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

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(54) **FEMALE ELECTRICAL CONNECTOR WITH LOCKING ARM**

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(52) **U.S. Cl.**  
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CPC .... H01R 13/64; H01R 13/506; H01R 13/516;  
H01R 13/627; H01R 13/641; H01R 13/642; H01R 13/659; H01R 13/4534;  
H01R 13/5816; G02B 6/3807; G02B 6/3816; G02B 6/3825; G02B 6/3831;  
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See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

|              |         |                |                 |
|--------------|---------|----------------|-----------------|
| 123,275 A    | 1/1872  | McCurry        |                 |
| D86,515 S    | 3/1932  | Cox            |                 |
| 2,046,221 A  | 6/1936  | Thomas         |                 |
| D188,419 S   | 7/1960  | Danesi         |                 |
| 3,008,116 A  | 11/1961 | Blanchenot     |                 |
| 3,560,908 A  | 2/1971  | Dell et al.    |                 |
| 4,258,970 A  | 3/1981  | Bourdon et al. |                 |
| D265,189 S * | 6/1982  | Eriksson       | ..... D10/114.1 |

|             |         |                |
|-------------|---------|----------------|
| 4,606,596 A | 8/1986  | Whiting et al. |
| D286,397 S  | 10/1986 | Challans       |
| 4,704,091 A | 11/1987 | Owens et al.   |
| D328,281 S  | 7/1992  | Nociar         |
| D329,840 S  | 9/1992  | Nociar         |
| 5,201,669 A | 4/1993  | Lin            |
| D336,070 S  | 6/1993  | Clark          |
| D344,490 S  | 2/1994  | Nociar         |
| 5,285,163 A | 2/1994  | Liotta         |
| 5,401,181 A | 3/1995  | Wilson         |
| D360,187 S  | 7/1995  | Starec et al.  |
| D360,871 S  | 8/1995  | Wilson         |
| D360,872 S  | 8/1995  | Wilson         |
| 5,460,545 A | 10/1995 | Siemon et al.  |
| D366,646 S  | 1/1996  | Carr           |
| D367,644 S  | 3/1996  | Fukao et al.   |
| D371,112 S  | 6/1996  | Anthony        |
| 5,641,310 A | 6/1997  | Tiberio, Jr.   |
| D393,831 S  | 4/1998  | Siemon et al.  |

(Continued)

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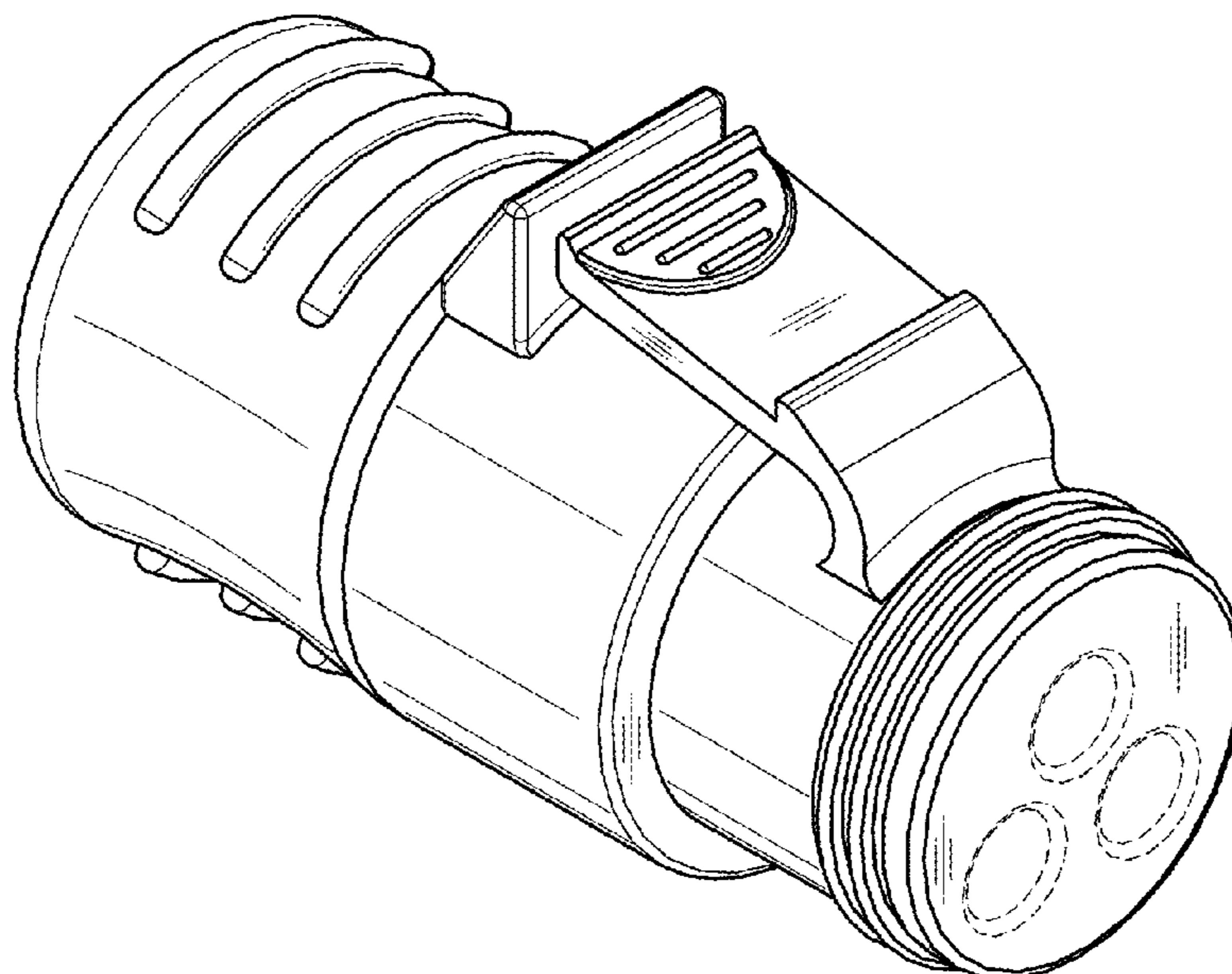
(57) **CLAIM**

