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(12) **United States Design Patent**  
**Rapparini**

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(54) **REINFORCEMENT RING**

D470,050 S 2/2003 Renz et al.  
D474,404 S 5/2003 Tropeano  
D476,564 S \* 7/2003 Flasch ..... D9/449  
6,648,163 B2 11/2003 Porter et al.

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(Continued)

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**FOREIGN PATENT DOCUMENTS**

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

CA 2 734 843 A1 2/2010  
EP 0 524 464 A1 1/1993

(Continued)

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**OTHER PUBLICATIONS**

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(52) **U.S. Cl.**  
USPC ..... **D9/454**

(58) **Field of Classification Search**  
USPC ..... D7/392.1, 396.2; D9/434-436, 443, 499,  
D9/516, 454, 452, 453  
CPC . B65D 1/00; B65D 1/26; B65D 1/265; B65D  
17/00; B65D 17/02; B65D 17/50; B65D  
17/501; B65D 25/00; B65D 81/00; B65D  
85/804; B65D 85/8043; B65D 85/8046;  
B65D 2543/00833  
See application file for complete search history.

Amazon. Qbuc 3 Pcs Replacement Scent Aromatherapy Ring for Solar Diffuser Air Freshener Ring Fragrant Ring Scent Ring for Essential Oil Diffuser with Solar Fan(Ocean). Oct. 5, 2019. <https://www.amazon.com/QBUC-Replacement-Aromatherapy-Freshener-Essential/dp/B07YQQLM8G?th=1> (Year: 2019).\*

(Continued)

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(57) **CLAIM**

I claim the ornamental design for a reinforcement ring, as shown and described.

(56) **References Cited**

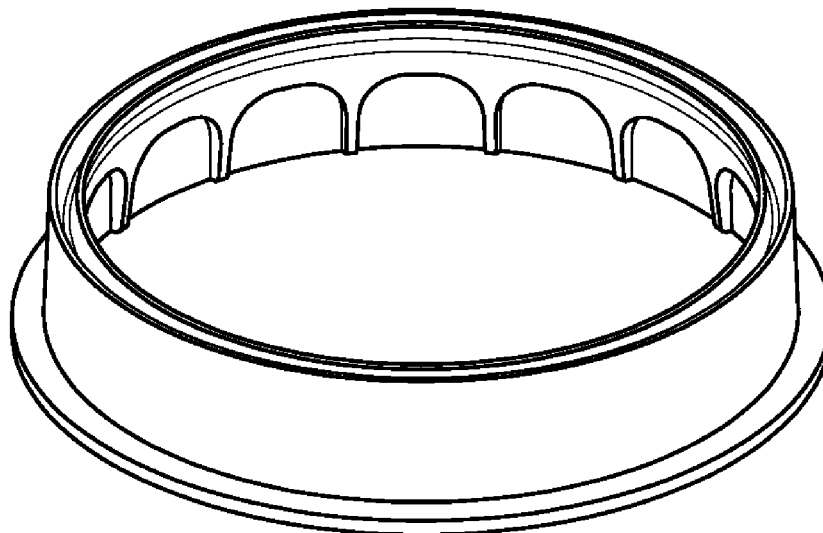
**U.S. PATENT DOCUMENTS**

3,440,951 A	4/1969	Barrera	
D225,308 S *	12/1972	Barefoot	..... D9/453
D233,138 S	10/1974	Vogel	
D248,269 S	6/1978	Schreckengost	
D251,828 S *	5/1979	Smith	..... D9/452
D260,243 S	8/1981	Dogliotti	
D261,486 S *	10/1981	Smith	..... D9/452
D286,508 S	11/1986	Tilden	
D288,063 S	2/1987	Tyler	
D306,974 S	4/1990	Tholstrup	
D383,646 S	9/1997	Jeppesen et al.	
D438,794 S	3/2001	Miles et al.	
D445,677 S	7/2001	Lindsay et al.	
D452,433 S	12/2001	Lazaris	
6,431,389 B1	8/2002	Jerstroem et al.	

