



US00D925109S

(12) **United States Design Patent** (10) **Patent No.:** **US D925,109 S**
Danesh et al. (45) **Date of Patent:** **** *Jul. 13, 2021**

(54) **LIGHTING MODULE**

(71) Applicant: **DMF, Inc.**, Carson, CA (US)

(72) Inventors: **Michael D. Danesh**, Carson, CA (US);
Dan Hero De Guzman Cajumban,
Hayward, CA (US)

(73) Assignee: **DMF, Inc.**, Carson, CA (US)

(*) Notice: This patent is subject to a terminal disclaimer.

(**) Term: **15 Years**

(21) Appl. No.: **29/688,143**

(22) Filed: **Apr. 18, 2019**

Related U.S. Application Data

(63) Continuation of application No. 29/663,037, filed on Sep. 11, 2018, now Pat. No. Des. 847,414, which is a continuation of application No. 15/167,682, filed on May 27, 2016, now Pat. No. 10,591,120.

(51) **LOC (13) Cl.** **26-05**

(52) **U.S. Cl.**
USPC **D26/138**; D26/63

(58) **Field of Classification Search**

USPC D26/63, 72, 74, 76, 78-83, 85, 86, 88, D26/90, 93, 111, 113, 118, 119, 120, 121, D26/122, 138, 139, 140, 141, 142, 152
CPC F21S 2/00; F21S 4/00; F21S 4/003; F21S 4/005; F21S 4/006; F21S 4/007; F21S 4/008; F21S 6/00; F21S 8/00; F21S 8/024; F21S 8/026; F21S 8/031; F21S 8/033; F21S 8/035-037; F21S 8/04; F21S 8/043; F21S 8/063

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,133,535 A 3/1915 Cain et al.
1,471,340 A 10/1923 Knight
1,856,356 A 5/1932 Owen
2,038,784 A 4/1936 Ghadiali
2,179,161 A 11/1939 Rambusch
2,197,737 A 4/1940 Appleton
2,352,913 A 7/1944 Morrill
2,528,989 A 11/1950 Ammells
2,597,595 A 5/1952 Ordas

(Continued)

FOREIGN PATENT DOCUMENTS

CA 2243934 C 6/2002
CA 2502637 A1 9/2005

(Continued)

OTHER PUBLICATIONS

2006 International Building Code, Section 712 Penetrations, 2006, 4 pages.

(Continued)

Primary Examiner — Natasha Vujcic
(74) *Attorney, Agent, or Firm* — Smith Baluch LLP

(57) **CLAIM**

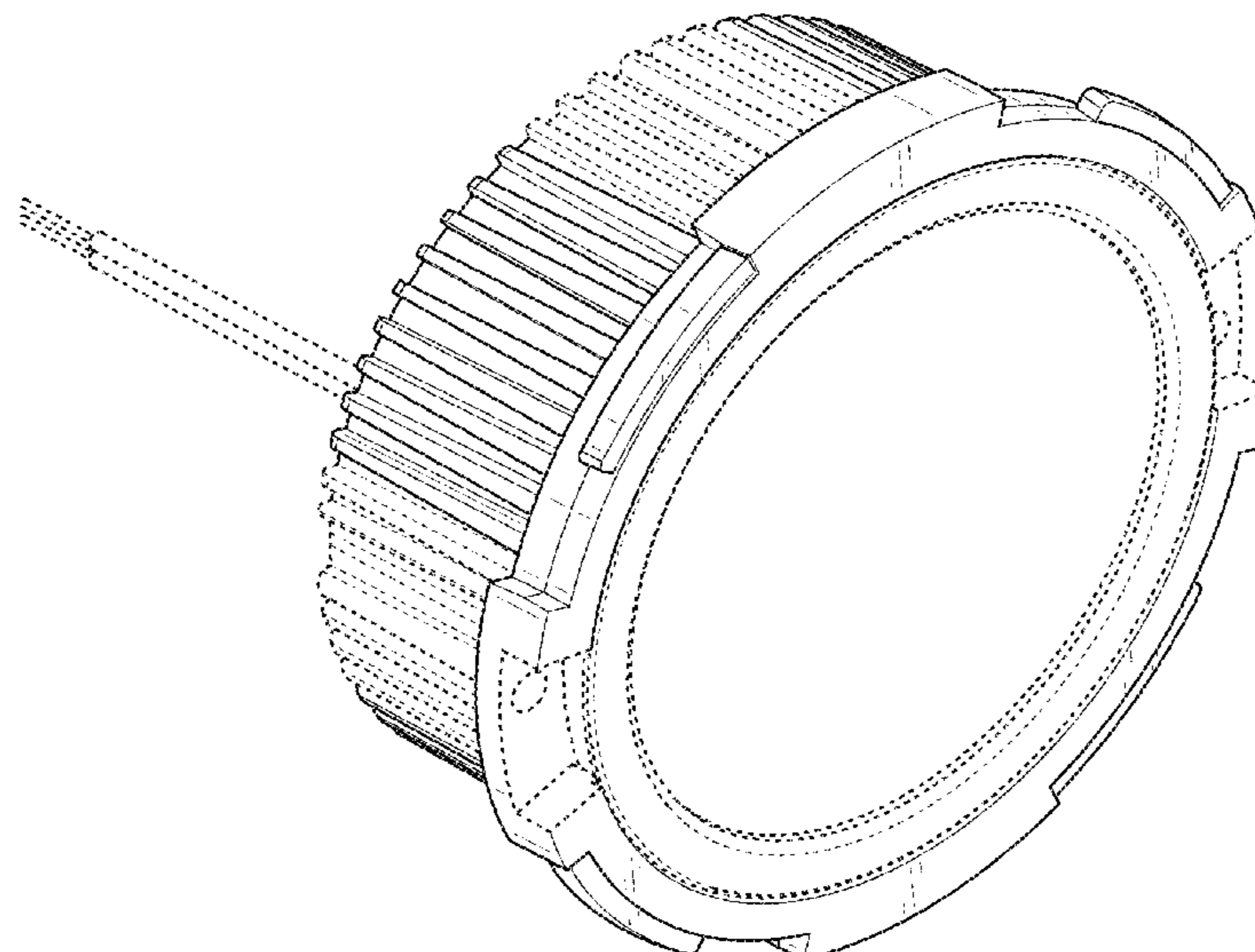
The ornamental design for a lighting module, as shown and described.

DESCRIPTION

FIG. 1 is an exploded right rear perspective view of the new design for a lighting module, the left rear perspective view being a reverse mirror image thereof; and, FIG. 2 is a front left perspective view of the new design for a lighting module, the front right perspective view being a reverse mirror image thereof.

The portions or features of the lighting module not shown in the drawings form no part of the claimed design. The broken lines in the drawings form no part of the claimed design.

1 Claim, 2 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

2,642,246 A	6/1953	Larry	5,957,573 A	9/1999	Wedekind et al.
2,670,919 A	3/1954	Vincent	5,975,323 A	11/1999	Turan
2,697,535 A	12/1954	Olson	6,082,878 A	7/2000	Doubek et al.
2,758,810 A	8/1956	Good	6,098,945 A	8/2000	Korcz
D180,844 S	8/1957	Poliakoff	6,105,334 A	8/2000	Monson et al.
2,802,933 A	8/1957	Harry	6,161,910 A	12/2000	Reisenauer et al.
2,998,512 A	8/1961	Duchene et al.	6,170,685 B1	1/2001	Currier
3,023,920 A	3/1962	Cook et al.	6,174,076 B1	1/2001	Petrakis et al.
3,057,993 A	10/1962	Gellert	6,176,599 B1	1/2001	Farzen
3,104,087 A	9/1963	Joseph et al.	6,267,491 B1	7/2001	Parrigin
3,214,126 A	10/1965	Roos	6,332,597 B1	12/2001	Korcz et al.
3,422,261 A	1/1969	McGinty	6,350,043 B1	2/2002	Gloisten
3,460,299 A	8/1969	Wilson	6,350,046 B1	2/2002	Lau
3,650,046 A	3/1972	Skinner	6,364,511 B1	4/2002	Cohen
3,675,807 A	7/1972	Lund et al.	6,375,338 B1	4/2002	Cummings et al.
3,700,885 A	10/1972	Bobrick	6,402,112 B1	6/2002	Thomas et al.
3,711,053 A	1/1973	Drake	D461,455 S	8/2002	Forbes
D227,989 S	7/1973	Geisel	6,461,016 B1	10/2002	Jamison et al.
3,773,968 A	11/1973	Copp	6,474,846 B1	11/2002	Kelmelis et al.
3,812,342 A	5/1974	Mcnamara	6,491,413 B1	12/2002	Benesohn
3,836,766 A	9/1974	Auerbach	D468,697 S	1/2003	Straub, Jr.
3,874,035 A	4/1975	Schuplin	D470,970 S	2/2003	Huang
3,913,773 A	10/1975	Copp et al.	6,515,313 B1	2/2003	Ibbetson et al.
D245,905 S	9/1977	Taylor	6,521,833 B1	2/2003	DeFreitas
4,088,827 A	5/1978	Kohaut	D471,657 S	3/2003	Huang
4,154,218 A	5/1979	Hulet	6,583,573 B2	6/2003	Bierman
4,154,219 A	5/1979	Gupta et al.	6,585,389 B2	7/2003	Bonazzi
4,176,758 A	12/1979	Glick	6,600,175 B1	7/2003	Baretz et al.
4,280,169 A	7/1981	Allen	D478,872 S	8/2003	Heggem
4,399,497 A	8/1983	Druffel	6,632,006 B1	10/2003	Rippel et al.
4,450,512 A	5/1984	Kristofek	6,657,236 B1	12/2003	Thibeault et al.
4,460,948 A	7/1984	Malola	6,666,419 B1	12/2003	Vrame
4,520,435 A	5/1985	Baldwin	D488,583 S	4/2004	Benghozi
4,539,629 A	9/1985	Poppenheimer	6,719,438 B2	4/2004	Sevack et al.
4,601,145 A	7/1986	Wilcox	6,758,578 B1	7/2004	Chou
4,667,840 A	5/1987	Lindsey	6,777,615 B1	8/2004	Gretz
4,723,747 A	2/1988	Karp et al.	6,779,908 B1	8/2004	Ng
4,729,080 A	3/1988	Fremont et al.	6,827,229 B2	12/2004	Dinh et al.
4,754,377 A	6/1988	Wenman	6,838,618 B2	1/2005	Newbold et al.
4,770,311 A	9/1988	Wang	6,906,352 B2	6/2005	Edmond et al.
4,880,128 A	11/1989	Jorgensen	D509,314 S	9/2005	Rashidi
4,910,651 A	3/1990	Montanez	6,948,829 B2	9/2005	Verdes et al.
4,919,292 A	4/1990	Hsu	6,958,497 B2	10/2005	Emerson et al.
4,929,187 A	5/1990	Hudson et al.	6,964,501 B2	11/2005	Ryan
4,930,054 A	5/1990	Krebs	6,967,284 B1	11/2005	Gretz
5,044,582 A	9/1991	Walters	D516,235 S	2/2006	Rashidi
D326,537 S	5/1992	Gattari	7,025,476 B2	4/2006	Leadford
5,216,203 A	6/1993	Gower	7,025,477 B2	4/2006	Blessing
5,222,800 A	6/1993	Chan et al.	7,064,269 B2	6/2006	Smith
5,239,132 A	8/1993	Bartow	D528,673 S	9/2006	Maxik et al.
5,250,269 A	10/1993	Langer et al.	7,102,172 B2	9/2006	Lynch
5,266,050 A	11/1993	O'Neil et al.	D531,740 S	11/2006	Maxik
5,303,894 A	4/1994	Deschamps et al.	D532,532 S	11/2006	Maxik
5,382,752 A	1/1995	Reyhan et al.	7,148,420 B1	12/2006	Johnson et al.
5,420,376 A	5/1995	Rajacki et al.	7,148,632 B2	12/2006	Berman
5,444,606 A	8/1995	Barnes et al.	7,152,985 B2	12/2006	Benitez et al.
5,465,199 A	11/1995	Bray et al.	7,154,040 B1	12/2006	Tompkins
5,505,419 A	4/1996	Gabrius	7,170,015 B1	1/2007	Roesch et al.
5,544,870 A	8/1996	Kelly et al.	D536,349 S	2/2007	Humber et al.
5,562,343 A	10/1996	Chan et al.	D537,039 S	2/2007	Pincek
5,571,993 A	11/1996	Jones et al.	7,181,378 B2	2/2007	Benitez et al.
5,580,158 A	12/1996	Aubrey et al.	D539,229 S	3/2007	Murphey
5,588,737 A	12/1996	Kusmer	7,186,008 B2	3/2007	Patti
5,603,424 A	2/1997	Bordwell et al.	7,190,126 B1	3/2007	Paton
5,609,408 A	3/1997	Targetti	7,211,833 B2	5/2007	Slater, Jr. et al.
5,613,338 A	3/1997	Esposito	7,213,940 B1	5/2007	Van De Ven et al.
D381,111 S	7/1997	Lecluze	7,234,674 B2	6/2007	Rippel et al.
5,662,413 A	9/1997	Akiyama et al.	D547,889 S	7/2007	Huang
D386,277 S	11/1997	Lecluze	D552,969 S	10/2007	Bobrowski et al.
5,690,423 A	11/1997	Hentz et al.	D553,267 S	10/2007	Yuen
D387,466 S	12/1997	Lecluze	D555,106 S	11/2007	Pape et al.
5,738,436 A	4/1998	Cummings et al.	D556,144 S	11/2007	Dinh
5,836,678 A	11/1998	Wright et al.	7,297,870 B1	11/2007	Sartini
5,942,726 A	8/1999	Reiker	7,312,474 B2	12/2007	Emerson et al.
5,944,412 A	9/1999	Janos et al.	7,320,536 B2	1/2008	Petrakis et al.
			D561,372 S	2/2008	Yan
			D561,373 S	2/2008	Yan
			7,335,920 B2	2/2008	Denbaars et al.
			D563,896 S	3/2008	Greenslate

