



US00D827620S

(12) **United States Design Patent** (10) **Patent No.:** **US D827,620 S**
Ross, III et al. (45) **Date of Patent:** **** Sep. 4, 2018**

(54) **ANTENNA ELEMENT**

(71) Applicant: **Antennas Direct, Inc.**, Ellisville, MO (US)

(72) Inventors: **John Edwin Ross, III**, Moab, UT (US); **Richard E. Schneider**, Wildwood, MO (US)

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

(21) Appl. No.: **29/577,321**

(22) Filed: **Sep. 12, 2016**

Related U.S. Application Data

(63) Continuation-in-part of application No. 14/878,504, filed on Oct. 8, 2015, now Pat. No. 9,761,935.

(30) **Foreign Application Priority Data**

Aug. 31, 2016 (CN) 2016 1 0797981
Aug. 31, 2016 (CN) 2016 2 1035432
Sep. 2, 2016 (TW) 105128416
Sep. 2, 2016 (TW) 105213526

(51) **LOC (11) Cl.** **14-03**

(52) **U.S. Cl.**
USPC **D14/230**

(58) **Field of Classification Search**
USPC D14/138, 230-238, 299, 358; D12/42, D12/43

CPC H01Q 7/00; H01Q 13/10; H01Q 9/285; H01Q 19/30; H01Q 19/12; H01Q 1/38; H01Q 1/36; H01Q 5/0027; H01Q 1/48; H01Q 9/045; H01Q 1/243; H04B 1/0475; H04B 1/034; H05K 11/00

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,060,098 A 11/1936 Norman
2,220,008 A 10/1940 Woodward et al.

2,437,251 A 3/1948 Frische et al.
2,480,155 A 8/1949 Masters
2,551,664 A 5/1951 Galper
2,589,578 A 3/1952 Sabins
D170,203 S 8/1953 Leonard
D171,560 S 2/1954 Ritter
D177,200 S 3/1956 Valiulis
D179,111 S 11/1956 Ballan
2,821,710 A 1/1958 Hale
3,015,101 A 12/1961 Turner et al.
3,123,826 A 3/1964 Durham

(Continued)

OTHER PUBLICATIONS

Notice of Allowance dated Apr. 13, 2017 for U.S. Appl. No. 14/878,504, filed Oct. 8, 2015 (published as US20170062919 on Mar. 2, 2017) which is the parent application to the instant application, 10 pages.

Primary Examiner — John Windmuller
(74) *Attorney, Agent, or Firm* — Harness, Dickey & Pierce, P.L.C.