The ornamental design for a female electrical connector with locking arm, as shown and described.

**DESCRIPTION**

FIG. 1 is a top, front, left side perspective view of my new design of a female electrical connector with locking arm. FIG. 2 is a front side elevational view thereof. FIG. 3 is a top plan view thereof. FIG. 4 is a bottom plan view thereof. FIG. 5 is a left side elevational view thereof, the right side elevational view being a mirror image thereof; and, FIG. 6 is a rear side elevational view thereof. The broken lines in FIGS. 1, 2 and 6 represent environment only, and form no part of the claimed design.

**1 Claim, 3 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

D413,100 S \* 8/1999 Nakazawa ..... D13/146  
 D416,230 S 11/1999 Narumo et al.  
 D425,028 S 5/2000 Lee  
 D434,377 S 11/2000 Bussett et al.  
 D437,828 S 2/2001 Corona  
 D439,221 S 3/2001 Corona  
 D444,128 S 6/2001 Tan et al.  
 D445,763 S 7/2001 Corona  
 D446,186 S 8/2001 Corona  
 D454,115 S 3/2002 Zemba  
 6,379,169 B1 4/2002 Corona  
 6,383,003 B1 5/2002 Corona  
 D472,523 S 4/2003 Hansen  
 D473,844 S 4/2003 Bender et al.  
 D502,919 S 3/2005 Studnicky  
 D503,150 S 3/2005 Yamawaki et al.  
 D514,070 S 1/2006 Bachmann  
 D516,028 S 2/2006 Deng  
 D521,933 S 5/2006 Wade et al.  
 D524,736 S 7/2006 Morita et al.  
 D524,737 S 7/2006 Lai et al.  
 D527,346 S \* 8/2006 Brodin ..... D13/146  
 D529,441 S 10/2006 LaPere  
 D529,865 S 10/2006 LaPere  
 D533,502 S 12/2006 Wakefield et al.  
 D535,618 S 1/2007 Hu et al.  
 D555,594 S 11/2007 So  
 7,300,318 B2 11/2007 Deja  
 D559,785 S 1/2008 Tosetti  
 D560,168 S 1/2008 McCoy  
 D560,610 S 1/2008 McCoy  
 D569,955 S 5/2008 Chen  
 D571,727 S 6/2008 Yang et al.  
 7,390,210 B2 6/2008 Corona  
 D573,536 S 7/2008 Hariharesan et al.  
 7,395,166 B2 7/2008 Plishner  
 D577,671 S 9/2008 Schnitzler  
 D586,750 S 2/2009 Li  
 D596,125 S 7/2009 Norin et al.  
 D601,090 S 9/2009 Vigorito et al.  
 D604,697 S 11/2009 Sogo et al.  
 D605,599 S 12/2009 Wong  
 D606,944 S 12/2009 Mehnert et al.  
 D611,904 S 3/2010 Mehnert et al.  
 D613,246 S 4/2010 Muecke et al.  
 D615,042 S 5/2010 Morgan et al.  
 D615,496 S 5/2010 Mennekes  
 7,722,397 B2 5/2010 Schleith  
 D616,821 S 6/2010 The  
 7,785,123 B2 8/2010 Corona  
 D626,506 S 11/2010 Giefers et al.  
 RE42,230 E 3/2011 Norin et al.  
 D637,159 S 5/2011 Hu  
 D639,243 S 6/2011 Gharib et al.