(56)

References Cited

U.S. PATENT DOCUMENTS

7,347,580 B2	3/2008	Blackman et al.	7,972,035 B2	7/2011	Boyer
D570,012 S	5/2008	Huang	7,972,043 B2	7/2011	Schutte
7,374,308 B2	5/2008	Sevack et al.	D642,536 S	8/2011	Robinson
D570,504 S	6/2008	Maxik et al.	D643,970 S	8/2011	Kim et al.
D570,505 S	6/2008	Maxik et al.	8,002,425 B2	8/2011	Russo et al.
7,399,104 B2	7/2008	Rappaport	D646,011 S	9/2011	Rashidi
7,429,025 B1	9/2008	Gretz	8,013,243 B2	9/2011	Korcz et al.
D578,677 S	10/2008	Huang	8,038,113 B2	10/2011	Fryzek et al.
7,431,482 B1	10/2008	Morgan et al.	D648,476 S	11/2011	Choi et al.
7,432,440 B2	10/2008	Hull et al.	D648,477 S	11/2011	Kim et al.
7,442,883 B2	10/2008	Jolly et al.	D650,115 S	12/2011	Kim et al.
7,446,345 B2	11/2008	Emerson et al.	8,070,328 B1	12/2011	Knoble et al.
7,470,048 B2	12/2008	Wu	8,096,670 B2	1/2012	Trott
7,473,005 B2	1/2009	O'Brien	D654,205 S	2/2012	Rashidi
D586,497 S	2/2009	Wu et al.	D656,262 S	3/2012	Yoshinobu et al.
7,488,097 B2	2/2009	Reisenauer et al.	D656,263 S	3/2012	Ogawa et al.
7,494,258 B2	2/2009	McNaught	8,142,057 B2	3/2012	Roos et al.
7,503,145 B2	3/2009	Newbold et al.	8,152,334 B2	4/2012	Krogman
7,524,089 B2	4/2009	Park	D658,788 S	5/2012	Dudik et al.
D591,894 S	5/2009	Flank	D658,802 S	5/2012	Chen
7,534,989 B2	5/2009	Suehara et al.	D659,862 S	5/2012	Tsai
D596,154 S	7/2009	Rivkin	D659,879 S	5/2012	Rashidi
7,566,154 B2	7/2009	Gloisten et al.	D660,814 S	5/2012	Wilson
D599,040 S	8/2009	Alexander et al.	8,182,116 B2	5/2012	Zhang et al.
D600,836 S	9/2009	Hanley et al.	8,201,968 B2	6/2012	Maxik et al.
7,588,359 B2	9/2009	Coushaine et al.	D663,058 S	7/2012	Pan
7,592,583 B2	9/2009	Page et al.	D663,466 S	7/2012	Rashidi
D606,696 S	12/2009	Chen et al.	D664,274 S	7/2012	de Visser et al.
7,625,105 B1	12/2009	Johnson	D664,705 S	7/2012	Kong et al.
7,628,513 B2	12/2009	Chiu	8,215,805 B2	7/2012	Cogliano et al.
7,651,238 B2	1/2010	O'Brien	8,220,970 B1	7/2012	Khazi et al.
7,654,705 B2	2/2010	Czech et al.	8,226,270 B2	7/2012	Yamamoto et al.
D611,650 S *	3/2010	Broekhoff D26/134	8,235,549 B2	8/2012	Gingrich, III et al.
7,670,021 B2	3/2010	Chou	8,238,050 B2	8/2012	Minano et al.
7,673,841 B2	3/2010	Wronski	8,240,630 B2	8/2012	Wronski
7,677,766 B2	3/2010	Boyer	D667,155 S	9/2012	Rashidi
7,692,182 B2	4/2010	Bergmann et al.	8,262,255 B1	9/2012	Rashidi
7,704,763 B2	4/2010	Fujii et al.	D668,372 S	10/2012	Renshaw et al.
D616,118 S	5/2010	Thomas et al.	D668,809 S	10/2012	Rashidi
7,722,208 B1	5/2010	Dupre et al.	D669,198 S	10/2012	Qui
7,722,227 B2	5/2010	Zhang et al.	D669,199 S	10/2012	Chuang
7,735,795 B2	6/2010	Wronski	D669,620 S	10/2012	Rashidi
7,735,798 B2	6/2010	Kojima	8,277,090 B2	10/2012	Fryzek et al.
7,748,887 B2	7/2010	Zampini, II et al.	D671,668 S *	11/2012	Rowlette, Jr. D26/74
7,766,518 B2	8/2010	Piepgras	8,308,322 B2	11/2012	Santiago et al.
7,769,192 B2	8/2010	Takagi et al.	D672,899 S	12/2012	Van De Ven et al.
7,771,082 B2	8/2010	Peng	D673,869 S	1/2013	Yu
7,771,094 B2	8/2010	Goode	D676,263 S	2/2013	Birke
7,784,754 B2	8/2010	Nevers et al.	D676,814 S	2/2013	Paul
D624,691 S *	9/2010	Zhang D26/138	8,376,593 B2	2/2013	Bazydola et al.
D624,692 S	9/2010	Mackin et al.	D677,417 S	3/2013	Rashidi
D625,847 S	10/2010	Maglica	D677,634 S	3/2013	Korcz et al.
D625,876 S	10/2010	Chen et al.	D679,044 S	3/2013	Jeswani et al.
D627,507 S	11/2010	Lai et al.	D679,047 S	3/2013	Tickner et al.
D627,727 S	11/2010	Alexander et al.	8,403,533 B1	3/2013	Paulsel
7,828,465 B2	11/2010	Roberge et al.	8,403,541 B1	3/2013	Rashidi
D629,366 S	12/2010	Ericson et al.	D681,259 S	4/2013	Kong
7,845,393 B2	12/2010	Kao et al.	8,408,759 B1	4/2013	Rashidi
7,857,275 B2	12/2010	de La Borbolla	D682,459 S	5/2013	Gordin et al.
7,871,184 B2	1/2011	Peng	D683,063 S *	5/2013	Lopez D26/113
7,874,539 B2	1/2011	Wright et al.	D683,890 S *	6/2013	Lopez D26/113
7,874,703 B2	1/2011	Shastry et al.	D684,269 S	6/2013	Wang et al.
7,874,709 B1	1/2011	Beadle	D684,287 S	6/2013	Rashidi
D633,224 S	2/2011	Lee	D684,719 S	6/2013	Rashidi
7,909,487 B1	3/2011	Venetucci et al.	D685,118 S	6/2013	Rashidi
D636,903 S	4/2011	Torenbeek	D685,120 S	6/2013	Rashidi
D637,339 S	5/2011	Hasan et al.	8,454,204 B1	6/2013	Chang et al.
D637,340 S	5/2011	Hasan et al.	D685,507 S	7/2013	Sun
7,950,832 B2	5/2011	Tanaka et al.	D687,586 S	8/2013	Rashidi
D639,499 S	6/2011	Choi et al.	D687,587 S	8/2013	Rashidi
D640,819 S	6/2011	Pan	D687,588 S	8/2013	Rashidi
7,956,546 B2	6/2011	Hasnain	D687,980 S	8/2013	Gravely et al.
7,959,332 B2	6/2011	Tickner et al.	D688,405 S	8/2013	Kim et al.
7,967,480 B2	6/2011	Pickard et al.	8,506,127 B2	8/2013	Russello et al.
D642,317 S	7/2011	Rashidi	8,506,134 B2	8/2013	Wilson et al.
			D690,049 S	9/2013	Rashidi
			D690,053 S	9/2013	Zhang et al.
			D690,864 S	10/2013	Rashidi
			D690,865 S	10/2013	Rashidi

(56)

