



US00D715647S

(12) **United States Design Patent**
Jacobson et al.

(10) **Patent No.:** **US D715,647 S**
(45) **Date of Patent:** **** Oct. 21, 2014**

(54) **VENTED END CLOSURE**
(71) Applicant: **Ball Corporation**, Broomfield, CO (US)
(72) Inventors: **Mark A. Jacobson**, Arvada, CO (US);
Howard C. Chasteen, Westminster, CO (US)
(73) Assignee: **Ball Corporation**, Broomfield, CO (US)
(**) Term: **14 Years**
(21) Appl. No.: **29/438,299**

3,262,611 A 7/1966 Palmer
3,307,737 A 3/1967 Harvey et al.
3,326,406 A 6/1967 Brown
D208,591 S 9/1967 Bozek
3,362,569 A 1/1968 Geiger
3,370,169 A 2/1968 Bozek
3,441,169 A 4/1969 Dunn et al.
3,446,389 A 5/1969 Brown
3,618,815 A 11/1971 Heffner
3,731,836 A 5/1973 Silver
3,741,432 A 6/1973 Werth et al.
3,744,667 A 7/1973 Frazee et al.
3,765,208 A 10/1973 Cozert

(Continued)

(22) Filed: **Nov. 28, 2012**
(51) **LOC (10) Cl.** **09-07**
(52) **U.S. Cl.**
USPC **D9/438**
(58) **Field of Classification Search**
USPC D7/392.1, 396.2, 541, 553.2, 605;
D9/416, 425, 432, 434, 435, 438, 443,
D9/447, 454, 518, 538, 763, 767, 772;
53/306, 308, 452, 486, 492; 72/422;
141/6; 215/305; 220/220, 253, 254.4,
220/258.5, 265, 269-273, 276, 288, 377,
220/604, 619, 623, 703, 711, 713, 730,
220/793; 222/153.07; 224/148.7;
229/123.2, 406; 413/4, 8, 12, 14-17,
413/56
See application file for complete search history.

FOREIGN PATENT DOCUMENTS

CA 2280461 2/2001
CA 2657391 1/2008

(Continued)

OTHER PUBLICATIONS

Final Action for U.S. Appl. No. 12/851,979, mailed Apr. 29, 2013, 11 pages.

(Continued)

Primary Examiner — Susan Bennett Hattan
Assistant Examiner — Leanne Was
(74) *Attorney, Agent, or Firm* — Sheridan Ross P.C.

(56) **References Cited**

U.S. PATENT DOCUMENTS

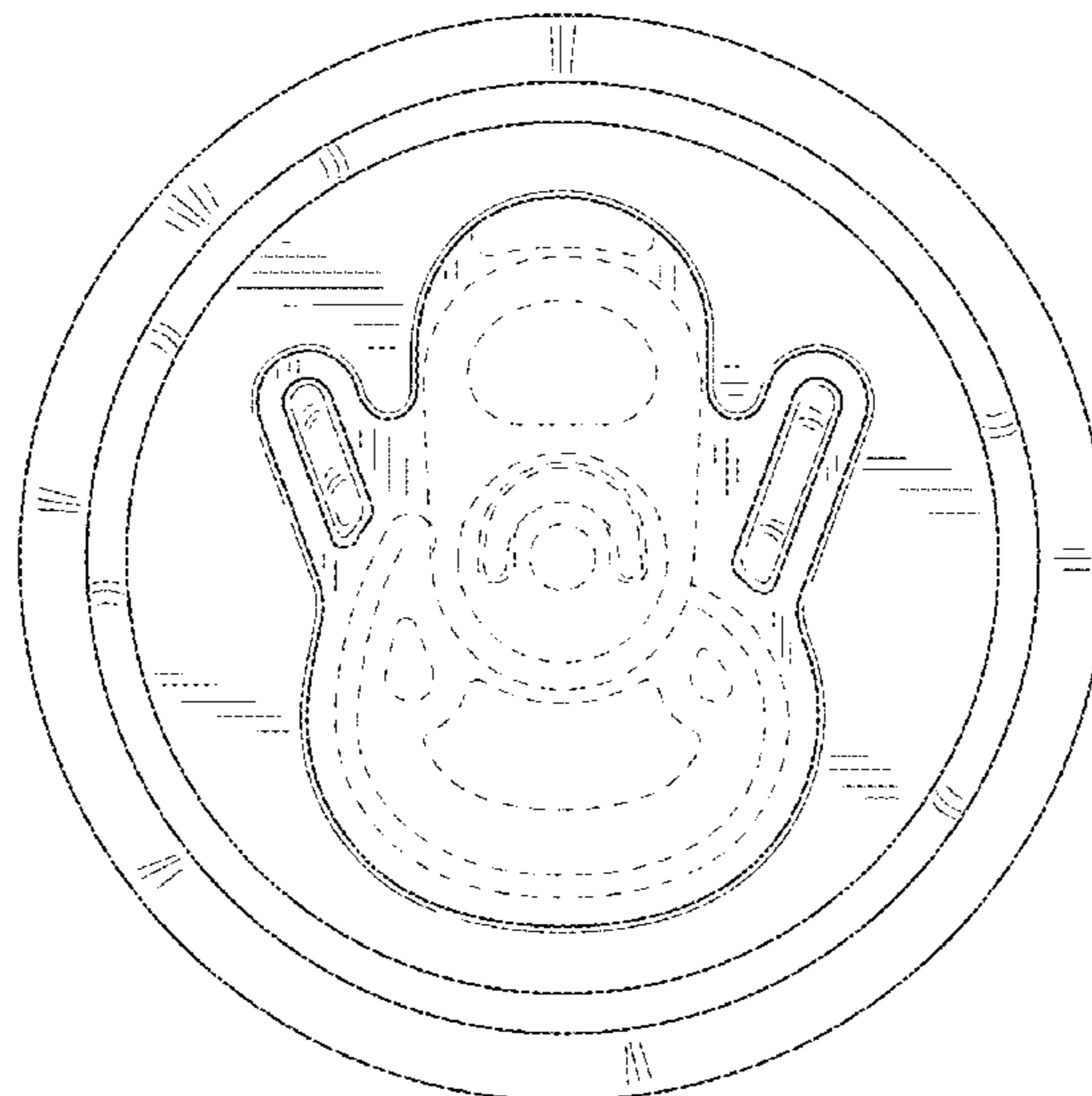
1,847,794 A 3/1932 Takeda
2,160,429 A 5/1939 Bukolt
2,272,111 A 2/1942 Dove
3,169,678 A 2/1965 Wilkinson
3,215,305 A 11/1965 Frankenberg
3,227,304 A 1/1966 Asbury
3,246,791 A 4/1966 Asbury