D639,250 S 6/2011 Svelnis et al.  
 D639,743 S 6/2011 Smith et al.  
 D643,815 S 8/2011 Mark et al.  
 D651,171 S 12/2011 Yamauchi et al.  
 D651,172 S 12/2011 Yamauchi et al.  
 D670,650 S 11/2012 Ebihara  
 D673,118 S 12/2012 Giefers et al.  
 D677,629 S 3/2013 Corona  
 D678,200 S 3/2013 Corona  
 D678,201 S 3/2013 Corona  
 D678,202 S 3/2013 Corona  
 D678,203 S 3/2013 Corona  
 D678,204 S 3/2013 Corona  
 D679,662 S 4/2013 Svelnis et al.  
 D682,209 S 5/2013 Henrick et al.  
 D682,793 S 5/2013 Igelmund  
 D692,829 S 11/2013 Dobler  
 D694,189 S 11/2013 Ledinger et al.  
 D697,030 S 1/2014 Ledinger et al.  
 D698,730 S 2/2014 Hori et al.  
 D703,142 S 4/2014 Hoshino et al.  
 D704,645 S 5/2014 Nomura et al.  
 D705,738 S 5/2014 Schmidt et al.  
 D707,179 S 6/2014 Smith  
 D708,142 S 7/2014 Luther et al.  
 D712,840 S 9/2014 Sykes et al.  
 D715,227 S 10/2014 Leem  
 D716,233 S 10/2014 Lai  
 D716,732 S 11/2014 Neumann  
 D729,169 S 5/2015 Corona  
 D733,655 S 7/2015 Sato et al.  
 D735,671 S 8/2015 Kuhnert  
 D737,771 S 9/2015 Hofmann  
 D743,893 S 11/2015 Kuribayashi  
 D748,058 S 1/2016 Corona  
 D753,065 S 4/2016 Corona  
 D753,600 S 4/2016 Svelnis  
 D762,178 S 7/2016 Liu et al.  
 D766,183 S 9/2016 Corona  
 D766,184 S 9/2016 Corona  
 D768,082 S 10/2016 Chuang  
 D770,386 S 11/2016 Corona  
 D770,981 S 11/2016 Corona  
 D774,465 S 12/2016 Corona  
 D774,466 S 12/2016 Corona  
 D780,123 S 2/2017 Zetterqvist et al.  
 D781,787 S 3/2017 Spiel  
 D787,446 S 5/2017 Cockerill  
 D793,340 S 8/2017 Wang  
 D797,052 S 9/2017 Moseke et al.  
 D801,933 S 11/2017 Sasaki  
 2002/0123275 A1 9/2002 Zhao  
 2003/0139094 A1 7/2003 Venditti et al.  
 2004/0147170 A1 7/2004 Greenwood et al.  
 2011/0003512 A1 1/2011 Bower et al.