References Cited

U.S. PATENT DOCUMENTS

D690,866 S	10/2013	Rashidi	
D691,314 S	10/2013	Rashidi	
D691,315 S	10/2013	Samson	
D691,763 S	10/2013	Hand et al.	
8,550,669 B2	10/2013	Macwan et al.	
D693,043 S	11/2013	Schmalfuss et al.	
D693,517 S	11/2013	Davis	
D694,456 S	11/2013	Rowlette, Jr. et al.	
8,573,816 B2	11/2013	Negley et al.	
D695,441 S	12/2013	Lui et al.	
D695,941 S	12/2013	Rashidi	
D696,446 S	12/2013	Huh	
D696,447 S	12/2013	Huh	
D696,448 S	12/2013	Huh	
8,602,601 B2	12/2013	Khazi et al.	
D698,067 S	1/2014	Rashidi	
D698,068 S	1/2014	Rashidi	
8,622,361 B2	1/2014	Wronski	
8,632,040 B2	1/2014	Mass et al.	
D698,985 S *	2/2014	Lopez	D26/113
D699,384 S	2/2014	Rashidi	
D699,687 S	2/2014	Baldwin et al.	
D700,387 S	2/2014	Snell	
8,641,243 B1	2/2014	Rashidi	
8,659,034 B2	2/2014	Baretz et al.	
D700,991 S	3/2014	Johnson et al.	
D701,175 S	3/2014	Baldwin et al.	
D701,466 S	3/2014	Clifford et al.	
8,672,518 B2	3/2014	Boomgaarden et al.	
D702,867 S	4/2014	Kim et al.	
D703,843 S	4/2014	Cheng	
8,684,569 B2	4/2014	Pickard et al.	
D705,472 S	5/2014	Huh	
D705,481 S	5/2014	Zhang et al.	
8,727,582 B2	5/2014	Brown et al.	
D708,381 S	7/2014	Rashidi	
8,777,449 B2	7/2014	Ven et al.	
D710,529 S	8/2014	Lopez et al.	
8,801,217 B2	8/2014	Oehle et al.	
8,820,985 B1	9/2014	Tam et al.	
8,833,013 B2	9/2014	Harman	
8,845,144 B1	9/2014	Davies et al.	
D714,989 S	10/2014	Rowlette, Jr. et al.	
8,870,426 B2	10/2014	Biebl et al.	
8,888,332 B2	11/2014	Martis et al.	
8,890,414 B2	11/2014	Rowlette, Jr. et al.	
D721,845 S	1/2015	Lui et al.	
8,926,133 B2	1/2015	Booth	
8,939,418 B2	1/2015	Green et al.	
D722,296 S	2/2015	Taylor	
D722,977 S	2/2015	Hagarty	
D722,978 S	2/2015	Hagarty	
8,950,898 B2	2/2015	Catalano	
D723,781 S	3/2015	Miner	
D723,783 S	3/2015	Miner	
D725,359 S	3/2015	Miner	
8,967,575 B1	3/2015	Gretz	
D726,363 S *	4/2015	Danesh	D26/138
D726,949 S	4/2015	Redfern	
9,004,435 B2	4/2015	Wronski	
9,039,254 B2	5/2015	Danesh	
D731,689 S	6/2015	Bernard et al.	
9,062,866 B1	6/2015	Christ et al.	
9,065,264 B2	6/2015	Cooper et al.	
9,068,719 B2	6/2015	Van De Ven et al.	
9,068,722 B2	6/2015	Wronski et al.	
D734,525 S	7/2015	Gordin et al.	
D735,012 S	7/2015	Cowie	
D735,142 S	7/2015	Hagarty	
9,078,299 B2	7/2015	Ashdown	
D735,933 S *	8/2015	Campagna	D26/142
9,109,760 B2	8/2015	Shum et al.	
D739,355 S	9/2015	D'Aubeterre	
D739,590 S	9/2015	Redfern	
9,140,441 B2	9/2015	Goelz et al.	
D741,538 S	10/2015	Ghasabi	
D742,325 S	10/2015	Leung	
9,151,457 B2	10/2015	Pickard et al.	
9,151,477 B2	10/2015	Pickard et al.	
D743,079 S	11/2015	Adair	
D744,723 S	12/2015	Yoo	
9,217,560 B2	12/2015	Harbers et al.	
9,222,661 B2	12/2015	Kim et al.	
9,239,131 B1	1/2016	Wronski et al.	
D750,317 S	2/2016	Lui et al.	
9,285,103 B2	3/2016	Van De Ven et al.	
9,291,319 B2	3/2016	Kathawate et al.	
9,301,362 B2	3/2016	Dohn et al.	
D754,078 S	4/2016	Baldwin et al.	
D754,079 S	4/2016	Baldwin et al.	
D754,605 S	4/2016	McMillan	
9,303,812 B2	4/2016	Green et al.	
9,310,038 B2	4/2016	Athalye	
9,310,052 B1	4/2016	Shum	
9,322,543 B2	4/2016	Hussell et al.	
9,347,655 B2	5/2016	Boomgaarden et al.	
9,360,190 B1	6/2016	Shum et al.	
9,366,418 B2	6/2016	Gifford	
9,371,966 B2	6/2016	Rowlette, Jr. et al.	
D762,181 S	7/2016	Lin	
9,395,051 B2	7/2016	Hussell et al.	
D762,906 S	8/2016	Jeswani et al.	
D764,079 S	8/2016	Wu	
9,404,639 B2	8/2016	Bailey et al.	
9,417,506 B1	8/2016	Tirosh	
D766,185 S	9/2016	Hagarty	
D767,199 S	9/2016	Wronski et al.	
9,447,917 B1	9/2016	Wronski et al.	
9,447,953 B2	9/2016	Lawlor	
D768,325 S	10/2016	Xu	
D768,326 S	10/2016	Guzzini	
D769,501 S	10/2016	Jeswani et al.	
D770,065 S	10/2016	Tittle	
D770,076 S	10/2016	Li et al.	
D770,084 S	10/2016	Salomon	
9,476,552 B2	10/2016	Myers et al.	
9,488,324 B2	11/2016	Shum et al.	
D774,676 S *	12/2016	Ng	D26/65
D776,324 S	1/2017	Gierl et al.	
D777,967 S	1/2017	Redfern	
9,534,751 B2	1/2017	Maglica et al.	
D778,241 S	2/2017	Holbrook et al.	
D778,484 S	2/2017	Guzzini	
D779,100 S	2/2017	Redfern	
9,581,302 B2	2/2017	Danesh	
9,599,315 B1	3/2017	Harpenau et al.	
9,605,842 B1	3/2017	Davis	
9,605,910 B2	3/2017	Swedberg et al.	
D785,228 S	4/2017	Guzzini	
D785,852 S	5/2017	Doust	
D786,472 S	5/2017	Redfern	
D786,473 S	5/2017	Dean	
D786,474 S	5/2017	Fujisawa	
D788,330 S	5/2017	Johnson et al.	
D790,102 S	6/2017	Guzzini	
9,673,597 B2	6/2017	Lee	
9,689,541 B2	6/2017	Wronski	
D791,709 S	7/2017	Holton	
D791,711 S	7/2017	Holton	
D791,712 S	7/2017	Holton	
9,696,021 B2	7/2017	Wronski	
9,702,516 B1	7/2017	Vasquez et al.	
D795,820 S	8/2017	Wengreen	
9,732,904 B1	8/2017	Wronski	
9,739,464 B2	8/2017	Wronski	
D799,105 S *	10/2017	Eder	D26/138
D800,957 S *	10/2017	Eder	D26/138
9,791,111 B1	10/2017	Huang et al.	
9,797,562 B2	10/2017	Dabiet et al.	
9,803,839 B2	10/2017	Visser et al.	
D805,660 S	12/2017	Creasman et al.	
D809,176 S	1/2018	Partington	
9,860,961 B2	1/2018	Chemel	
9,863,619 B2	1/2018	Mak	

(56)

References Cited

U.S. PATENT DOCUMENTS

D809,465 S	2/2018	Keirstead	2007/0035951 A1	2/2007	Tseng
9,903,569 B2	2/2018	O'Brien et al.	2007/0121328 A1	5/2007	Mondloch et al.
9,964,266 B2	5/2018	Danesh	2007/0131827 A1	6/2007	Nevers et al.
D820,494 S	6/2018	Cohen	2007/0185675 A1	8/2007	Papamichael et al.
D821,615 S	6/2018	Trice	2007/0200039 A1	8/2007	Petak
D821,627 S	6/2018	Ko	2007/0206374 A1	9/2007	Petrakis et al.
9,995,441 B2	6/2018	Power et al.	2008/0002414 A1	1/2008	Miletich et al.
D822,505 S	7/2018	Gibson et al.	2008/0019138 A1	1/2008	Otte et al.
D824,494 S	7/2018	Martins et al.	2008/0112168 A1	5/2008	Pickard et al.
D825,829 S	8/2018	Guo	2008/0112170 A1	5/2008	Trott
10,041,638 B2	8/2018	Vasquez et al.	2008/0112171 A1	5/2008	Patti et al.
D827,903 S	9/2018	Wu	2008/0130308 A1	5/2008	Behr
D832,218 S	10/2018	Wronski et al.	2008/0137347 A1	6/2008	Trott et al.
D833,977 S	11/2018	Danesh et al.	2008/0165545 A1	7/2008	O'Brien
10,125,959 B2	11/2018	Cohen	2008/0170404 A1	7/2008	Steer et al.
10,139,059 B2	11/2018	Danesh	2008/0224008 A1	9/2008	Dal Ponte et al.
D836,976 S	1/2019	Reese et al.	2008/0232116 A1	9/2008	Kim
D847,414 S *	4/2019	Danesh	2008/0247181 A1	10/2008	Dixon
	 F21V 5/04	2008/0285271 A1	11/2008	Roberge et al.
		D26/138	2009/0003009 A1	1/2009	Tessnow et al.
D847,415 S *	4/2019	Danesh	2009/0034261 A1	2/2009	Grove
	 F21S 8/02	2009/0080189 A1	3/2009	Wegner
		D26/138	2009/0086484 A1	4/2009	Johnson
10,247,390 B1	4/2019	Kopitzke, IV	2009/0097262 A1	4/2009	Zhang et al.
D848,375 S	5/2019	Danesh et al.	2009/0135613 A1	5/2009	Peng
10,281,131 B2	5/2019	Cohen	2009/0141500 A1	6/2009	Peng
10,295,163 B1	5/2019	Cohen	2009/0141506 A1	6/2009	Lan et al.
D850,695 S	6/2019	Dabiet et al.	2009/0141508 A1	6/2009	Peng
D851,046 S	6/2019	Peng et al.	2009/0147517 A1	6/2009	Li
10,408,395 B2	9/2019	Danesh	2009/0161356 A1	6/2009	Negley et al.
10,408,396 B2	9/2019	Wronski et al.	2009/0237924 A1	9/2009	Ladewig
10,408,436 B2	9/2019	Wronski et al.	2009/0280695 A1	11/2009	Sekela et al.
D863,661 S	10/2019	Tian et al.	2009/0283292 A1	11/2009	Lehr
D864,877 S	10/2019	Danesh	2009/0290343 A1	11/2009	Brown et al.
D864,885 S	10/2019	Kobayashi et al.	2010/0002320 A1	1/2010	Minano et al.
D867,653 S	11/2019	Gorman	2010/0014282 A1	1/2010	Danesh
10,488,000 B2	11/2019	Danesh et al.	2010/0033095 A1	2/2010	Sadwick
10,551,044 B2	2/2020	Peng et al.	2010/0061108 A1	3/2010	Zhang et al.
10,563,850 B2	2/2020	Danesh	2010/0110690 A1	5/2010	Hsu et al.
10,591,120 B2	3/2020	Bailey et al.	2010/0110698 A1	5/2010	Harwood et al.
D880,733 S *	4/2020	Lo	2010/0110699 A1	5/2010	Chou
D883,562 S	5/2020	Hu	2010/0148673 A1	6/2010	Stewart et al.
D885,648 S	5/2020	Zeng	2010/0149822 A1	6/2010	Cogliano et al.
D885,649 S	5/2020	McLaughlin, III et al.	2010/0165643 A1	7/2010	Russo et al.
10,663,127 B2	5/2020	Danesh et al.	2010/0244709 A1	9/2010	Steiner et al.
10,663,153 B2	5/2020	Nikooyan et al.	2010/0246172 A1	9/2010	Liu
D888,313 S	6/2020	Xie et al.	2010/0259919 A1	10/2010	Khazi et al.
10,683,994 B2	6/2020	Wronski et al.	2010/0270903 A1	10/2010	Jao et al.
10,684,003 B2	6/2020	Wronski et al.	2010/0277905 A1	11/2010	Janik et al.
D890,410 S	7/2020	Stanford et al.	2010/0284185 A1	11/2010	Ngai
10,753,558 B2	8/2020	Danesh	2010/0302778 A1	12/2010	Dabiet et al.
10,816,148 B2	10/2020	Danesh	2011/0043040 A1	2/2011	Porter et al.
D901,745 S	11/2020	Yang	2011/0063831 A1	3/2011	Cook
2002/0172047 A1	11/2002	Ashley	2011/0068687 A1	3/2011	Takahasi et al.
2003/0006353 A1	1/2003	Dinh et al.	2011/0069499 A1	3/2011	Trott et al.
2003/0016532 A1	1/2003	Reed	2011/0080750 A1	4/2011	Jones et al.
2003/0021104 A1	1/2003	Tsao	2011/0116276 A1	5/2011	Okamura et al.
2003/0161153 A1	8/2003	Patti	2011/0121756 A1	5/2011	Thomas et al.
2004/0001337 A1	1/2004	Defouw et al.	2011/0134634 A1	6/2011	Gingrich, III et al.
2004/0120141 A1	6/2004	Beadle	2011/0134651 A1	6/2011	Berman
2004/0156199 A1	8/2004	Rivas et al.	2011/0140633 A1	6/2011	Archenhold
2005/0078474 A1	4/2005	Whitfield	2011/0170294 A1	7/2011	Mier-Langner et al.
2005/0225966 A1	10/2005	Hartmann et al.	2011/0194299 A1	8/2011	Crooks et al.
2005/0227536 A1	10/2005	Gamache et al.	2011/0216534 A1	9/2011	Tickner et al.
2005/0231962 A1	10/2005	Koba et al.	2011/0226919 A1	9/2011	Fryzek et al.
2005/0237746 A1	10/2005	Yiu	2011/0255292 A1	10/2011	Shen
2006/0005988 A1	1/2006	Jorgensen	2011/0267828 A1	11/2011	Bazydola et al.
2006/0158873 A1	7/2006	Newbold et al.	2011/0285314 A1	11/2011	Carney et al.
2006/0198126 A1	9/2006	Jones	2012/0020104 A1	1/2012	Biebl et al.
2006/0215408 A1	9/2006	Lee	2012/0074852 A1	3/2012	Delnoij
2006/0221620 A1	10/2006	Thomas	2012/0106176 A1	5/2012	Lopez et al.
2006/0237601 A1	10/2006	Rinderer	2012/0113642 A1	5/2012	Catalano
2006/0243877 A1	11/2006	Rippel	2012/0140442 A1	6/2012	Woo et al.
2006/0250788 A1	11/2006	Hodge et al.	2012/0140465 A1	6/2012	Rowlette, Jr. et al.
2006/0262536 A1	11/2006	Nevers	2012/0162994 A1	6/2012	Wasniewski et al.
2006/0262545 A1	11/2006	Piepgas et al.	2012/0182744 A1	7/2012	Santiago et al.
2007/0012847 A1	1/2007	Tai	2012/0188762 A1	7/2012	Joung et al.
			2012/0243237 A1	9/2012	Toda et al.
			2012/0266449 A1	10/2012	Krupa