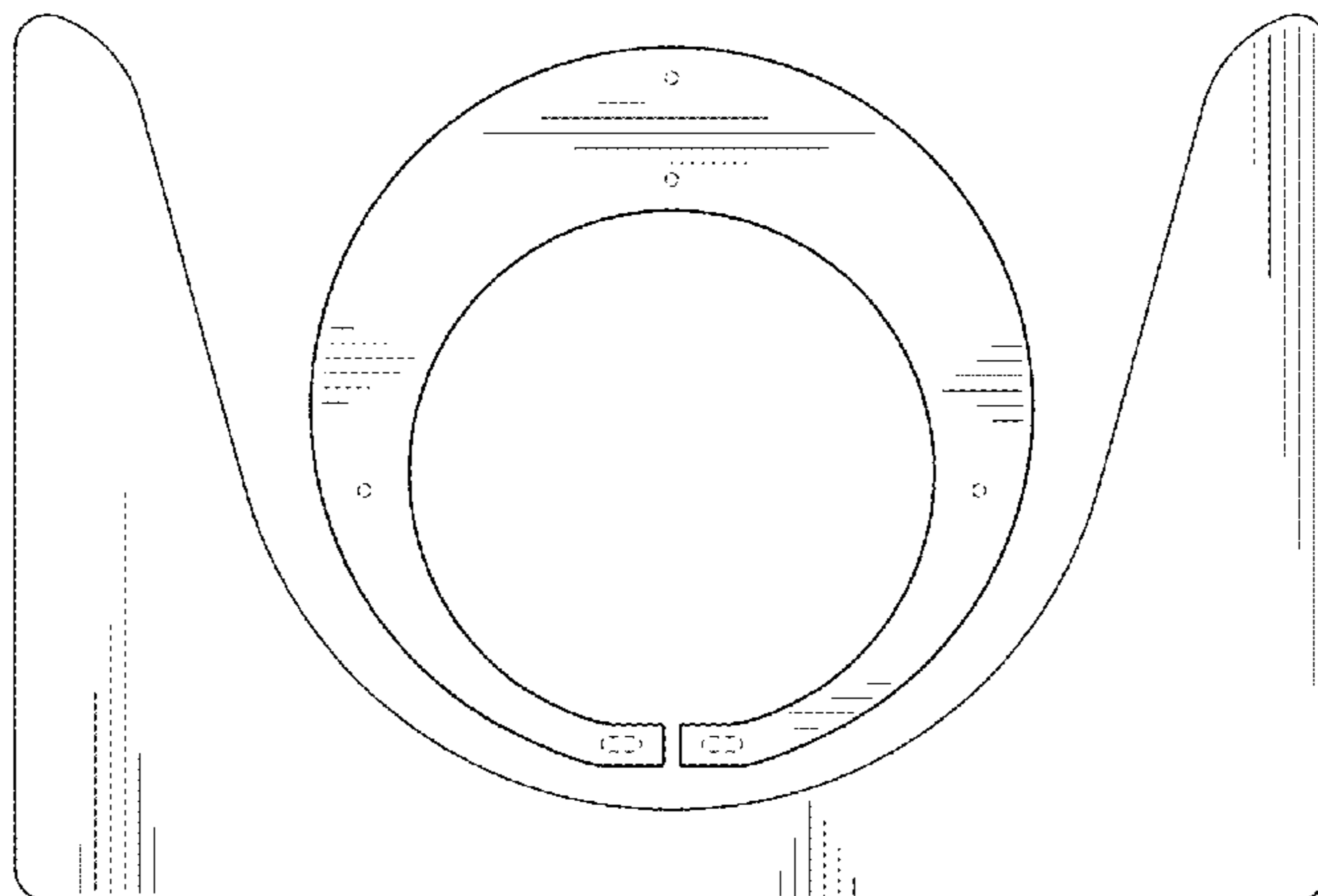
(57) **CLAIM**

The ornamental design for an antenna element, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of the antenna element, showing our new design;
FIG. 2 is a front elevation view thereof;
FIG. 3 is a back elevation thereof;
FIG. 4 is a right elevation view thereof;
FIG. 5 is a left elevation view thereof.
FIG. 6 is a top plan view thereof; and,
FIG. 7 is a bottom plan view thereof.
In the drawings, the broken lines depict environmental subject matter only and form no part of the claimed design.

1 Claim, 4 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

3,161,975 A 12/1964 McMillan
 3,239,838 A 3/1966 Kelleher
 3,261,019 A 7/1966 Lundy
 3,273,158 A 9/1966 Fouts et al.
 D209,402 S 11/1967 Burlingame
 D211,025 S 5/1968 Callaghan
 3,434,145 A 3/1969 Wells
 3,560,983 A 2/1971 Willie et al.
 3,587,105 A 6/1971 Neilson
 3,721,990 A 3/1973 Gibson et al.
 3,828,867 A 8/1974 Elwood
 3,971,031 A 7/1976 Burke
 4,183,027 A 1/1980 Ehrenspeck
 4,184,163 A 1/1980 Woodward
 4,418,427 A 11/1983 Muterspaugh
 D310,671 S 9/1990 Weiss
 4,987,424 A 1/1991 Tamura et al.
 D318,673 S 7/1991 Terk
 D327,690 S 7/1992 Ogawa et al.
 D332,262 S 1/1993 Borchardt
 5,280,645 A 1/1994 Nguyen et al.
 D344,731 S 3/1994 Witzky
 5,313,218 A 5/1994 Busking
 5,943,025 A 8/1999 Benham
 D414,495 S 9/1999 Heiligenstein et al.
 D421,610 S 3/2000 Ghalebi
 6,054,963 A 4/2000 Muterspaugh
 6,239,764 B1 5/2001 Timofeev et al.
 D449,593 S 10/2001 Schultz
 6,590,541 B1 7/2003 Schultz
 6,593,886 B2 7/2003 Schantz
 D480,714 S 10/2003 Wang
 6,680,708 B2 1/2004 Yamaki
 D501,468 S 2/2005 Wang
 6,885,352 B2 4/2005 Lee et al.
 6,917,793 B2 7/2005 Wang
 7,091,925 B1 8/2006 Wang
 7,126,556 B1 10/2006 Wang
 7,209,089 B2 4/2007 Schantz
 D544,471 S 6/2007 Wang
 7,239,290 B2 7/2007 Poilasne et al.
 7,245,266 B1 7/2007 Szente et al.
 D558,189 S 12/2007 Inoue
 D581,931 S 12/2008 Pine
 D585,883 S 2/2009 Kaneko
 D598,433 S 8/2009 Schneider et al.
 D598,434 S 8/2009 Schneider et al.