\* cited by examiner

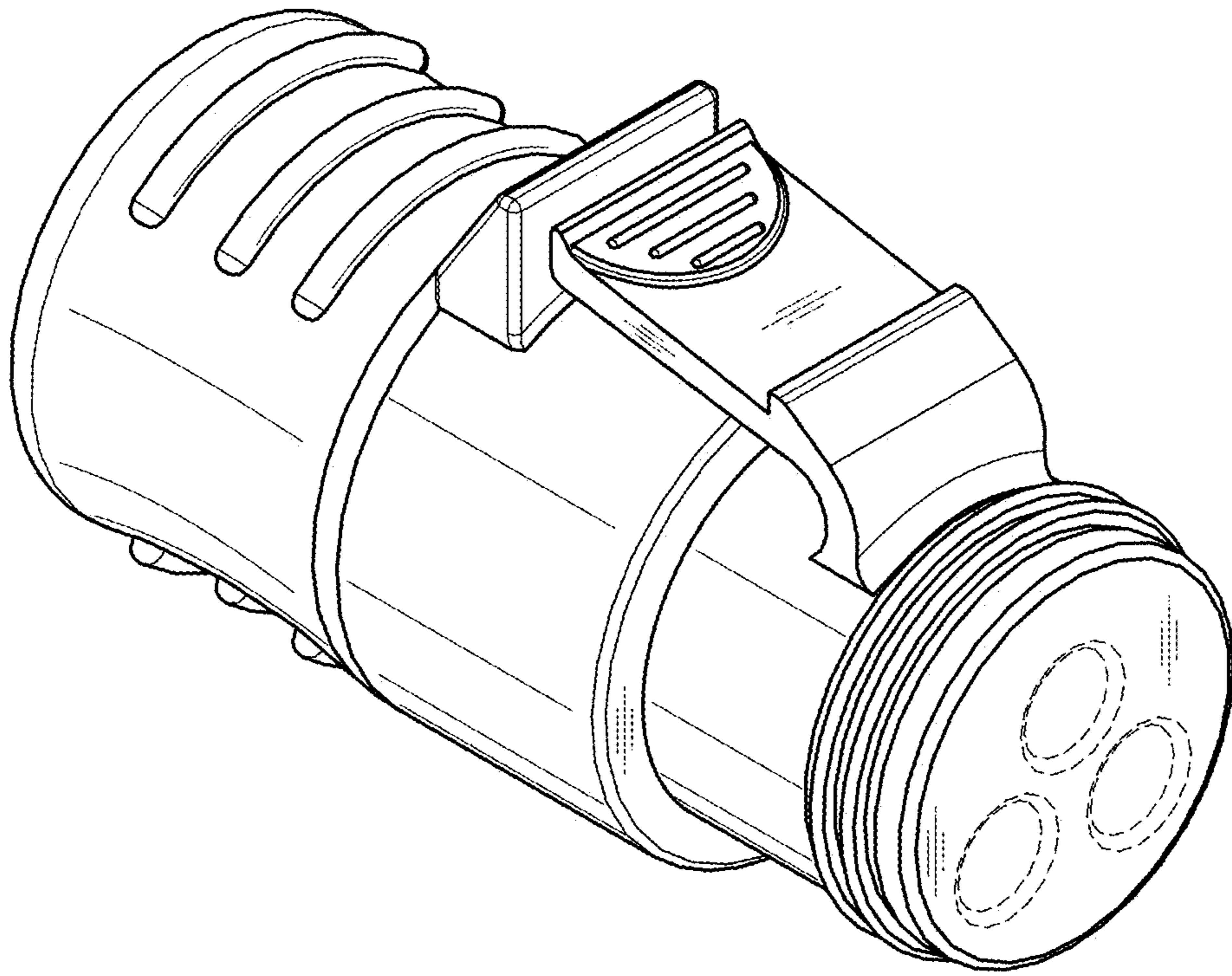