(56)

References Cited

U.S. PATENT DOCUMENTS

2012/0268688 A1 10/2012 Sato et al.
 2012/0287625 A1 11/2012 Macwan et al.
 2012/0305868 A1 12/2012 Callahan et al.
 2012/0314429 A1 12/2012 Plunk
 2013/0009552 A1 1/2013 Page
 2013/0010476 A1 1/2013 Pickard et al.
 2013/0016864 A1 1/2013 Ivey et al.
 2013/0033872 A1 2/2013 Randolph et al.
 2013/0051012 A1 2/2013 Oehle et al.
 2013/0083529 A1 4/2013 Gifford
 2013/0141913 A1 6/2013 Sachsenweger
 2013/0155681 A1 6/2013 Nall et al.
 2013/0163254 A1 6/2013 Chang et al.
 2013/0170232 A1 7/2013 Park et al.
 2013/0170233 A1 7/2013 Nezu et al.
 2013/0227908 A1 9/2013 Gulbrandsen et al.
 2013/0258677 A1 10/2013 Fryzek et al.
 2013/0265750 A1 10/2013 Pickard et al.
 2013/0271989 A1 10/2013 Hussell et al.
 2013/0294084 A1 11/2013 Kathawate et al.
 2013/0301252 A1 11/2013 Hussell et al.
 2013/0322062 A1 12/2013 Danesh
 2013/0322084 A1 12/2013 Ebisawa
 2013/0335980 A1 12/2013 Nakasuji et al.
 2014/0029262 A1 1/2014 Maxik et al.
 2014/0036497 A1 2/2014 Hussell et al.
 2014/0049957 A1 2/2014 Goelz et al.
 2014/0063776 A1 3/2014 Clark et al.
 2014/0071679 A1 3/2014 Booth
 2014/0071687 A1 3/2014 Tickner et al.
 2014/0140490 A1 5/2014 Roberts et al.
 2014/0063818 A1 6/2014 Randolph et al.
 2014/0233246 A1 8/2014 Lafreniere et al.
 2014/0254177 A1 9/2014 Danesh
 2014/0268836 A1 9/2014 Thompson
 2014/0268869 A1 9/2014 Blessitt et al.
 2014/0299730 A1 10/2014 Green et al.
 2014/0313775 A1 10/2014 Myers et al.
 2014/0321122 A1 10/2014 Domagala et al.
 2014/0347848 A1 11/2014 Pisavadia et al.
 2015/0009676 A1 1/2015 Danesh
 2015/0029732 A1 1/2015 Hatch
 2015/0078008 A1 3/2015 He
 2015/0085500 A1 3/2015 Cooper et al.
 2015/0138779 A1 5/2015 Livesay et al.
 2015/0184837 A1 7/2015 Zhang et al.
 2015/0198324 A1 7/2015 O'Brien et al.
 2015/0219317 A1 8/2015 Gatof et al.
 2015/0233556 A1 8/2015 Danesh
 2015/0241039 A1 8/2015 Fryzek
 2015/0263497 A1 9/2015 Korcz et al.
 2015/0276185 A1 10/2015 Bailey et al.
 2015/0308662 A1 10/2015 Vice et al.
 2015/0345761 A1 12/2015 Lawlor
 2015/0362159 A1 12/2015 Ludyjan
 2016/0084488 A1 3/2016 Wu et al.
 2016/0209007 A1 7/2016 Belmonte et al.
 2016/0238225 A1 8/2016 Doust
 2016/0308342 A1 10/2016 Witherbee et al.
 2016/0312987 A1 10/2016 Danesh
 2016/0348860 A1 12/2016 Danesh
 2016/0348861 A1 12/2016 Bailey et al.
 2016/0366738 A1 12/2016 Boulanger et al.
 2017/0003007 A1 1/2017 Wronski
 2017/0005460 A1 1/2017 Lee
 2017/0045213 A1 2/2017 Williams et al.
 2017/0059135 A1 3/2017 Jones
 2017/0138576 A1 5/2017 Peng et al.
 2017/0138581 A1 5/2017 Doust
 2017/0167672 A1 6/2017 Stauner et al.
 2017/0167699 A1 6/2017 Schubert et al.
 2017/0198896 A1 7/2017 May
 2017/0284616 A1 10/2017 Coakley et al.
 2017/0307188 A1 10/2017 Oudina et al.
 2018/0112857 A1 4/2018 Wronski et al.

2018/0142871 A1 5/2018 Morales
 2018/0216809 A1 8/2018 Cohen
 2018/0224095 A1 8/2018 Cohen
 2018/0231197 A1 8/2018 Danesh
 2018/0283677 A1 10/2018 Cohen
 2018/0372284 A1 12/2018 Danesh et al.
 2019/0032874 A1 1/2019 Bonnetto et al.
 2019/0041050 A1 2/2019 Cairns et al.
 2019/0049080 A1 2/2019 Danesh
 2019/0063701 A1 2/2019 Lotfi et al.
 2019/0093836 A1 3/2019 Danesh
 2020/0182420 A1 6/2020 Cohen et al.
 2020/0291652 A1 9/2020 Shen

FOREIGN PATENT DOCUMENTS

CA 2691480 C 4/2012
 CA 2734369 A1 10/2013
 CA 2561459 A1 11/2013
 CA 2815067 11/2013
 CA 2848289 A1 10/2014
 CA 2998173 7/2018
 CN 2182475 Y 11/1994
 CN 201059503 Y 5/2008
 CN 201259125 Y 6/2009
 CN 101608781 A 12/2009
 CN 201636626 U 11/2010
 CN 102062373 A 5/2011
 CN 202014067 U 10/2011
 CN 202392473 U 8/2012
 CN 202733693 U 2/2013
 CN 103307518 A 9/2013
 CN 103322476 A 9/2013
 CN 203202661 U 9/2013
 CN 203215483 U 9/2013
 CN 101498411 B 11/2013
 CN 203273663 U 11/2013
 CN 203297980 U 11/2013
 CN 203628464 U 12/2013
 CN 203641919 U 6/2014
 CN 204300818 U 4/2015
 CN 104654142 A 5/2015
 CN 204513161 U 7/2015
 CN 204611541 U 9/2015
 CN 204786225 U 11/2015
 CN 204829578 U 12/2015
 CN 103712135 B 4/2016
 CN 205606362 U 9/2016
 CN 206130742 U 4/2017
 CN 103154606 B 5/2017
 CN 206222112 U 6/2017
 CN 107013845 A 8/2017
 CN 107084343 A 8/2017
 DE 9109828 U1 2/1992
 DE 199 47 208 5/2001
 EP 1 589 289 10/2005
 EP 1 672 155 A1 6/2006
 EP 1688663 8/2006
 EP 2 095 938 A1 2/2008
 EP 2 306 072 A1 4/2011
 EP 2 453 169 A2 5/2012
 EP 2 193 309 B1 7/2012
 EP 2 735 787 A1 5/2014
 EP 3 104 024 A1 12/2016
 GB 2325728 12/1998
 GB 2427020 A 12/2006
 GB 2466875 7/2010
 GB 2471929 1/2014
 GB 2509772 A 7/2014
 JP H02113002 U 9/1990
 JP 2007091052 A 4/2007
 JP 2007265961 A 10/2007
 JP 2011060450 A2 3/2011
 JP 2012064551 A2 3/2012
 JP 2015002027 A2 1/2015
 JP 2015002028 A2 1/2015
 JP 2016219335 A 12/2016
 JP 2017107699 A2 6/2017
 KR 1020110008796 A 1/2011

(56)

References Cited

FOREIGN PATENT DOCUMENTS

KR	1020120061625	A	6/2012
MX	2011002947	A	9/2011
TW	474382	U	1/2002
WO	WO 2013/128896	A1	9/2013
WO	WO 2015/000212	A1	1/2015
WO	WO 2016152166	A2	9/2016

OTHER PUBLICATIONS

Acrich COB Zhaga Module, Product Description, Seoul Semiconductor, Nov. 2016, 39 pages.

<<https://www.zhagastandard.org/books/book18/>>, Mar. 2017, 5 pages. Appeal 2016-007893 (2017 PTAB) for U.S. Appl. No. 29/465,550, now U.S. Pat. No. D. 822,505, Board Decision Examiner Reversed; Decision reversing rejection under 35 USC 112, Oct. 2, 2017, 6 pages.

Bortz, J. C. et al., "Optimal design of a nonimaging TIR doublet lens for an illumination system using an LED source", Proc. SPIE 5529, Nonimaging Optics and Efficient Illumination Systems, (Sep. 29, 2004); doi: 10.1117/12.562598; <https://doi.org/10.1117/12.562598>, 10 pages.

BXUV.GuidelInfo, Fire Resistance Ratings—ANSI/UL 263, UL Online Certifications Directory, last updated Nov. 3, 2016, 27 pages.

CEYY.GuideInfo, Outlet Boxes and Fittings Certified for Fire Resistance, UL Online Certifications Directory, last updated May 16, 2013, 2 pages.

Canadian Office Action dated Dec. 23, 2013 from Canadian Application No. 2,778,581, 3 pages.

Canadian Office Action dated Mar. 22, 2016 from Canadian Application No. 2,879,629, 4 pages.

Canadian Office Action dated Dec. 6, 2016 from Canadian Application No. 2,879,629, 3 pages.

Canadian Office Action dated Mar. 9, 2017 from Canadian Application No. 2,931,588, 5 pages.

Canadian Office Action dated Feb. 1, 2016 from Canadian Application No. 2,879,486, 5 pages.

Canadian Office Action dated Jun. 12, 2017 from Canadian Application No. 2,927,601, 4 pages.

Canadian Office Action dated Aug. 11, 2017 from Canadian Application No. 2,941,051, 4 pages.

Carlton® Zip Box® Blue™ Switch and Outlet Boxes, Product Brochure, <http://www.carlonsales.com/brochures.php>, 2006, 22 pages.

Corrected Notice of Allowability dated Oct. 25, 2018 from U.S. Appl. No. 14/183,424, 3 pages.

Cree LMH2 LED Module downloaded from the Internet Archive at: <https://web.archive.org/web/20120909164757/www.mouser.com/new/cree/creelmh2>, 1996-2012, downloaded Oct. 9, 2018, 2 pages.