**DESCRIPTION**

FIG. 1 is a top perspective view of a first embodiment of a reinforcement ring design;  
FIG. 2 is a bottom plan view thereof;  
FIG. 3 is a top plan view thereof;  
FIG. 4 is a right side elevation view thereof, where a left side elevation view, a front elevation view, and a rear elevation view thereof each is the same as the right side elevation view; and,  
FIG. 5 is a cross-sectional view taken in the direction of line 5-5 of FIG. 2.

**1 Claim, 5 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

D502,362 S 3/2005 Lazaris et al.  
 D515,353 S 2/2006 Martin  
 D560,095 S 1/2008 Bodum  
 D561,528 S 2/2008 Bodum  
 D587,995 S 3/2009 Studee  
 D605,502 S 12/2009 Honda et al.  
 D606,363 S 12/2009 Aardenburg  
 D606,404 S 12/2009 Diss  
 D612,732 S 3/2010 Takata et al.  
 D627,636 S 11/2010 Fang  
 D628,883 S 12/2010 Stephens  
 D637,484 S 5/2011 Winkler  
 D644,924 S 9/2011 Lin  
 D647,397 S 10/2011 Inaba  
 D651,865 S 1/2012 Smyers  
 D652,266 S 1/2012 Smyers  
 D668,538 S 10/2012 Knutson et al.  
 D682,675 S 5/2013 Rapparini  
 D684,459 S 6/2013 Stowe  
 D685,631 S 7/2013 Rapparini  
 D688,945 S 9/2013 Kim  
 D692,759 S 11/2013 Rapparini  
 D692,760 S 11/2013 Rapparini  
 D695,615 S 12/2013 Rapparini  
 D696,113 S 12/2013 Stein  
 D705,064 S 5/2014 Sy  
 D709,369 S 7/2014 van de Klippe et al.  
 D709,765 S 7/2014 Hager  
 D711,227 S 8/2014 Sheikh  
 D713,245 S 9/2014 Taylor et al.  
 D726,006 S 4/2015 Rapparini  
 D727,141 S 4/2015 Mastropasqua  
 D730,734 S 6/2015 Rapparini  
 D732,390 S 6/2015 Trombetta  
 D743,252 S 11/2015 Hansen  
 D750,481 S \* 3/2016 Rapparini ..... D9/500  
 D750,482 S 3/2016 Rapparini  
 D750,493 S \* 3/2016 Andujar ..... D9/454  
 D766,080 S 9/2016 Lebon  
 9,694,946 B2 \* 7/2017 Kopolas ..... B65D 41/04

D801,807 S 11/2017 Rapparini  
 D837,052 S 1/2019 Rapparini  
 D842,093 S \* 3/2019 Rapparini ..... D9/429  
 D842,094 S \* 3/2019 Rapparini ..... D9/429  
 D876,236 S \* 2/2020 Griffis ..... D9/454  
 D931,105 S \* 9/2021 Griffis ..... D9/516  
 D970,341 S \* 11/2022 Yoshida ..... D9/454  
 D974,910 S \* 1/2023 Collins ..... D9/454  
 D992,419 S \* 7/2023 Mullins ..... D9/454  
 2007/0148290 A1 6/2007 Ternite et al.  
 2009/0178313 A1 7/2009 McManigal  
 2011/0111098 A1 5/2011 Ricotti  
 2013/0158637 A1 6/2013 Sheikh  
 2015/0191320 A1 7/2015 Gerbault  
 2017/0050799 A1 2/2017 Anghileri  
 2018/0215120 A1 8/2018 Rapparini  
 2018/0332995 A1 11/2018 Rapparini et al.

FOREIGN PATENT DOCUMENTS

EP 1 792 850 A1 6/2007  
 FR 1 543 608 10/1968  
 JP 2017-522150 A 8/2017  
 WO WO 2015/186035 A1 12/2015  
 WO WO 2020/075016 A1 4/2020

OTHER PUBLICATIONS

Industrial Meeting. Aroma System expands its production facility closer to the ICA's headquarters. No date specified. <https://www.industrialmeeting.club/aroma-system-expand-its-production-facility-closer-to-icas-headquarters/> (Year: 0).\*

Perfumer Flavorist. Air Up Launches Scent-Flavored Hydration in United States. Jul. 21, 2022. <https://www.perfumerflavorist.com/flavor/beverage/news/22327755/air-up-launches-scentflavored-hydration-in-us> (Year: 2022).\*

International Search Report for International Application No. PCT/IB2011/001278, dated Oct. 20, 2011, 2 pages.