(57) **CLAIM**
The ornamental design for a vented end closure, as shown and described.

DESCRIPTION

The sole FIGURE is a top plan view of the vented end closure. The broken lines showing a vented end closure are included for the purpose of illustrating environment and form no part of the claimed design.

1 Claim, 1 Drawing Sheet



(56)

References Cited

U.S. PATENT DOCUMENTS

3,779,417 A	12/1973	Klein	5,494,184 A	2/1996	Noguchi et al.	
3,794,206 A	2/1974	De Line et al.	5,555,992 A	9/1996	Sedgeley	
3,826,401 A	7/1974	Zundel	5,655,678 A	8/1997	Kobayashi	
3,833,144 A	9/1974	Bollmann et al.	D385,192 S	10/1997	Hurst et al.	
3,836,038 A	9/1974	Cudzik	5,683,006 A	11/1997	Cook, III	
3,856,184 A	12/1974	Luviano	5,692,636 A	12/1997	Schubert	
3,877,604 A	4/1975	Brown	5,695,085 A	12/1997	Hadener	
3,881,630 A	5/1975	Lovell et al.	5,711,448 A	1/1998	Clarke, III	
3,908,856 A	9/1975	Perry	5,713,481 A	2/1998	Jordan	
D238,150 S	12/1975	Cudzik	5,819,973 A	10/1998	Traub, Sr. et al.	
D238,659 S	2/1976	Wallace	D402,887 S	12/1998	Hurst	
D239,255 S	3/1976	Brincks et al.	5,860,553 A	1/1999	Schubert	
D239,256 S	3/1976	Brincks et al.	5,911,331 A	6/1999	Boller	
RE28,910 E	7/1976	Dalli et al.	5,975,327 A	11/1999	Funk	
3,970,212 A	7/1976	Brown	5,979,697 A	11/1999	Kim	
3,982,657 A	9/1976	Keller et al.	6,024,239 A	2/2000	Turner et al.	
4,024,981 A	5/1977	Brown	D424,438 S	5/2000	Turner et al.	
4,032,034 A	6/1977	Willis	6,079,583 A	6/2000	Chasteen	
4,039,100 A	8/1977	Wells	6,131,763 A	10/2000	Stanish et al.	
4,051,976 A	10/1977	Perry	6,145,866 A	11/2000	Peter	
4,054,228 A	10/1977	Balocca et al.	D434,983 S	12/2000	Hurst	
4,061,243 A	12/1977	Khoury	6,354,453 B1	3/2002	Chasteen	
4,062,471 A	12/1977	Perry et al.	6,375,029 B2	4/2002	Anthony et al.	
4,073,403 A	2/1978	Orange	6,499,329 B1	12/2002	Enoki et al.	
4,084,721 A	4/1978	Perry	6,715,629 B2	4/2004	Hartman et al.	
4,105,133 A	8/1978	La Barge et al.	6,761,281 B2	7/2004	Hartman	
4,128,186 A	12/1978	Gane	6,837,093 B2	1/2005	Yamasaki	
4,146,149 A	3/1979	Beveridge	7,000,797 B2	2/2006	Forrest et al.	
4,148,410 A	4/1979	Brown	7,096,759 B2	8/2006	Kirko	
4,184,607 A	1/1980	Potts	7,100,789 B2	9/2006	Nguyen et al.	
4,196,823 A	4/1980	Madden et al.	D559,680 S	1/2008	Jacobson et al.	
D255,424 S	6/1980	Bathurst	7,506,779 B2	3/2009	Jentzsch et al.	
D255,425 S	6/1980	Bathurst	7,513,383 B2	4/2009	Hwang	
4,205,760 A	6/1980	Hasegawa	7,748,557 B2	7/2010	Robinson	
RE30,349 E	7/1980	Silver	7,918,359 B2	4/2011	Paris et al.	
4,210,257 A	7/1980	Radtke	7,975,884 B2 *	7/2011	Mathabel et al. 222/541.9	
4,213,538 A	7/1980	Boardman	D653,944 S	2/2012	Seki et al.	
4,244,489 A	1/1981	Klein	8,245,866 B2	8/2012	Gibson et al.	