Cree LMH2 LED Module Data Sheet; "LED modules advance in performance, standardization questions persist," downloaded from the Internet Archive at: https://web.archive.org/web/20120111020942/http://www.cree.com/products/pdf/LEDModules_LMH2.pdf, Oct. 29, 2013, downloaded Oct. 9, 2018, 9 pages.

Cree LMH2 LED Design Guide downloaded from the Internet Archives at: http://web.archive.org/web/20131102045753/http://www.cree.com:80/~media/Files/Cree/Led%20Components%20and%20Modules/Modules/Design%20Files%20LMH2/LEDmodules_LMH2_DG.pdf, 2011-2013, 20 pages.

DME Series Installation Instructions, Oct. 18, 2011, 2 pages.

DMF, Inc., "dmfLighting: LED Recessed Lighting Solutions," Info sheets, Mar. 15, 2012, 4 pages.

DMF, Inc., "dmfLighting: LED Recessed Downlighting," DRD2 Product Brochure, Oct. 23, 2014, 50 pages.

DMF, Inc., "dmfLighting: LED Recessed Downlighting," Product Catalog, Aug. 2012, 68 pages.

dmf DRD2 Recessed LED Downlight General Retrofit Junction Box Dated: Dec. 18, 2015 Downloaded Jul. 28, 2018, from <https://www.alconlighting.com/specsheets/DMF/DRD2-Junction-Box-Retrofit-Spec-Sheet.pdf>, 6 pages.

dmf DRD2 Recessed LED Downlight General New Construction 4", 5", 6" Aperture Dated: Aug. 31, 2016 Downloaded Jul. 28, 2018, from https://www.cansandfans.com/sites/default/files/DRD2-General-New-Construction-Spec-Sheet_7_0.pdf, 9 pages.

David's Bridal, Inc. v. Jenny Yoo Collections, Inc., PGR2016-00041 (PTAB 2017), U.S. Pat. No. D. 744,723; Decision Denying Institution of Post-Grant Review Entered Feb. 22, 2017, 19 pages.

Mar 5, 2016—The DMF Lighting DRD2 Recessed LED Downlight General Retrofit Junction Box—Wet Location Rated is the ideal solution for Commercial LED recessed lighting retrofit applications. web cache <https://www.alconlighting.com/dmf-drd2m.html> (downloaded Jul. 28, 2018), 6 pages.

DRD2 LED Recessed Downlighting DMF Light Catalog Oct. 23, 2014.

DRD2 Recessed LED Downlight General New Construction 4", 5", 6" Aperture Product Specifications Dated: Jun. 15, 2016, 9 pages.

Dross, O. et al., "Review of SMS design methods and real-world applications", Proc. SPIE 5529, Nonimaging Optics and Efficient Illumination Systems, (Sep. 29, 2004); doi: 10.1117/12.561336; <https://doi.org/10.1117/12.561336>, 14 pages.

Ex Parte Quayle Office Action mailed Oct. 16, 2018 for U.S. Appl. No. 29/663,037, 7 pages.

Final Office Action dated Apr. 27, 2016 from U.S. Appl. No. 14/184,601, 19 pages.

Final Office Action dated Jul. 26, 2017 from U.S. Appl. No. 14/184,601, 18 pages.

Final Office Action dated Jan. 29, 2016 from U.S. Appl. No. 14/183,424, 21 pages.

Final Office Action dated Jun. 23, 2016 from U.S. Appl. No. 13/484,901, 18 pages.

Final Office Action dated Apr. 2, 2015 from U.S. Appl. No. 13/484,901, 13 pages.

HALO, HALO LED H4 H7 Collection, SustainableDesign, Cooper Lighting, (emphasis on p. 18 "H7 Collection LED Modules—Halo LED H7 Module Features,") Mar. 28, 2012, 52 pages.

HALO, H7 LED Downlight Trims 49x Series, 6-inch LED Trims for Use with MI7x LED Modules, Cooper Lighting, ADV110422, rev. Aug. 12, 2011, 15 pages.

HALO, LED Module ML706x, Cooper Lighting, General Installation for All Modules/p. 1; Tether Installation/pp. 2-3; Installation into HALO H750x Series LED—only (Non-Screw Based), Recessed Fixture, p. 4, Oct. 20, 2009, 4 pages.

Imtra Portland Bi-Color LED downloaded from the Internet Archive at: <https://web.archive.org/web/20130125092712/http://www.imtra.com:80/0ade25fb-3218-4cae-a926-6abe64ffd93a/lighting-light-fixtures-downlights-3-to-4-inches-detail.htm>, 2012, downloaded Oct. 9, 2018, 1 page.

Mini LED Puck Light from Elco Lighting, model No. E247W, E247B, E247N, E247BZ downloaded from the Internet Archives at: <https://elcolighting.com/printpdf/products/undercabinet-pucks-xyris%E2%84%A2-mini-led-puck-light>, 2018, 1 page.

The Imtra Marine Lighting 2012 Catalog downloaded from the Internet Archive at: https://web.archive.org/web/20120617141635/http://www.imtra.com:80/COLLATERAL/DOCUMENTS/ENGLISH-US/PRODUCTS/IML_BROCHURE.PDF, downloaded Oct. 9, 2018, 40 pages.

LED Undercabinet Pocket Guide, "Drivers for LED Puck Lights", LED Undercabinet Pocket Guide, downloaded from the Internet Archives at: <https://elcolighting.com/sites/default/files/catalog-elpcat1045-undercabinet.pdf>, 12 pages.

Medvedev, V. et al., "Uniform LED illuminator for miniature displays," Proc. SPIE 3428, Illumination and Source Engineering, (Oct. 20, 1998); doi: 10.1117/12.327957; <https://doi.org/10.1117/12.327957>, 13 pages.

"Membrane Penetrations in Fire-Resistance Rated Walls," https://www.ul.com/wp-content/uploads/2014/04/ul_MembranePenetrations.pdf, Issue 1, 2009, 2 pages.

"Metallic Outlet Boxes," UL 514A, Underwriters Laboratories, Inc., Feb. 16, 2004 (Title Page Reprinted Aug. 10, 2007), 106 pages.

"Metallic and Non-metallic Outlet Boxes Used in Fire-rated Assembly," <https://iaeimagazine.org/magazine/2000/09/16/metallic-and-non-metallic-outlet-boxes-used-in-fire-rated-assembly/>, Sep. 16, 2000, 5 pages.

(56)

References Cited

OTHER PUBLICATIONS

- Notice of Allowance dated Mar. 26, 2018 for U.S. Appl. No. 14/184,601, 10 pages.
- Non-Final Office Action dated Mar. 15, 2010 from U.S. Appl. No. 12/100,148, 8 pages.
- Non-Final Office Action dated Apr. 30, 2010 from U.S. Appl. No. 12/173,232, 13 pages.
- Non-Final Office Action dated Sep. 5, 2014 from U.S. Appl. No. 13/791,087, 8 pages.
- Non-Final Office Action dated Jul. 20, 2015 from U.S. Appl. No. 14/184,601, 16 pages.
- Non-Final Office Action dated Dec. 15, 2016 from U.S. Appl. No. 14/184,601, 18 pages.
- Non-Final Office Action dated Feb. 6, 2018 from U.S. Appl. No. 15/167,682, 9 pages.
- Non-Final Office Action dated Sep. 15, 2015 from U.S. Appl. No. 13/484,901, 16 pages.
- Non-Final Office Action dated Oct. 16, 2014 from U.S. Appl. No. 13/484,901, 11 pages.
- Non-Final Office Action dated Sep. 6, 2017 from U.S. Appl. No. 14/726,064, 8 pages.
- Non-Final Office Action dated May 17, 2017 from U.S. Appl. No. 14/183,424, 20 pages.
- Non-Final Office Action dated Jun. 2, 2015 from U.S. Appl. No. 14/183,424, 20 pages.
- Non-Final Office Action dated Apr. 12, 2018 for U.S. Appl. No. 29/638,259, 5 pages.
- Non-Final Office Action dated May 16, 2018 for U.S. Appl. No. 15/132,875, 18 pages.
- Non-Final Office Action dated Jul. 24, 2018 for U.S. Appl. No. 29/638,259, 6 pages.
- Non-Final Office Action dated Oct. 16, 2018 from U.S. Appl. No. 29/663,040, 7 pages.
- Notice of Allowance dated Jan. 30, 2015 from U.S. Appl. No. 13/791,087, 9 pages.
- Notice of Allowance dated Jan. 16, 2015 from U.S. Appl. No. 29/467,026, 9 pages.
- Notice of Allowance dated Oct. 21, 2016 from U.S. Appl. No. 13/484,901, 7 pages.
- Notice of Allowance dated Mar. 24, 2016 from U.S. Appl. No. 14/247,149, 8 pages.
- Notice of Allowance dated May 22, 2018 from U.S. Appl. No. 14/183,424, 9 pages.
- Notice of Allowance dated May 10, 2018 from U.S. Appl. No. 14/726,064, 7 pages.
- Notice of Allowance dated Aug. 23, 2017 from Canadian Application No. 2,879,629, 1 page.
- Notice of Allowance dated Nov. 19, 2018 from U.S. Appl. No. 29/663,037, 5 pages.
- Notice of Allowance dated Nov. 15, 2018 from U.S. Appl. No. 29/663,040, 5 pages.
- “Outlet Boxes for Use in Fire Rated Assemblies,” https://www.ul.com/wp-content/uploads/2014/04/UI_outletboxes.pdf, 2011, 2 pages.
- Parkyn, W. A. et al., “New TIR lens applications for light-emitting diodes”, Proc. SPIE 3139, Nonimaging Optics: Maximum Efficiency Light Transfer IV, (Oct. 3, 1997); doi: 10.1117/12.290217, 7 pages.
- Schreiber, P. et al., “Microoptics for homogeneous LED-illumination”, Proc. SPIE 6196, Photonics in Multimedia, 61960P (Apr. 21, 2006); doi: 10.1117/12.663084; <https://doi.org/10.1117/12.663084>, 11 pages.
- Skechers USA, Inc., v. Nike, Inc.*, IPR2016-00871 (PTAB 2016), U.S. Pat. No. D. 725,359; Decision Denying Institution of Inter Partes Review, Sep. 29, 2016, 31 pages.
- Skechers v. Nike*, No. 2017-00621, U.S. Pat. No. D. 723,781, Final Written Decision; dated Jun. 28, 2018, 31 pages.
- Versi LED Mini Flush Installation Instructions downloaded from the Internet Archives at: http://sunoptics.acuitybrands.com/products/detail/174967/lithonia-lighting/led-versi-lite/decorative-indoor-flush-mount/-/media/products/lithonia_lighting/174967/document/u990636-rev-a_.pdf.pdf, 2 pages.
- Zhen, Y. et al., “The optimal design of TIR lens for improving LED illumination uniformity and efficiency”, Proc. SPIE 6834, Optical Design and Testing III, 68342K (Nov. 28, 2007); doi: 10.1117/12.756101, 9 pages.
- Zou, H. et al., “58.1: Single-Panel LCOS Color Projector with LED Light Sources”, SID Symposium, vol. 36, Issue 1, 4 pages (May 2005).
- Cree LED Lamp Family Sales Sheet—Better light is beautiful light , Apr. 24, 2017, 2 pages.
- Notice of Allowance dated Sep. 21, 2018 from U.S. Appl. No. 29/645,941, 5 pages.
- “Versi LED Mini Flush,” Lithonia Lghting. Sep. 2013. 6 pages.
- Notice of Allowance dated Oct. 4, 2018 from U.S. Appl. No. 15/947,065 , 9 pages.
- Non-Final Office Action dated Jun. 25, 2018 for U.S. Appl. No. 29/541,565, 10 pages.
- Non-Final Office Action dated Oct. 24, 2018 for U.S. Appl. No. 15/688,266, 14 pages.
- OneFrame Recessed Led Downlight. Dmflighting.com. Published Jun. 6, 2018. Retrieved at <https://www.dmflighting.com/product/oneframe> on Jun. 6, 2018. 11 pages.
- Notice of Allowance dated Oct. 9, 2018 from U.S. Appl. No. 29/653,142, 7 pages.
- International Search Report and Written Opinion in PCT/US2018/048357 dated Nov. 14, 2018, 13 pages.
- Non-Final Office Action dated Dec. 5, 2018 from U.S. Appl. No. 14/942,937, 13 pages.
- International Search Report and Written Opinion in International Patent Application No. PCT/US18/39048 dated Dec. 14, 2018. 24 pages.
- Notice of Allowance dated Jan. 2, 2019 from U.S. Appl. No. 29/541,565, 6 pages.
- RACO 4 i+A882:C958n. Octagon Welded Concrete Ring, 3-1/2 in. Deep with 1/2 and 3/4 in. Knockouts and ilcludes 890 cover (20-Pack). Model # 280. Accessed at <https://www.homedepot.com/p/RACO-4-in-Octagon-Welded-Concrete-Ring-3-1-2-in-Deep-with-1-2-and-3-4-in-Knockouts-and-ilcludes-890-cover-20-Pack-280/203638679> on Jan. 18, 2019. 3 pages.
- RCO 4 in. Octagon Welded Concrete Ring, 6 in. Deep with 1/2 and 3/4 in. Knockouts (10-Pack). Model # 276. Accessed at <https://www.homedepot.com/p/RACO-4-in-Octagon-Welded-Concrete-Ring-6-in-Deep-with-1-2-and-3-4-in-Knockouts-10-Pack-276/203638675> on Jan. 16, 2019. 4 pages.
- Notice of Allowance dated Feb. 8, 2019 from U.S. Appl. No. 29/541,565 5 pages.
- Non-Final Office Action dated Feb. 7, 2019 from U.S. Appl. No. 16/200,393, 32 pages.
- Notice of Allowance dated Jan. 28, 2019 from U.S. Appl. No. 29/664,471, 8 pages.
- Non-Final Office Action dated Jul. 24, 2018 from U.S. Appl. No. 29/638,259, 5 pages.
- Final Office Action dated Mar. 15, 2019 from U.S. Appl. No. 15/132,875, 15 pages.
- International Search Report and Written Opinion in International Patent Application No. PCT/US18/62868 dated Mar. 14, 2019, 13 pages.
- CS&E PCT Collaborative Search and Examination Pilot Upload Peer Contribution in International Patent Application No. PCT/US18/62868 dated Mar. 14, 2019, 61 pages.
- Non-Final Office Action dated Apr. 4, 2019 from U.S. Appl. No. 29/678,482, 8 pages.
- Notice of Allowance dated Apr. 8, 2019 from U.S. Appl. No. 29/653,142, 8 pages.
- Notice of Allowance dated Apr. 17, 2019 from U.S. Appl. No. 29/678,478, 7 pages.
- International Search Report and Written Opinion in International Patent Application No. PCT/US18/67614 dated Apr. 25, 2019, 20 pages.

