/00
- (52)U.S. Cl. USPC 362/294; 362/147; 362/148; 362/365; 362/235: 362/249.02

(2006.01)

(58) Field of Classification Search See application file for complete search history.

US 8,672,518 B2

(45) Date of Patent: Mar. 18, 2014

References Cited

(56)

U.S. PATENT DOCUMENTS

6,431,728	B1 *	8/2002	Fredericks et al	362/244
6,719,446	B2 *	4/2004	Сао	362/547
2008/0037255	A1 *	2/2008	Wang	362/294

(Continued)

FOREIGN PATENT DOCUMENTS

EP	1950491 A1	7/2008
WO	2008137732 A1	11/2008

OTHER PUBLICATIONS

EP International Search Report for Application No. 10174449.8; Mail Date: Dec. 14, 2010; 8 pgs.

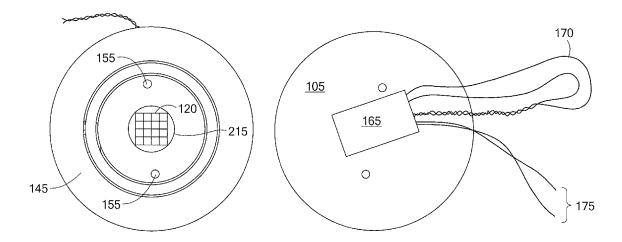
(Continued)

Primary Examiner — Ali Alavi (74) Attorney, Agent, or Firm - Cantor Colburn LLP

(57)ABSTRACT

A luminaire includes a heat spreader; a heat sink; an LED light source; a power supply; an electrical supply line having a first end connected to the power supply, and a second end connected to a plug-in connector; and, an optic securely retained relative to the heat spreader or heat sink. An accessory kit includes a first pre-wired jumper including a pair of insulated electrical wires having a first plug-in connector electrically connected at one end and an Edison base electrically connected at the other end; and/or, a second pre-wired jumper including a pair of insulated electrical wires having a second plug-in connector electrically connected at one end and unconnected wire ends at the other end. The plug-in connector of the first pre-wired jumper and the second prewired jumper are each configured to electrically engage with the plug-in connector of the electrical supply line.

15 Claims, 17 Drawing Sheets



(10) Patent No.:

(56) **References Cited**

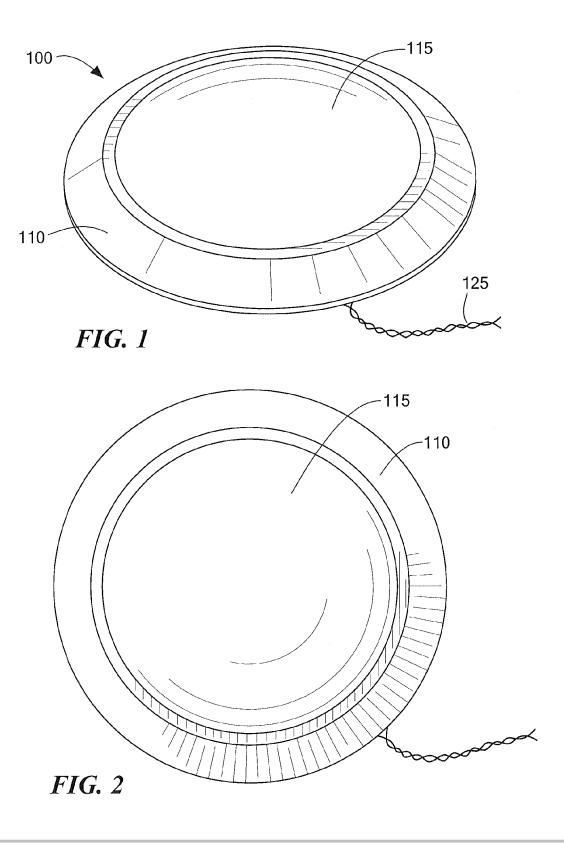
U.S. PATENT DOCUMENTS

2008/0170398 A1	7/2008	Kim
2008/0232116 A1	9/2008	Kim
2009/0086474 A1	4/2009	Chou
2009/0141506 A1	6/2009	Lan et al

OTHER PUBLICATIONS

European Office Action for Application No. 10 174 449.8. Mailed on Apr. 8, 2013. 4 pages.

* cited by examiner

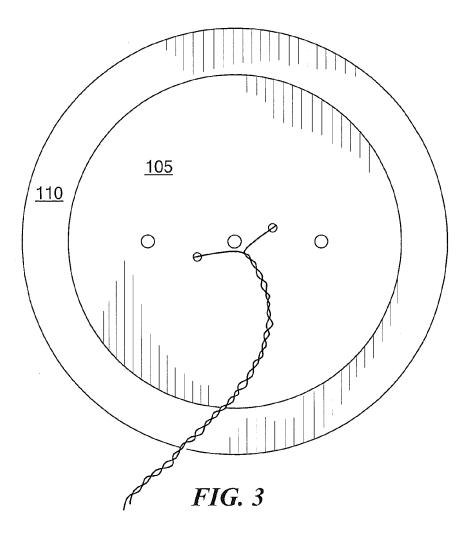


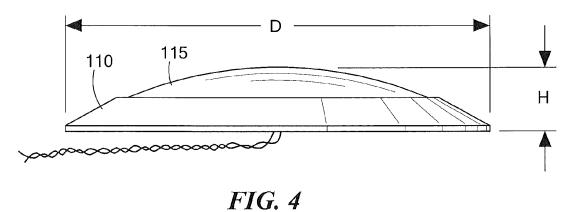
DOCKET Α LARM Find authenticated court documents without watermarks at <u>docketalarm.com</u>.

D

Α

Α





OCKFT R M Find authenticated court documents without watermarks at docketalarm.com.

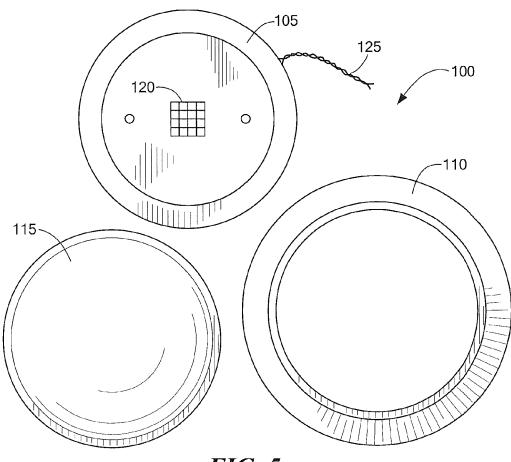


FIG. 5

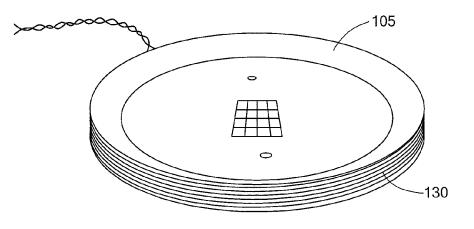


FIG. 6

DOCKET A L A R M



Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.