4,244,490 A	1/1981	Klein	8,336,726 B2	12/2012	Ramsey et al.	
4,252,247 A	2/1981	Asbury	8,397,935 B2	3/2013	Emanuele, III et al.	
4,257,529 A	3/1981	Saunders	D691,039 S	10/2013	Jacobson et al.	
D259,403 S	6/1981	Frazier	2002/0005408 A1	1/2002	Yamasaki et al.	
4,276,993 A	7/1981	Hasegawa	2002/0113069 A1	8/2002	Forrest et al.	
4,280,427 A	7/1981	Potts	2002/0139800 A1	10/2002	Hwang et al.	
4,289,251 A	9/1981	Maliszewski	2003/0038134 A1	2/2003	Chasteen et al.	
4,305,523 A	12/1981	Dalli et al.	2003/0075544 A1 *	4/2003	Turner et al. 220/269	
4,318,494 A	3/1982	Heyn	2003/0098306 A1	5/2003	Cho	
4,320,850 A	3/1982	Drolen, Jr.	2003/0192889 A1	10/2003	Chasteen et al.	
4,361,251 A	11/1982	Langseder et al.	2004/0056032 A1 *	3/2004	Vaughan 220/269	
D267,633 S	1/1983	Christian	2004/0144787 A1	7/2004	Heck	
4,416,389 A	11/1983	Wilkinson et al.	2004/0211786 A1 *	10/2004	Turner et al. 220/619	
4,438,865 A	3/1984	Scattaregia	2005/0077316 A1	4/2005	Roberts	
4,448,325 A	5/1984	Edwards et al.	2007/0045318 A1	3/2007	Gibson et al.	
4,465,204 A	8/1984	Kaminski et al.	2007/0138178 A1	6/2007	Erickson	
4,576,306 A	3/1986	Kelsey et al.	2007/0215621 A1 *	9/2007	Shinguryo et al. 220/269	
4,901,880 A	2/1990	Tatham et al.	2008/0011786 A1	1/2008	Mathabel et al.	
4,930,658 A	6/1990	McEldowney	2009/0039090 A1 *	2/2009	Forrest et al. 220/623	
4,994,009 A	2/1991	McEldowney	2009/0039091 A1 *	2/2009	Forrest et al. 220/623	
5,007,554 A	4/1991	Hannon et al.	2009/0057315 A1	3/2009	Stringfield et al.	
5,011,037 A	4/1991	Moen et al.	2009/0200305 A1	8/2009	Stude	
5,064,087 A	11/1991	Koch	2009/0206083 A1	8/2009	Heigl	
5,065,882 A	11/1991	Sugiyama	2010/0018976 A1	1/2010	Christian et al.	
5,129,541 A	7/1992	Voigt et al.	2010/0044383 A1	2/2010	Watson et al.	
5,131,555 A	7/1992	DeMars et al.	2010/0294771 A1	11/2010	Holder et al.	
5,219,257 A	6/1993	Koch	2011/0056946 A1	3/2011	Emanuele, III et al.	
5,224,618 A	7/1993	Garbiso	2011/0253719 A1	10/2011	Cherian	
5,248,053 A	9/1993	Lundgren	2011/0266281 A1	11/2011	Thiemann et al.	
5,285,919 A	2/1994	Recchia	2012/0031056 A1	2/2012	Chasteen et al.	
5,307,947 A	5/1994	Moen et al.	2012/0048870 A1	3/2012	Ellerbe, III et al.	
D353,769 S	12/1994	Miller	2012/0199586 A1	8/2012	Shamalta	
5,375,729 A	12/1994	Schubert	2012/0199587 A1	8/2012	Norris	
5,397,014 A	3/1995	Aydt	2012/0205378 A1 *	8/2012	Forrest 220/269	
5,405,039 A	4/1995	Komura	2013/0037543 A1 *	2/2013	McClung et al. 220/269	
5,456,378 A	10/1995	DeMars	2013/0075401 A1 *	3/2013	Forrest 220/270	
D365,274 S	12/1995	Cook	2013/0126529 A1	5/2013	Nesling et al.	
			2013/0270269 A1 *	10/2013	Lewis 220/270	
			2014/0054290 A1 *	2/2014	McClung et al. 220/271	