(56)

References Cited

OTHER PUBLICATIONS

CS&E PCT Collaborative Search and Examination Pilot Upload Peer Contribution in International Patent Application No. PCT/US18/67614 dated Apr. 24, 2019, 53 pages.

Specification & Features 4" Octagonal Concrete Box Covers. Orbit Industries, Inc. Accessed at <https://www.orbitelectric.com> on May 6, 2019. 1 page.

4" Octagon Concrete Boxes and Back Plates. Appleton. Accessed at www.appletonelec.com on May 6, 2019. 1 page.

RACO Commercial, Industrial and Residential Electrical Products. Hubbell. Accessed at www.Hubbell-RTB.com on May 6, 2019. 356 pages.

Imtra Marine Lighting 2008 Catalog. 40 pages.

Imtra Marine Lighting 2009 Catalog. 32 pages.

Imtra Marine Lighting Spring 2007 Catalog. 36 pages.

Final Office Action dated Jun. 6, 2019 from U.S. Appl. No. 15/688,266, 7 pages.

Non-Final Office Action dated Jun. 11, 2019 from U.S. Appl. No. 15/901,738, 6 pages.

Notice of Allowance dated Jun. 12, 2019 from U.S. Appl. No. 16/016,040, 8 pages.

Cooper Lighting HALO ML56 LED System Product Sheet. Mar. 2, 2015. Accessed at http://www.cooperindustries.com/content/dam/public/lighting/products/documents/halo/spec_sheets/halo-m156600-80cri-141689-sss.pdf. 8 pages.

KWIKBRACE® New Construction Braces for Lighting Fixtures or Ceiling Fans 1-1/2 in. Depth. Hubbel. Accessed at <https://hubbellcdn.com/specsheet/926.pdf> on Jun. 27, 2019. 1 page.

IC1JB Housing 4" IC-Rated New Construction Junction Box Housing. AcuityBrands. Accessed at <https://www.acuitybrands.com/en/products/detail/845886/juno/ic1jb-housing/4-ic-rated-new-construction-junction-box-housing> on Jun. 27, 2019.

Ex-Parte Quayle Action dated Jun. 27, 2019 from U.S. Appl. No. 29/683,730, 5 pages.

Notice of Allowance dated Sep. 19, 2018 from U.S. Appl. No. 15/167,682, 7 pages.

Notice of Allowance dated Nov. 27, 2018 from U.S. Appl. 15/167,682, 11 pages.

Notice of Allowance dated Apr. 1, 2019 from U.S. Appl. No. 15/167,682, 7 pages.

Notice of Allowance dated Jul. 31, 2019 from U.S. Appl. No. 15/167,682, 7 pages.

Supplemental Notice of Allowance dated Aug. 5, 2019 from U.S. Appl. No. 15/947,065, 2 pages.

International Search Report and Written Opinion in International Patent Application No. PCT/US19/32281 dated Aug. 2, 2019, 18 pages.

Notice of Allowance dated Sep. 11, 2019 from U.S. Appl. No. 29/653,142, 6 pages.

Notice of Allowance dated Sep. 19, 2019 from U.S. Appl. No. 16/016,040, 7 pages.

Corrected Notice of Allowance dated Sep. 27, 2019 from U.S. Appl. No. 15/167,682, 2 pages.

Final Office Action dated Sep. 27, 2019 from U.S. Appl. No. 16/200,393, 34 pages.

Notice of Allowance dated Feb. 15, 2019 from U.S. Appl. No. 15/947,065, 9 pages.

Notice of Allowance dated Oct. 1, 2019 from U.S. Appl. No. 14/942,937, 7 pages.

Final Office Action dated Oct. 3, 2019 from U.S. Appl. No. 29/678,482, 6 pages.

Delhi Rehab & Nursing Facility ELM16-70884. Vertex Innovative Solutions Feb 25, 2016. 89 pages.

SlimSurface surface mount downlighting. Philips Lightolier 2018. 8 pages.

Be seen in the best light. Lightolier by signify. Comprehensive 2019 Lighting Catalog. 114 pages.

Corrected Notice of Allowance dated Oct. 10, 2019 from U.S. Appl. No. 16/016,040, 2 pages.

Cree® LMR2 LED Module. Product Family Data Sheet Cree 2011. 3 pages.

Notice of Allowance dated Oct. 16, 2019 from U.S. Appl. No. 15/132,875, 12 pages.

International Search Report and Written Opinion in International Patent Application No. PCT/US2019/036477 dated Oct. 17, 2019, 15 pages.

ML56 LED Lighting System 600 / 900 / 1200 Series Halo. Cooper Lighting Brochure 2015. Accessed at <https://images.homedepot-static.com/catalog/pdfimages/06/06d28f93-4bf6-45be-a35a-a0239606f227.pdf>. 41 pages.

Switch and Outlet Boxes and Covers Brochure. Appleton 2010. 77 pages.

Non-Final Office Action dated Dec. 30, 2019 from U.S. Appl. No. 16/653,497, 8 pages.

Notice of Allowance dated Feb. 5, 2020 from U.S. Appl. No. 15/901,738, 8 pages.

Notice of Allowance dated Feb. 5, 2020 from U.S. Appl. No. 29/678,482, 13 pages.

Maxim Lighting Wafer Trifold Brochure LMXBRO1711 2017. Accessed at <https://www.maximlighting.com/Upload/download/brochure/pdf/LMXBRO1711.pdf> on Feb. 13, 2020. 2 pages.

Maxim Convert Fixture. LMXCAT1805 Maxim Main Catalog 2018 p. 639.

Maxim Wafer. LMXCAT1805 Maxim Main Catalog 2018 pp. 636-638.

Maxim Lighting Trim Trifold LMXBRO1905 2019. Accessed at <https://www.maximlighting.com/Upload/download/brochure/pdf/LMXBRO1905.pdf> on Feb. 13, 2020. 2 pages.

International Search Report and Written Opinion in International Patent Application No. PCT/US2019/054220 dated Feb. 24, 2020, 23 pages.

Final Office Action dated Mar. 17, 2020 for U.S. Appl. No. 29/653,142, 13 pages.

LED Book Price Guide 2012. DMF Light. Issued Jun. 26, 2013. 3 pages.

DLER411 4" Recessed LED Retrofit Module. DMF Light. Issued Jun. 15, 2011. 1 page.

DLEI411 4" Recessed LED New Construction, IC. DMF Light. Issued Nov. 30, 2011. 1 page.

DLEIR411 4" Recessed LED Remodel, IC. DMF Light. Issued Jun. 15, 2011. 1 page.

3 & 4" DLE Series LED Sample Case Now Available. DMF Light. Issued Jan. 6, 2012. 1 page.

DLEI3 3" Recessed Led New Construction, Ic. DMF Light. Issued Nov. 30, 2011. 2 pages.

Ridgway-Barnes, SlimSurface LED Downlight: One of the thinnest LED surface mount downlights in the market. Philips Lighting Blog. Oct. 28, 2014. Accessed at <http://applications.nam.lighting.philips.com/blog/index.php/2014/10/28/slimsurface-led-downlight-one-of-the-thinnest-led-surface-mount-downlights-in-the-market/>. 3 pages.

SlimSurface LED S5R, S7R & S10R Round 5", 7" and 10" Apertures. Lightolier by Signify. Nov. 2018. 9 pages.

Non-Final Office Action dated Apr. 2, 2020 for U.S. Appl. No. 16/522,275, 21 pages.

Notice of Allowance dated May 18, 2020 from U.S. Appl. No. 15/901,738, 7 pages.

Non-Final Office Action dated May 20, 2020 for U.S. Appl. No. 15/688,266, 6 pages.

Non-Final Office Action dated May 26, 2020 for U.S. Appl. No. 16/719,361, 10 pages.

Maxim Lighting International, "Wafer LED 7" RD 3000K Wall/Flush Mount", undated.

Maxim Lighting International, "Convert LED Flush Mount", undated.

Maxim Lighting International, "Views of the Wafer Flush Mount", undated.

Maxim Lighting International, "Product/Drawing Specification Sheet", undated.

International Search Report and Written Opinion in PCT/US2020/017331 dated Jun. 22, 2020, 16 pages.

Taiwan Office Action and translation thereof dated Jun. 12, 2020 from Taiwan Application No. 108116564, 8 pages.

(56)

References Cited

OTHER PUBLICATIONS

Access Lighting Installation Instructions. No. 20870LEDD/20871LEDD/20872LEDD. Dec. 16, 2019. 2 pages.

Model No. 20870LEDD-WH/ACR Infinite Specification Sheet. Access Lighting. Apr. 9, 2020. 1 page.

Notice of Allowance dated Apr. 9, 2020 from U.S. Appl. No. 16/653,497, 7 pages.

Notice of Allowance dated Jul. 10, 2020 from U.S. Appl. No. 29/694,475, 6 pages.

Notice of Allowance dated Jul. 20, 2020 from U.S. Appl. No. 29/648,046, 5 pages.