FIG. 1

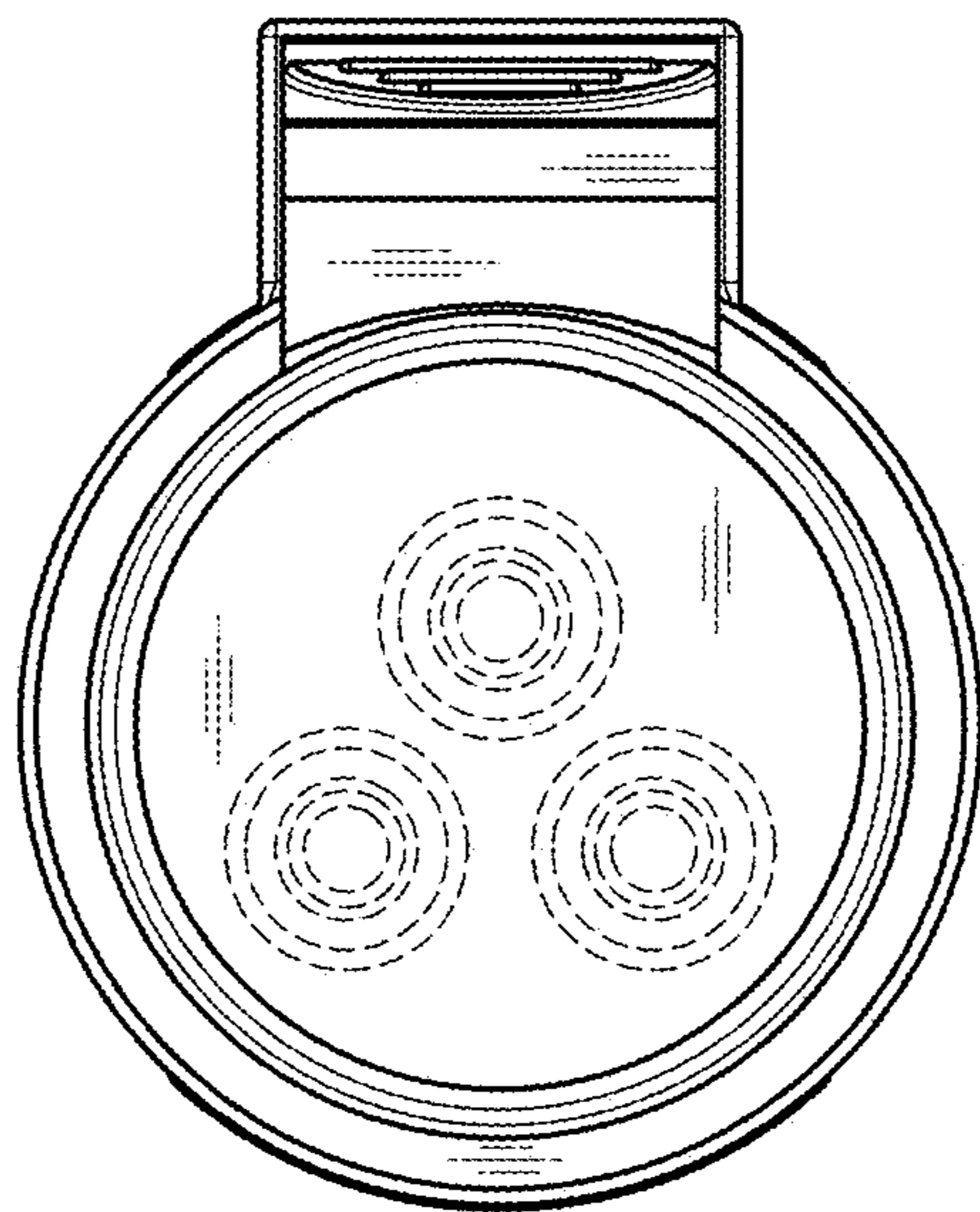


FIG. 2