7,609,222 B2 10/2009 Schneider et al.
 D604,276 S 11/2009 Schneider et al.
 D611,460 S 3/2010 Chao
 7,693,570 B2 4/2010 Green et al.
 D624,531 S 9/2010 Fleck et al.
 7,839,347 B2 11/2010 Schneider et al.
 7,839,351 B2 11/2010 Schadler et al.
 7,898,496 B2 3/2011 Olsen et al.
 7,936,311 B2 5/2011 Rowser et al.
 7,990,335 B2 8/2011 Schneider et al.
 D666,178 S 8/2012 Schneider et al.
 8,368,607 B2 2/2013 Schneider et al.
 D704,682 S * 5/2014 Forster D14/230
 D709,863 S * 7/2014 Forster D14/230
 D715,780 S * 10/2014 Forster D14/230
 D758,998 S * 6/2016 Man D14/230
 D787,483 S * 5/2017 Forster D14/230
 D788,299 S * 5/2017 Wapler D14/230
 D812,597 S * 3/2018 Forster D14/230
 D815,073 S * 4/2018 Feit D14/230
 D816,642 S * 5/2018 Pars Benli D14/230
 2002/0158798 A1 10/2002 Chiang et al.
 2003/0071757 A1 4/2003 Yamaki
 2004/0090379 A1 5/2004 Fourdeux et al.
 2004/0090385 A1 5/2004 Green
 2004/0113841 A1 6/2004 Louzir et al.
 2004/0217912 A1 11/2004 Mohammadian
 2005/0088342 A1 4/2005 Parsche
 2005/0162332 A1 7/2005 Schantz
 2005/0259023 A1 11/2005 Wang
 2005/0280582 A1 12/2005 Powell et al.
 2006/0033665 A1 2/2006 Yang
 2006/0055618 A1 3/2006 Poilasne et al.
 2006/0077115 A1 4/2006 Oh et al.
 2006/0103577 A1 5/2006 Lee
 2006/0164304 A1 7/2006 Huang et al.
 2007/0069955 A1 3/2007 McCorkle
 2007/0200769 A1 8/2007 Nakano et al.
 2008/0094291 A1 4/2008 Bystrom et al.
 2008/0211720 A1 9/2008 Hansen
 2008/0258980 A1 10/2008 Chen et al.
 2008/0291345 A1 11/2008 Schneider
 2009/0058732 A1 3/2009 Nakano et al.
 2009/0073067 A1 3/2009 Soler Castany et al.
 2009/0146899 A1 6/2009 Schneider et al.
 2010/0085269 A1 4/2010 Sadowski et al.
 2012/0169553 A1 7/2012 Nomura et al.
 2012/0249396 A1 10/2012 Parsche
 2014/0292597 A1 10/2014 Schneider et al.