Octagon Concrete Box Cover with (3) 1/2 in. & (2) 3/4 in. Conduit Knockouts. Garvin. Accessed at https://www.garvinindustries.com/covers-and-device-rings/concrete-slab-box-covers-adaptor-rings/flat-covers-all-styles/cbp?gclid=Cj0KCQjw9b4BRCMARIsADMUlypJc0K80UHdDTI9C5m4BDzR3U87PRYV1NdQIBFxEWQ2l_3otTCTqEkaAi_DEALw_wcB on Jul. 20, 2020. 1 page.

Notice of Allowance dated Jul. 28, 2020 from U.S. Appl. No. 16/719,361, 8 pages.

Notice of Allowance dated Jul. 29, 2020 from U.S. Appl. No. 16/522,275, 8 pages.

Non-Final Office Action dated Aug. 19, 2020 for U.S. Appl. No. 16/886,365, 16 pages.

Notice of Allowance dated Sep. 8, 2020 from U.S. Appl. No. 29/678,482, 5 pages.

Corrected Notice of Allowance dated Sep. 11, 2020 from U.S. Appl. No. 16/719,361, 2 pages.

Canadian Office Action in Application No. 2931588 dated Aug. 13, 2020, 5 pages.

Corrected Notice of Allowance dated Sep. 14, 2020 from U.S. Appl. No. 16/522,275, 2 pages.

Notice of Allowance dated Sep. 22, 2020 from U.S. Appl. No. 29/683,730, 6 pages.

Notice of Allowance dated Sep. 22, 2020 from U.S. Appl. No. 29/653,142, 6 pages.

Notice of Allowance dated Oct. 27, 2020 from U.S. Appl. No. 29/648,046, 5 pages.

Notice of Allowance dated Oct. 27, 2020 from U.S. Appl. No. 29/694,475, 5 pages.

Notice of Allowance dated Nov. 10, 2020 from U.S. Appl. No. 29/688,172, 6 pages.

Non-Final Office Action dated Nov. 30, 2020 from U.S. Appl. No. 17/000,702, 7 pages.

Notice of Allowance dated Dec. 2, 2020 from U.S. Appl. No. 29/746,262, 6 pages.

International Search Report and Written Opinion in PCT/US2020/050767 dated Dec. 9, 2020, 25 pages.

Non-Final Office Action dated Dec. 16, 2020 from U.S. Appl. No. 17/080,080, 28 pages.

Canadian Office Action in Application No. 2941051 dated Dec. 8, 2020, 5 pages.

Final Office Action dated Jan. 11, 2021 from U.S. Appl. No. 15/688,266, 7 pages.

Non-Final Office Action dated Jan. 11, 2021 from U.S. Appl. No. 16/725,606, 7 pages.

Non-Final Office Action dated Jan. 13, 2021 from U.S. Appl. No. 17/085,636, 14 pages.

Notice of Allowance dated Jan. 15, 2021 from U.S. Appl. No. 17/000,702, 7 pages.

Notice of Allowance dated Jan. 22, 2021 from U.S. Appl. No. 17/080,080, 14 pages.

Notice of Allowance dated Jan. 22, 2021 from U.S. Appl. No. 16/886,365, 7 pages.

Final Office Action dated Feb. 5, 2021 from U.S. Appl. No. 16/200,393, 7 pages.

"Electrical Boxes" accessed at <http://electrical-inspector.blogspot.com/2013/06/electrical-boxes.html> Jun. 22, 2013 retrieved from Wayback Machine Archinve.org on Jan. 25, 2021. 12 pages.

"Electrical Boxes Volume and Fill Calculations" accessed at <http://electrical-inspector.blogspot.com/2013/06/electrical-boxes-Volume->

and-Fill-Calculations.html Jun. 22, 2013 retrieved from Wayback Machine Archinve.org on Jan. 25, 2021. 8 pages.

U.S. Appl. No. 61/881,162, filed Sep. 23, 2013. Priority application to US Publication No. 2015/0085500 to Cooper et al. 31 pages.

Civil Action No. 2:18-cv-07090. Complaint for Infringement and Unfair Competition. *DMF, Inc. v. AMP Plus, Inc. d/b/a ELCO Lighting*. 52 pages. Dated Aug. 15, 2018.

Petition for Inter Partes Review of U.S. Pat. No. 9,964,266 Pursuant to 37 C.F.R. § 42.100 et seq. *AMP Plus Inc. dbd ELCO Lighting v. DMF, Inc.* IPR2019-01094 filed May 17, 2019. 108 pages.

IPR2019-01094 Exhibit 1001. U.S. Pat. No. 9,964,266 ("the '266 Patent"). 14 pages.

IPR2019-01094 Exhibit 1002. Declaration of Eric Bretschneider, Ph.D. ("Bretschneider"). 107 pages.

IPR2019-01094 Exhibit 1003. Curriculum Vitae of Dr. Bretschneider. 11 pages.

IPR2019-01094 Exhibit 1004. Excerpts from the File History of U.S. Pat. No. 9,964,266. 105 pages.

IPR2019-01094 Exhibit 1005. Imtra 2011 Marine Lighting Catalog—Advanced LED Solutions ("Imtra 2011"). 40 pages.

IPR2019-01094 Exhibit 1006. Imtra 2007 Marine Lighting Catalog ("Imtra 2007"). 36 pages.

IPR2019-01094 Exhibit 1007. U.S. Pat. No. 9,366,418 ("Gifford"). 9 pages.

IPR2019-01094 Exhibit 1008. Declaration of Colby Chevalier ("Chevalier"). 89 pages.

IPR2019-01094 Exhibit 1009. U.S. Pat. No. 7,102,172 ("Lynch"). 41 pages.

IPR2019-01094 Exhibit 1010. Illuminating Engineering Society, ANSI RP-16-10, Nomenclature and Definitions for Illuminating Engineering (approved as an American National Standard Jul. 15, 2005, approved by the IES Board of Directors Oct. 15, 2005). 4 pages.

IPR2019-01094 Exhibit 1011. Underwriters Laboratories Inc. Standard for Safety, Standard UL-8750, entitled Light Emitting Diode (LED) Equipment for Use in Lighting (1st ed. 2009). 5 pages.

IPR2019-01094 Exhibit 1012. Celanese CoolPoly® D5502 Thermally Conductive Liquid Crystalline Polymer Specification ("CoolPoly"). 1 page.

IPR2019-01094 Exhibit 1013. Illuminating Engineering Society of North America, IES Lighting Handbook (John E. Kaufman and Howard Haynes eds., Application vol. 1981) ("Lighting Handbook"). 5 pages.

IPR2019-01094 Exhibit 1014. California Energy Commission, PIER Lighting Research Program: Project 2.3 Low-profile LED Luminaires Final Report (Prepared by Lighting Research Center, Jan. 2005) ("PIER LRP"). 70 pages.

IPR2019-01094 Exhibit 1015. Jim Sinopoli, Using DC Power to Save Energy and End the War on Currents, GreenBiz (Nov. 15, 2012), <https://www.greenbiz.com/news/2012/11/15/using-dc-power-save-energy-end-war-currents> ("Sinopoli"). 6 pages.

IPR2019-01094 Exhibit 1016. Robert W. Johnson, "Thought Leadership White Paper: AC Versus DC Power Distribution" (Nov. 2012) ("Johnson"). 10 pages.

IPR2019-01094 Exhibit 1017. Lumileds, LUXEON Rebel General Purpose Product Datasheet, Specification DS64 (2016) ("Luxeon Rebel"). 26 pages.

IPR2019-01094 Exhibit 1018. U.S. Pat. No. 8,454,204 ("Chang"). 11 pages.

IPR2019-01094 Exhibit 1019. U.S. Department of Energy, CALiPER Benchmark Report: Performance of Incandescent A-Type and Decorative Lamps and LED Replacements (prepared by Pacific National Laboratory, Nov. 2008) ("CALiPER 2008"). 25 pages.

IPR2019-01094 Exhibit 1020. U.S. Pat. No. 3,836,766 ("Auerbach"). 13 pages.

IPR2019-01094 Exhibit 1021. U.S. Department of Energy, CALiPER Application Summary Report 16: LED BR30 and R30 Lamps (prepared by Pacific Northwest National Laboratory, Jul. 2012) ("CALiPER 2012"). 26 pages.

IPR2019-01094 Exhibit 1022. Sandia National Laboratories, Sandia Report: "The Case for a National Research Program on Semiconductor Lighting" (Jul. 2000) ("Haitz"). 24 pages.

(56)

References Cited

OTHER PUBLICATIONS

IPR2019-01094 Exhibit 1023. Sylvania, Post Top Street Light LED Retrofit Kit Specification, LED40POST (2009) (“Sylvania”). 4 pages.

IPR2019-01094 Exhibit 1024. Webster’s New Collegiate Dictionary (1973) (“Webster’s”). 2 pages.

IPR2019-01094 Exhibit 1025. 3M Wire Connectors and Tools Catalog 2013 (“3M Catalog”). 22 pages.

IPR2019-01094 Exhibit 1026. Wakefield Semiconductor Heat Sinks and Thermal Products 1974 Catalog (“Wakefield”). 3 pages.

IPR2019-01094 Exhibit 1027. U.S. Department of Energy, Solid-State Lighting Research and Development Portfolio: Multi-Year Program Plan FY’07-FY’12 (prepared by Navigant Consulting, Inc., Mar. 2006) (“DOE 2006”). 129 pages.

IPR2019-01094 Exhibit 1028. U.S. Department of Energy, Solid-State Lighting ResearA1023:C1043elopment: Multi-Year Program Plan (Apr. 2013) (“DOE 2013”). 89 pages.

Declaration of Colby Chevalier from Central District of California Civil Docket for Case #: 2:18-cv-07090-CAS-GJS filed Jun. 3, 2019, signed Jun. 3, 2019. 2 pages.

Docket Listing in Inter Partes Review of U.S. Pat. No. 9,964,266. Docket Navigator *AMP Plus, Inc. d/b/a Elco Lighting et al v. DMF, Inc.* PTAB-IPR2019-01094. Downloaded Mar. 25, 2020. 4 pages.

Petition for Inter Partes Review of U.S. Pat. No. 9,964,266 Pursuant to 37 C.F.R. § 42.100 et seq. *AMP Plus Inc. dbd Elco Lighting v. DMF, Inc.* PTAB-IPR2019-01500 filed Aug. 14, 2019. 99 pages.

Docket Listing in Inter Partes Review of U.S. Pat. No. 9,964,266 . *Amp Plus, Inc. d/b/a Elco Lighting et al v. DMF, Inc.* PTAB-IPR2019-01500. Downloaded Mar. 25, 2020. 3 pages.

Docket Listing in Civil Action No. 2:18-cv-07090. *DMF, Inc. v. AMP Plus, Inc. d/b/a ELCO Lighting et al CDCA-2-18-cv-07090.* Downloaded on Mar. 25, 2020. 39 pages.

Civil Action No. 2:19-cv-4519. Complaint for Patent Infringement. *DMF, Inc. v. AMP Plus, Inc. d/b/a Elco Lighting.* 52 pages dated May 22, 2019. 23 pages.

Docket Listing in Civil Action No. 2:19-cv-4519. *DMF Inc v. AMP Plus, Inc. d/b/a Elco Lighting et al CDCA-2-19-cv-04519.* Downloaded on Mar. 25, 2020. 3 pages.

Decision Denying Institution of Inter Partes Review of U.S. Pat. No. 9,964,266 in IPR2019-01500 dated Mar. 17, 2020. 21 pages.

Defendants’ Notice of Prior Art Pursuant to 35 U.S.C. § 282 in Civil Action No. 2:18-cv-07090-CAS-GJS dated Feb. 28, 2020. 7 pages.

Defendant AMP Plus, Inc.’s Opposition to DMF’s Motion for Summary Judgment in Civil Action No. 2:18-cv-07090-CAS-GJS filed Feb. 10, 2020. 32 pages.