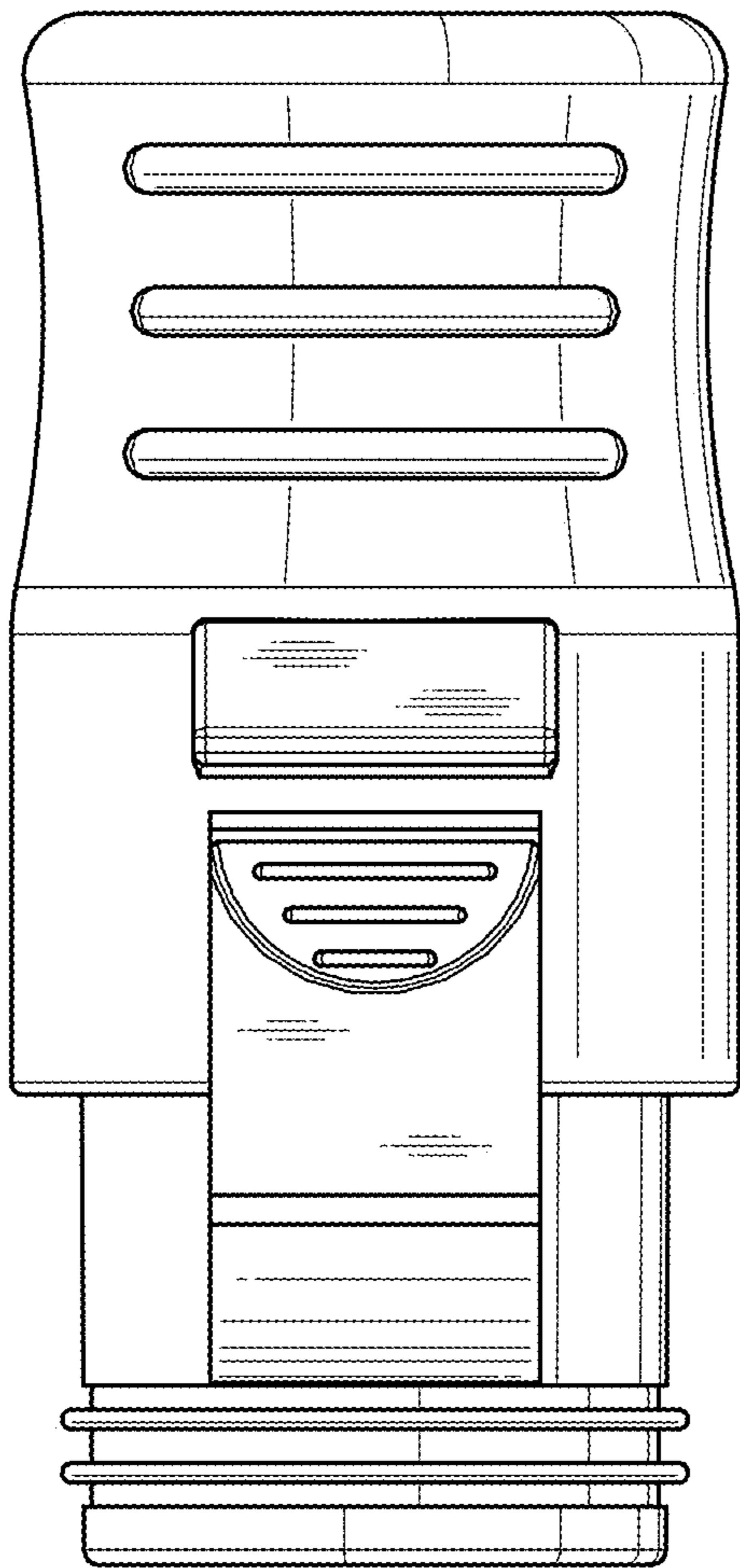


FIG. 3

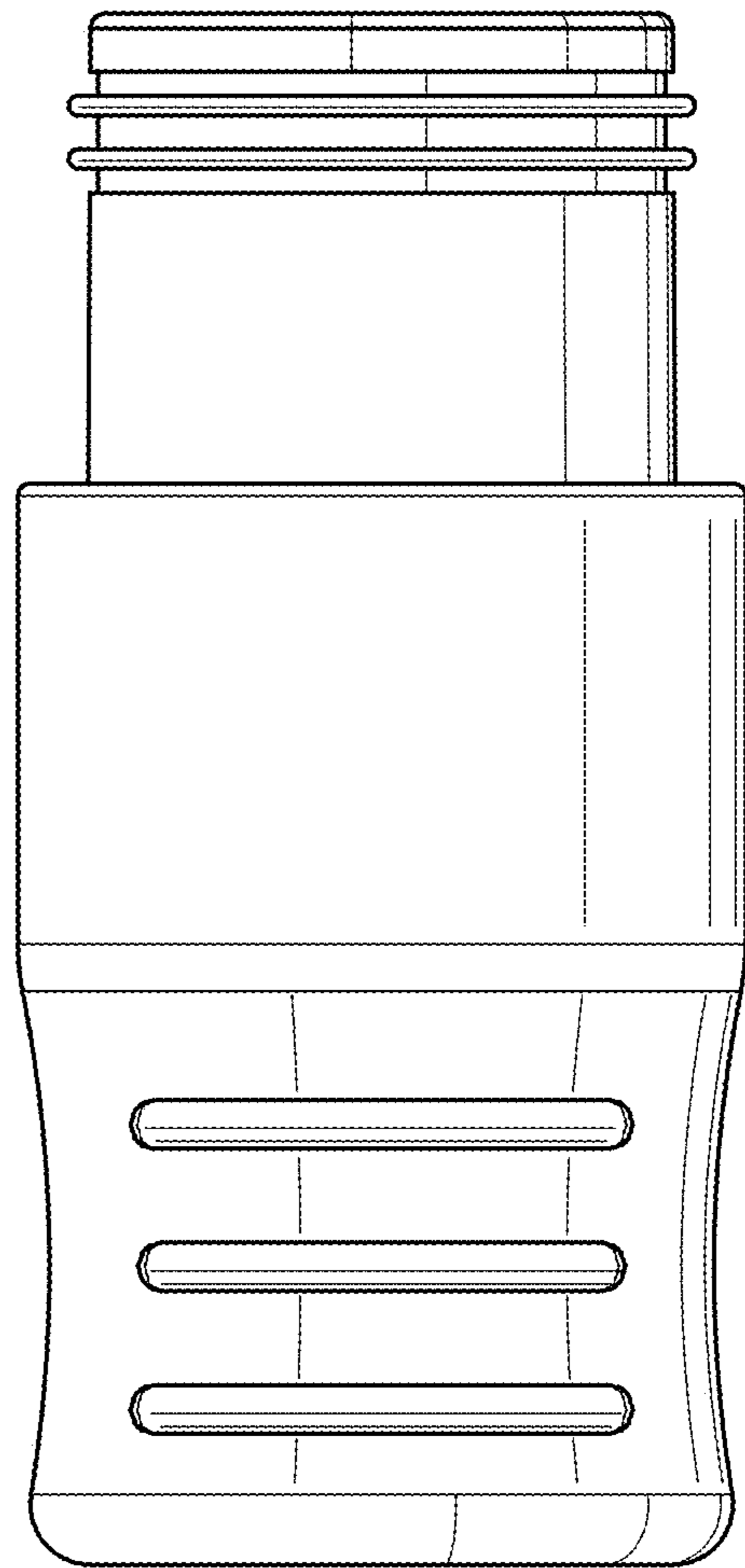