International Search Report for International Application No. PCT/IB2011/001273, dated Oct. 21, 2011, 2 pages.

\* cited by examiner

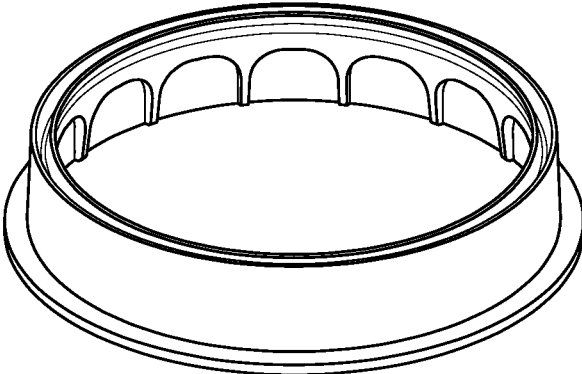


FIG. 1

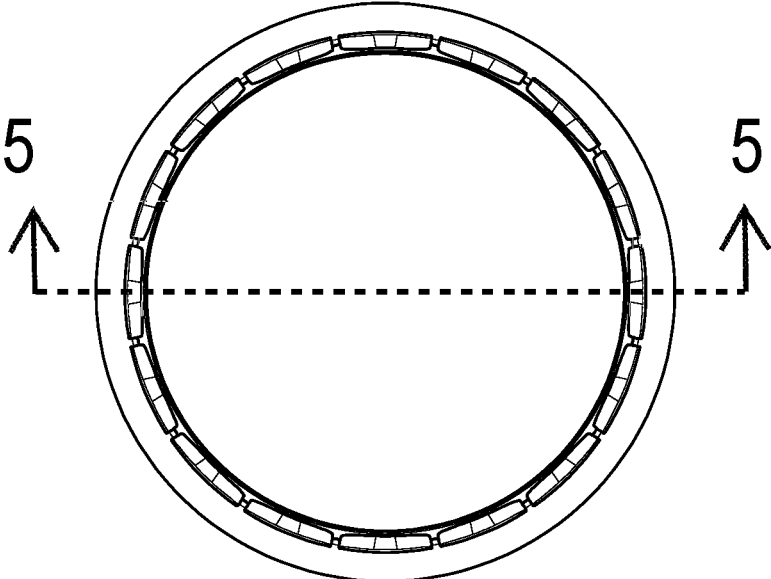


FIG. 2

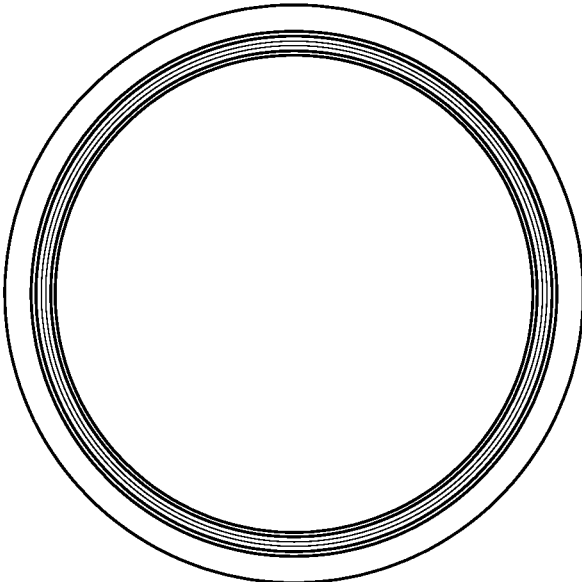


FIG. 3



FIG. 4

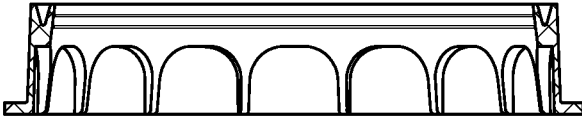


FIG. 5