Declaration of Eric Bretschneider, Ph.D in Support of Amp Plus, Inc.’s Opposition to Dmf, Inc.’s Motion for Partial Summary Judgment in Civil Action No. 2:18-cv-07090-Cas-Gjs filed Feb. 10, 2020. 210 pages.

Plaintiff DMF’s Reply in Support of Motion for Partial Summary Judgment in Civil Action No. 2:18-cv-07090-CAS-GJS filed Feb. 18, 2020. 33 pages.

Declaration of James R. Benya in Support of Plaintiff DMF’s Motion for Summary Judgment in Civil Action No. 2:18-cv-07090-CAS-GJS filed Feb. 3, 2020. 193 pages.

Underwriters Laboratories Inc. Standard for Safely. UL 1598. Luminaires Jan. 11, 2020. 12 pages.

Exceptional LED Lighting Technology Product Portfolio. LightingScience 2012. 11 pages.

“Cree LMH2 LED Modules,” Mouser Electronics. Sep. 9, 2012. 4 pages.

Slim Line Disc. Eye LEDs Specification Sheet 2012. 2 pages.

HiBay LED Heat Sink. Wakefield-vette. Dec. 11, 2017.1 pages.

Thermal Management of Cree® XLamp® LEDs. Cree Application Note. 2004. 19 pages.

Imtra Marine Lighting Fall 2007 Catalog. 32 pages.

Cree LMH2 LED Modules Product Family Data Sheet. Cree 2011-2014, 18 pages.

Cree LMH2 LED Modules Design Guide. Cree 2011-2015, 23 pages.

Brochure of Elco EL49A, EL49ICA, EL49RA modules. ELCO Lighting Nov. 25, 2009. 1 page.

Image of Elco E347/247 module identified by Elco in response to DMF’s Request for Production in Civil Action No. 2:18-cv-07090-CAS-GJS on Aug. 28, 2019. 1 page.

Screenshots from the Deposition of Brandon Cohen in Civil Action No. 2:18-cv-07090-CAS-GJS. Conducted Sep. 2, 2020. 8 pages.

Defendant AMP Plus, Inc.’s Initial Disclosure and Designation of Expert Witnesses in Civil Action No. 2:19-CV-4519-CAS. 37 pages.

Defendant AMP Plus, Inc. D/B/a Elco Lighting’s Supplemental Responses to Plaintiff DMF, Inc.’s First Set of Interrogatories (Nos. 1-16) in Civil Action No. 2:19-CV-4519-CAS, Redacted. 13 pages.

Final Written Decision in IPR2019-01094 dated Nov. 19, 2020, 58 pp.

U.S. Appl. No. 14/183,424, filed Feb. 18, 2014, Danesh.

U.S. Appl. No. 14/726,064, filed May 29, 2015, Bailey et al.

U.S. Appl. No. 15/132,875, filed Apr. 19, 2016, Danesh.

U.S. Appl. No. 15/167,682, filed May 27, 2016, Bailey et al.

U.S. Appl. No. 14/942,937, filed Nov. 16, 2015, Peng et al.

U.S. Appl. No. 15/637,742, filed Jun. 29, 2017, Kopitzke, IV.

U.S. Appl. No. 15/688,266, Aug. 28, 2017, Lofti et al.

U.S. Appl. No. 15/853,400, filed Dec. 22, 2017, Kashani.

U.S. Appl. No. 15/901,738, filed Feb. 21, 2018, Danesh.

U.S. Appl. No. 15/947,065, filed Apr. 6, 2018, Danesh.

U.S. Appl. No. 16/016,040, filed Jun. 22, 2018, Danesh.

U.S. Appl. No. 16/200,393, filed Nov. 26, 2018, Danesh.

U.S. Appl. No. 29/638,259, filed Feb. 26, 2018, Danesh.

U.S. Appl. No. 29/541,565, filed Oct. 5, 2015, Peng.

U.S. Appl. No. 29/645,941, filed Apr. 30, 2018, Danesh et al.

U.S. Appl. No. 29/653,142, filed Jun. 11, 2018, Danesh et al.

U.S. Appl. No. 29/664,471, filed Sep. 25, 2018, Danesh et al.

U.S. Appl. No. 29/678,478, filed Jan. 29, 2019, Danesh et al.

U.S. Appl. No. 29/678,482, filed Jan. 29, 2019, Danesh et al.

U.S. Appl. No. 29/683,730, filed Mar. 15, 2019, Danesh et al.

U.S. Appl. No. 29/694,475, filed Jun. 11, 2019, Peng et al.

U.S. Appl. No. 16/653,497, filed Oct. 15, 2019, Danesh et al.

U.S. Appl. No. 29/711,198, filed Nov. 29, 2019, Danesh et al.

U.S. Appl. No. 16/690,970, filed Nov. 21, 2019, Nikooyan et al.

U.S. Appl. No. 16/719,361, filed Dec. 18, 2019, Danesh et al.

U.S. Appl. No. 16/522,275, filed Jul. 25, 2019, Danesh.

U.S. Appl. No. 16/725,606, filed Dec. 23, 2019, Bailey et al.

U.S. Appl. No. 29/648,046, filed May 17, 2018, Williams.

U.S. Appl. No. 16/779,824, filed Feb. 3, 2020, Danesh.

U.S. Appl. No. 16/779,865, filed Feb. 3, 2020, Danesh et al.

U.S. Appl. No. 16/883,144, May 26, 2020, Nikooyan et al.

U.S. Appl. No. 29/696,830, filed Jul. 1, 2019, Kopitzke.

U.S. Appl. No. 16/182,481, filed Nov. 6, 2018, Kopitzke.

* cited by examiner

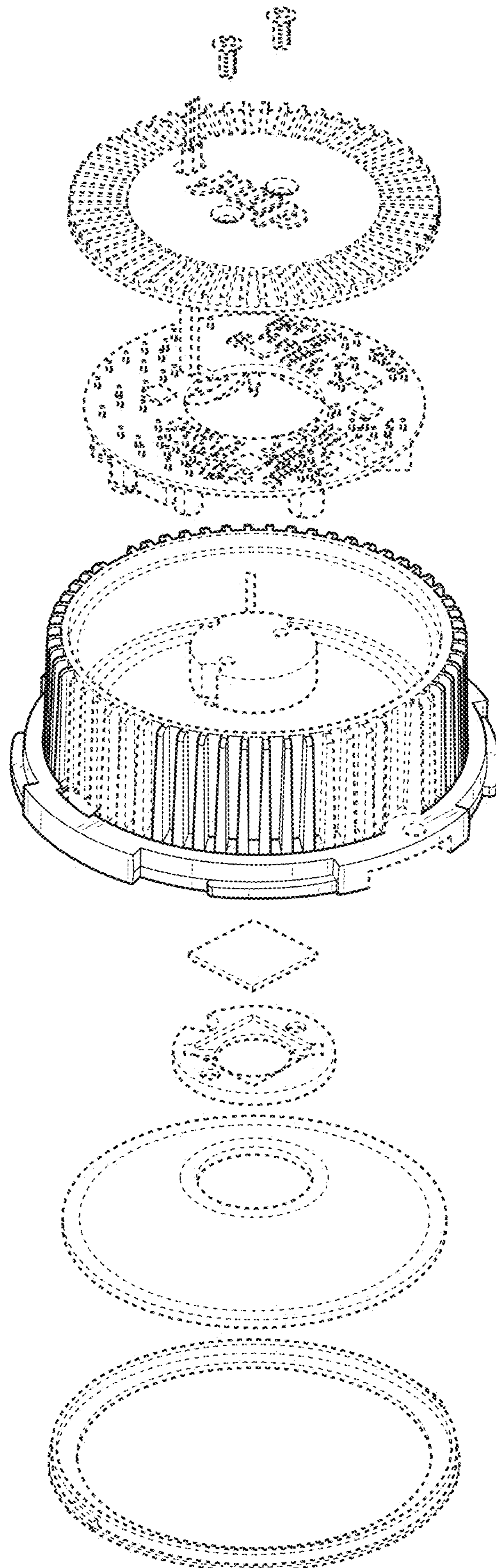


FIG. 1

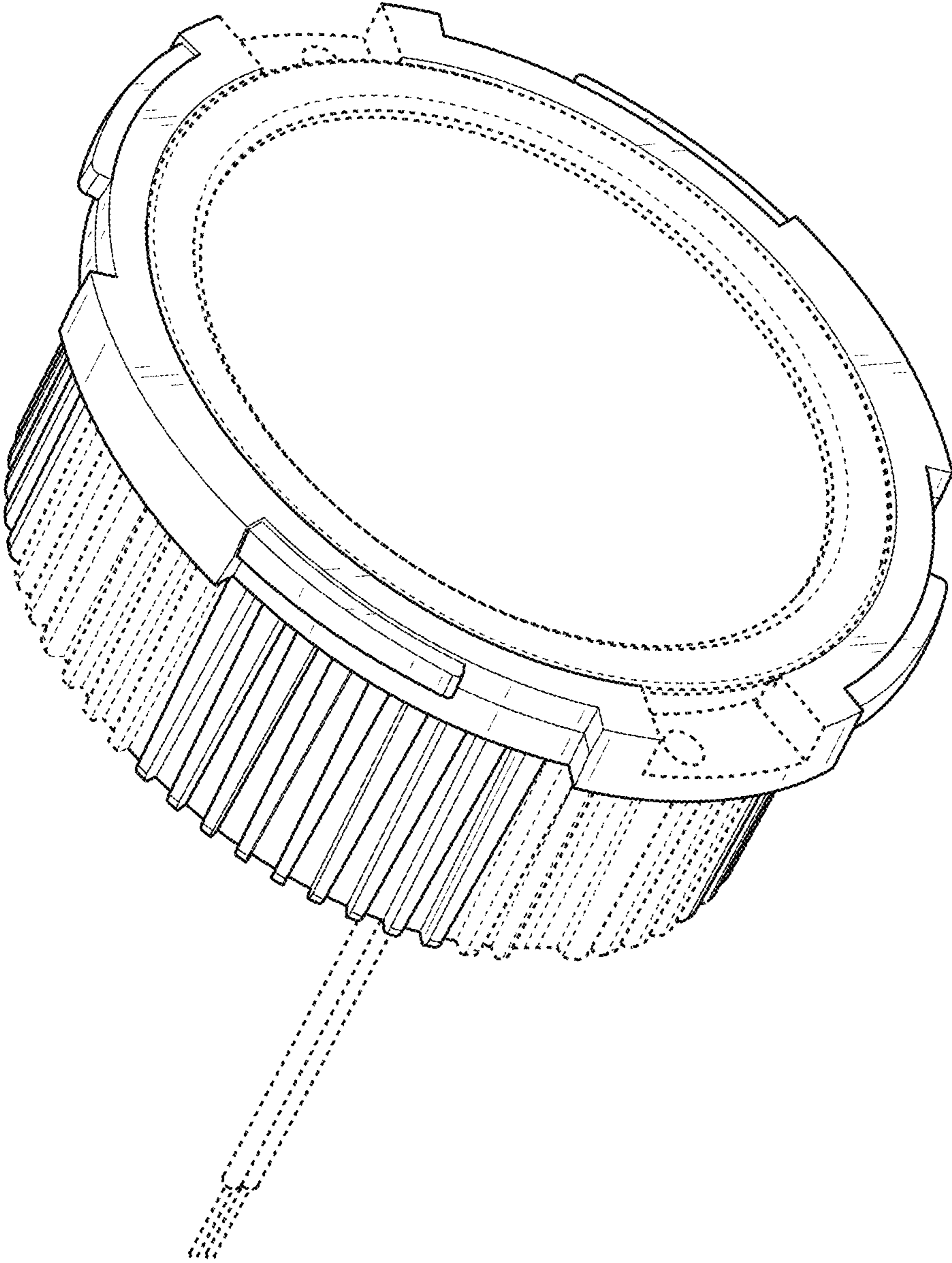


FIG. 2