* cited by examiner

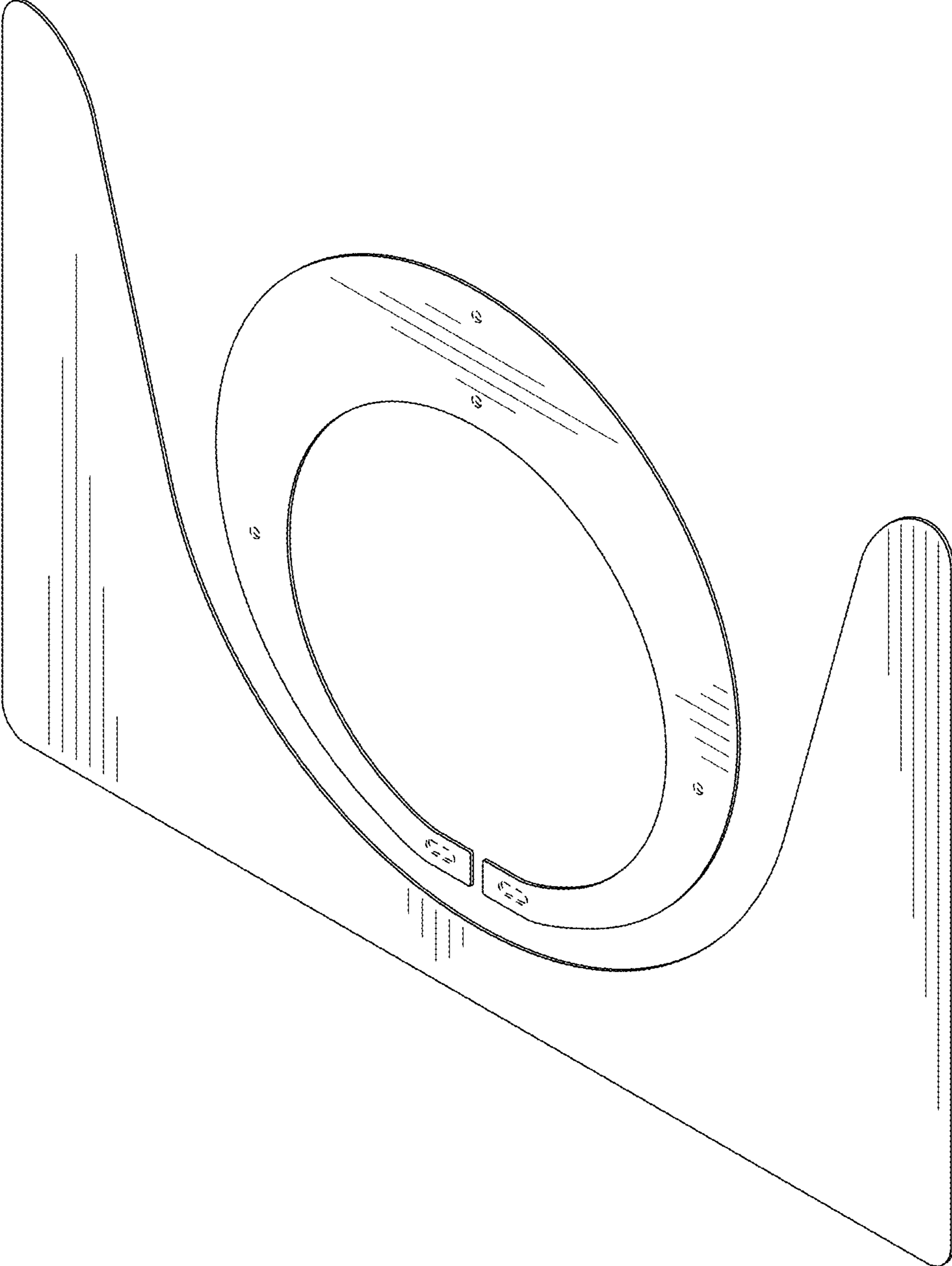


FIG. 1

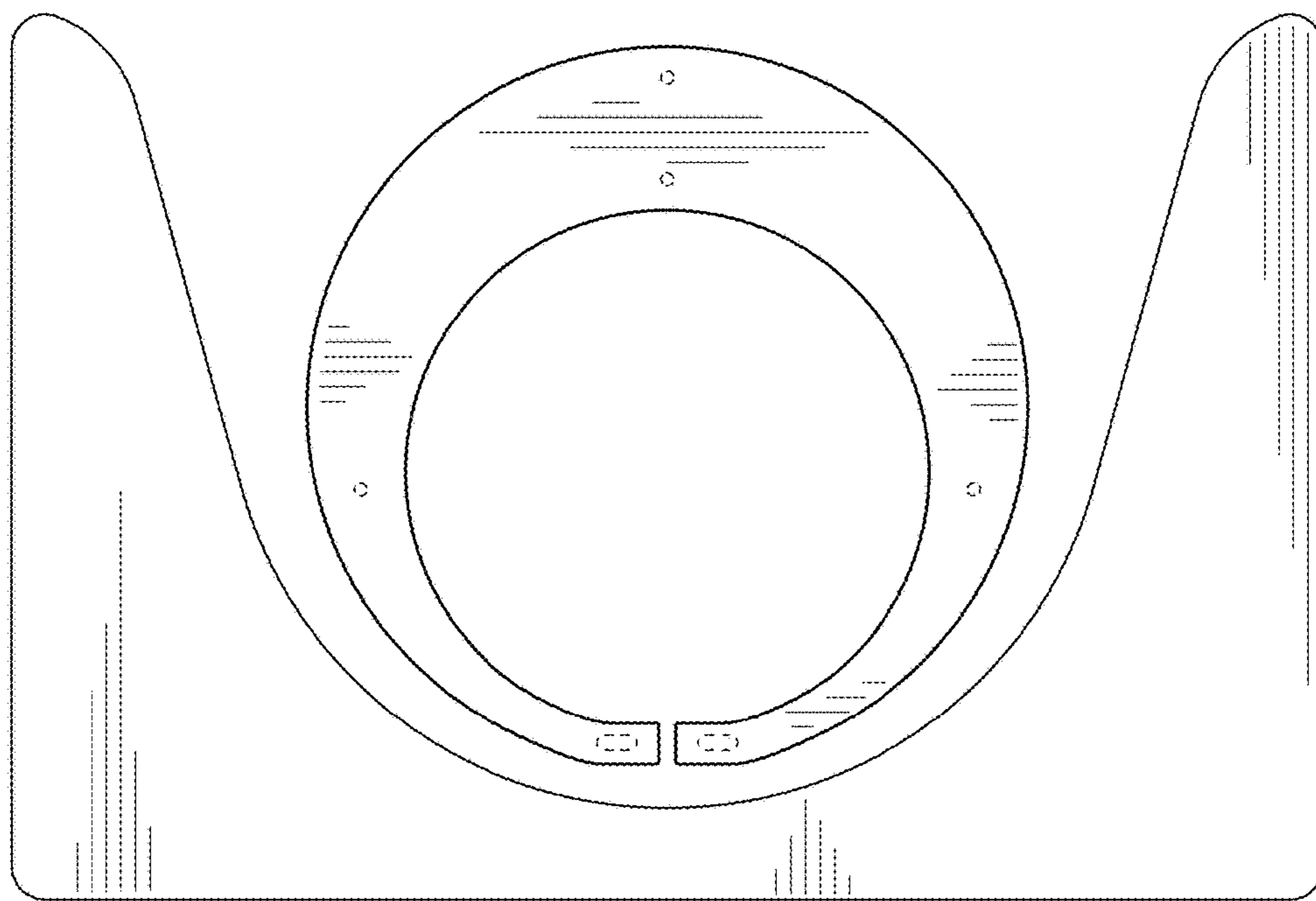