FIG. 4

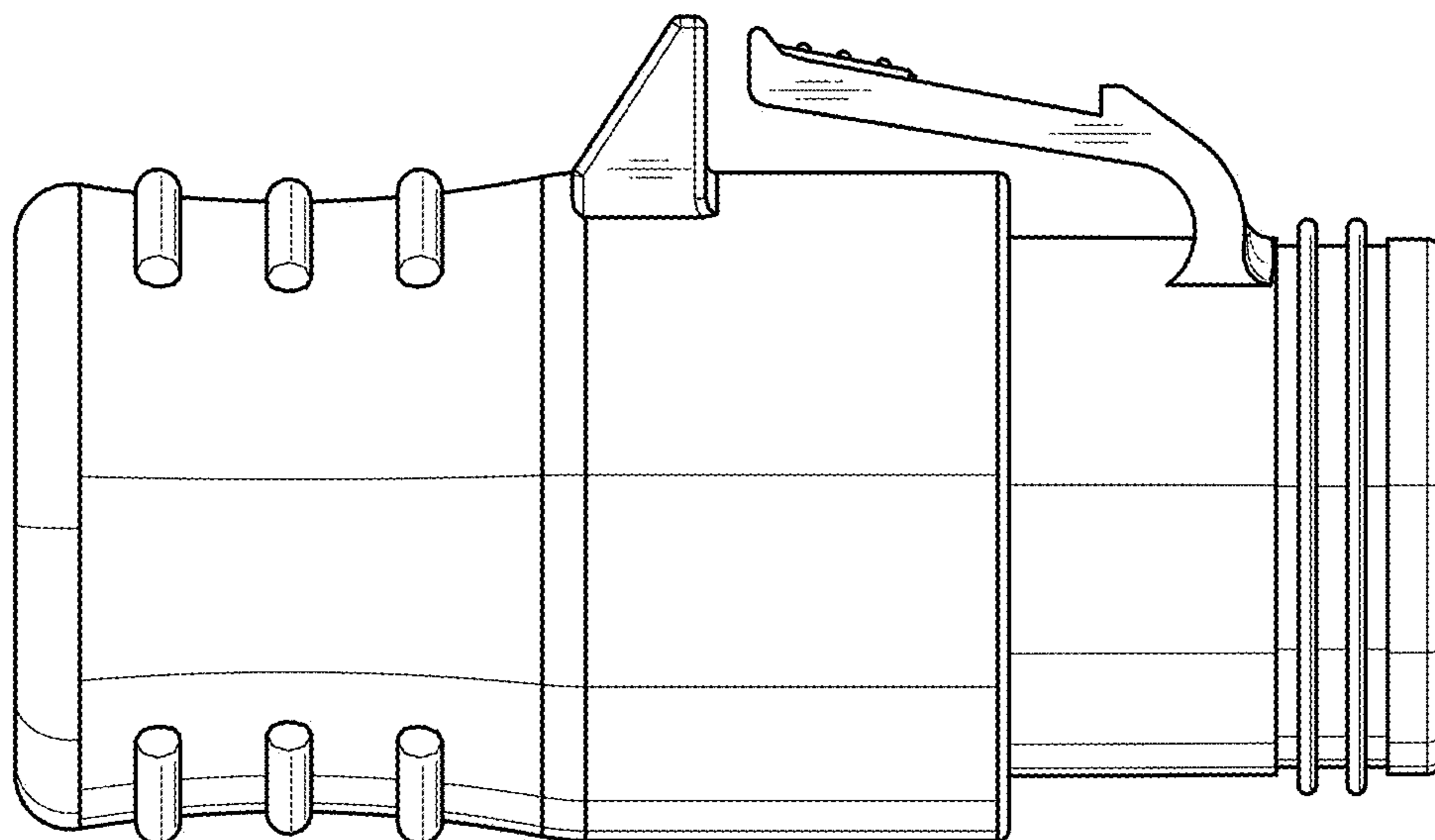