(56)

References Cited

U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

GB	1436617	5/1976
GB	1532081	11/1978
GB	2280165	1/1995
GB	2291030	1/1996
GB	2320008	6/1998
JP	H08-151043	6/1996
JP	H09-58681	3/1997
JP	H09-301364	11/1997
JP	10-035662	2/1998
JP	H10-245032	9/1998
JP	2003285837	10/2003
JP	2004359339	12/2004
JP	2005088961	4/2005
NL	1023297	11/2004
WO	WO 94/13544	6/1994
WO	WO 96/02432	2/1996
WO	WO 97/22531	6/1997
WO	WO 97/42088	11/1997
WO	WO 00/56613	9/2000
WO	WO 01/46025	6/2001
WO	WO 2008/008892	1/2008
WO	WO 2008/023983	2/2008
WO	WO 2008/057207	5/2008
WO	WO 2011/053776	5/2011
WO	WO 2013/102595	7/2013

OTHER PUBLICATIONS

Notice of Allowance for U.S. Appl. No. 12/851,979, mailed Jul. 11, 2013, 8 pages.
 Notice of Allowance with English Translation for China Patent Application No. 201330161204.X, dated Oct. 16, 2013 4 pages.
 Notice of Allowance with English Translation for China Patent Application No. 201330204259.4, dated Sep. 26, 2013 4 pages.
 Official Action for U.S. Appl. No. 29/404,996 mailed Apr. 12, 2013, 5 pages.
 Notice of Allowance for U.S. Appl. No. 29/404,996 mailed May 30, 2013, 7 pages.

U.S. Appl. No. 29/464,785, filed Aug. 21, 2013, Jacober et al.
 Official Action for Canadian Patent Application No. 2,806,879 dated Oct. 23, 2013, 2 pages.
 Official Action for Canada Patent Application No. 144505, dated Jun. 13, 2012 2 pages.
 English translation of Notice of Allowance for China Patent Application No. 201230127943.2, dated Aug. 20, 2012 2 pages.
 U.S. Appl. No. 14/066,457, filed Oct. 29, 2013, Chasteen et al.
 U.S. Appl. No. 13/667,928, filed Nov. 2, 2012, Jacober et al.
 U.S. Appl. No. 29/437,073, filed Nov. 13, 2012, Scott.
 International Search Report for International (PCT) Application No. PCT/US11/44940, mailed Dec. 22, 2011, 3 pages.
 Written Opinion for International (PCT) Application No. PCT/US11/44940, mailed Dec. 22, 2011, 5 pages.
 International Preliminary Report on Patentability for International (PCT) Application No. PCT/US11/44940, mailed Feb. 21, 2013, 7 pages.
 International Search Report and Written Opinion for International (PCT) Application No. PCT/US12/63384 mailed Feb. 1, 2013, 8 pages.
 Official Action for U.S. Appl. No. 12/851,979, mailed Sep. 28, 2012 10 pages.
 Official Action for Australia Patent Application No. 2011286291, dated Dec. 12, 2013 3 pages.
 Extended European Search Report for European Patent Application No. 11815019.2 dated Mar. 27, 2014, 7 pages.
 Official Action for Canadian Patent Application No. 150953 dated Feb. 26, 2014, 2 pages.
 Official Action for Canadian Patent Application No. 151227 dated Feb. 26, 2014, 2 pages.
 Official Action for U.S. Appl. No. 29/437,073 mailed Apr. 9, 2014, 6 pages.
 Notice of Allowance for Australia Patent Application No. 2011286291, dated Apr. 3, 2014 2 pages.
 News Releases: "The Can, ReinVented: Louisville is Pilot Market for New Bud Light Vented Can" Anheuser-Busch InBev, Jun. 5, 2013, 3 pages.
 Press Release: "Crown and Molson Coors Debut Cans with New Vented End in Canada," Crown Holdings, Inc., Jul. 11, 2013, 2 pages.

* cited by examiner