FIG. 2

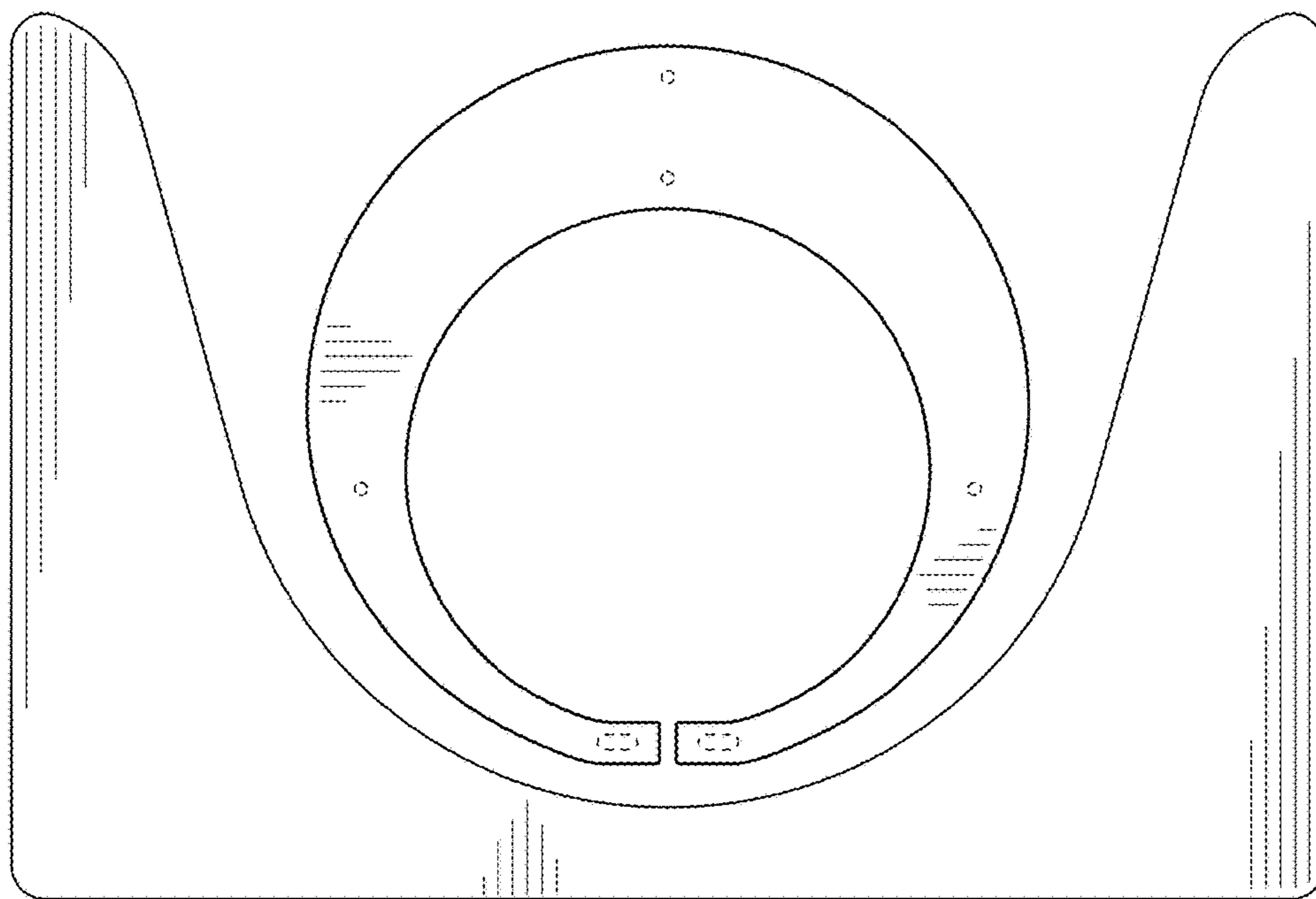


FIG. 3



FIG. 4

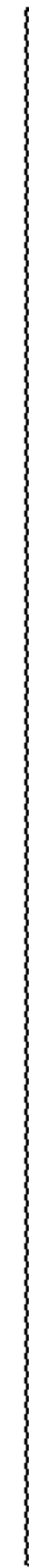


FIG. 5

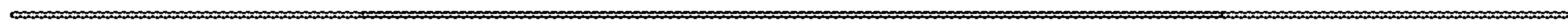


FIG. 6

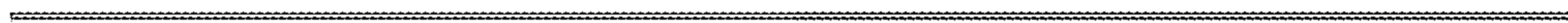


FIG. 7