FIG. 5

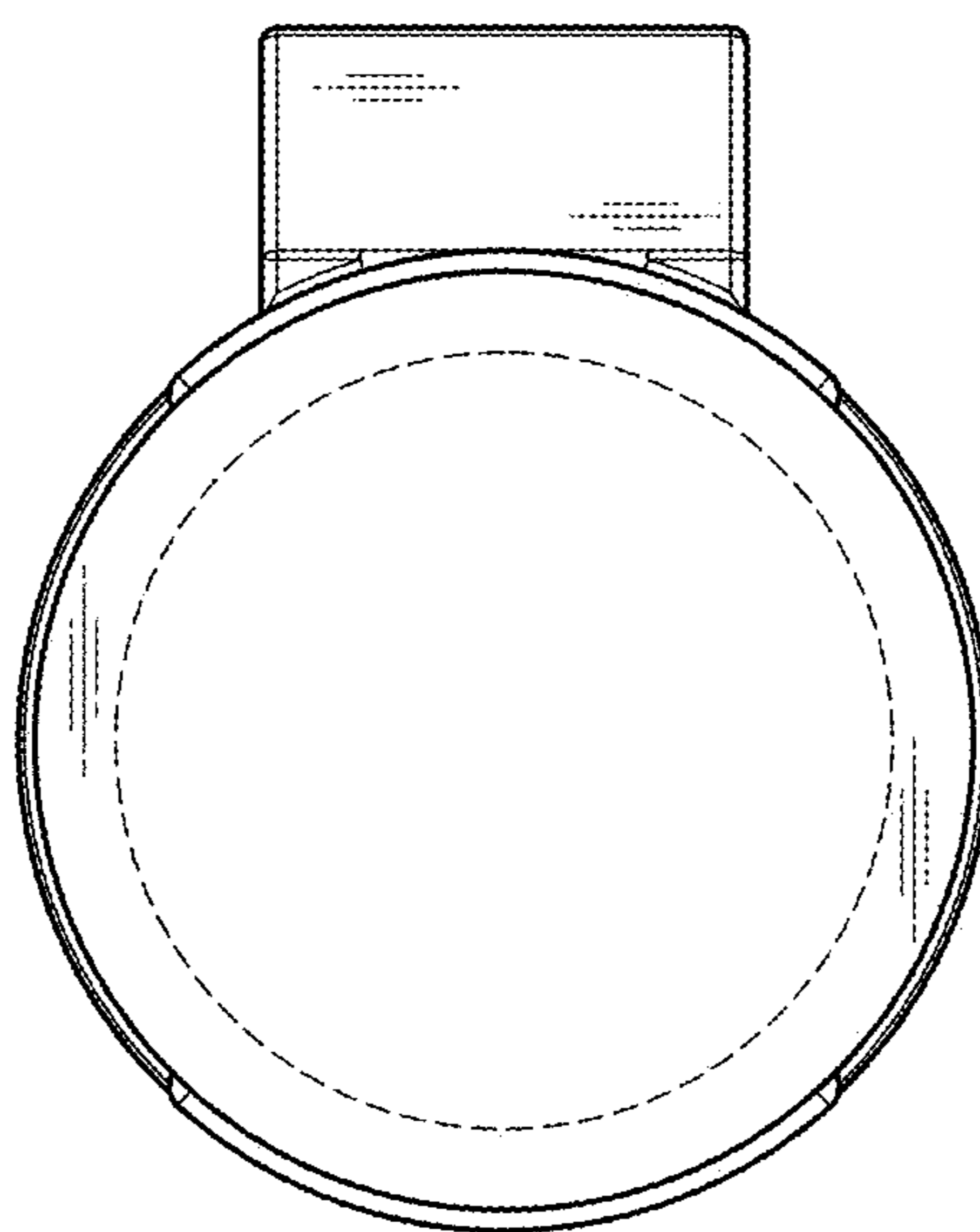


FIG. 6