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(12) **United States Design Patent** (10) **Patent No.:** **US D935,500 S**  
**Li** (45) **Date of Patent:** **\*\* Nov. 9, 2021**

(54) **DIGITAL DISPLAY SOLDERING IRON**  
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(72) Inventor: **Qing Li**, Xianning (CN)  
(\*\*) Term: **15 Years**  
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(52) **U.S. Cl.**  
USPC ..... **D15/144.2**; D8/30  
(58) **Field of Classification Search**  
USPC ..... D8/20, 70; D15/144, 144.1, 144.2;  
D24/144  
CPC . B23K 3/02; B23K 3/03; B23K 3/021; B23K  
3/022; B23K 3/023; B23K 3/027; B23K  
3/033; B23K 3/0338; B23K 3/0346;  
B23K 3/0361; B23K 3/3023  
See application file for complete search history.

(56) **References Cited**  
U.S. PATENT DOCUMENTS  
3,699,306 A \* 10/1972 Finch ..... B23K 3/0338  
219/241  
3,770,183 A \* 11/1973 Vanyi ..... B23K 3/033  
228/53  
4,873,608 A \* 10/1989 Yoshimura ..... B23K 3/0338  
361/220  
5,803,061 A \* 9/1998 Kao ..... B23K 3/022  
126/413  
5,915,955 A \* 6/1999 Lin ..... B23K 3/022  
431/344  
5,921,231 A \* 7/1999 Butler ..... B23K 3/022  
126/414  
5,928,536 A \* 7/1999 Lee ..... B23K 3/033  
219/229  
6,874,671 B2 \* 4/2005 Hirano ..... B23K 3/022  
126/414

D535,396 S \* 1/2007 Reschke ..... D24/144  
7,679,032 B2 \* 3/2010 Masaki ..... B23K 3/0353  
219/229  
D660,669 S \* 5/2012 Teraoka ..... D8/30  
9,314,863 B2 \* 4/2016 Teraoka ..... B23K 3/033  
D847,233 S \* 4/2019 Gou ..... D15/144  
D847,234 S \* 4/2019 Gou ..... D15/144  
D847,235 S \* 4/2019 Gou ..... D15/144  
D862,547 S 10/2019 Xie  
D865,014 S 10/2019 Xu  
D887,801 S \* 6/2020 Li ..... D8/30  
D891,209 S \* 7/2020 Gou ..... D8/30  
D892,579 S \* 8/2020 Cheng ..... D8/30  
D897,173 S \* 9/2020 Ding ..... D8/30  
D905,521 S \* 12/2020 Ding ..... D8/30  
2004/0232132 A1 \* 11/2004 Masaki ..... B23K 3/033  
219/229

(Continued)

Primary Examiner — Patricia A Palasik

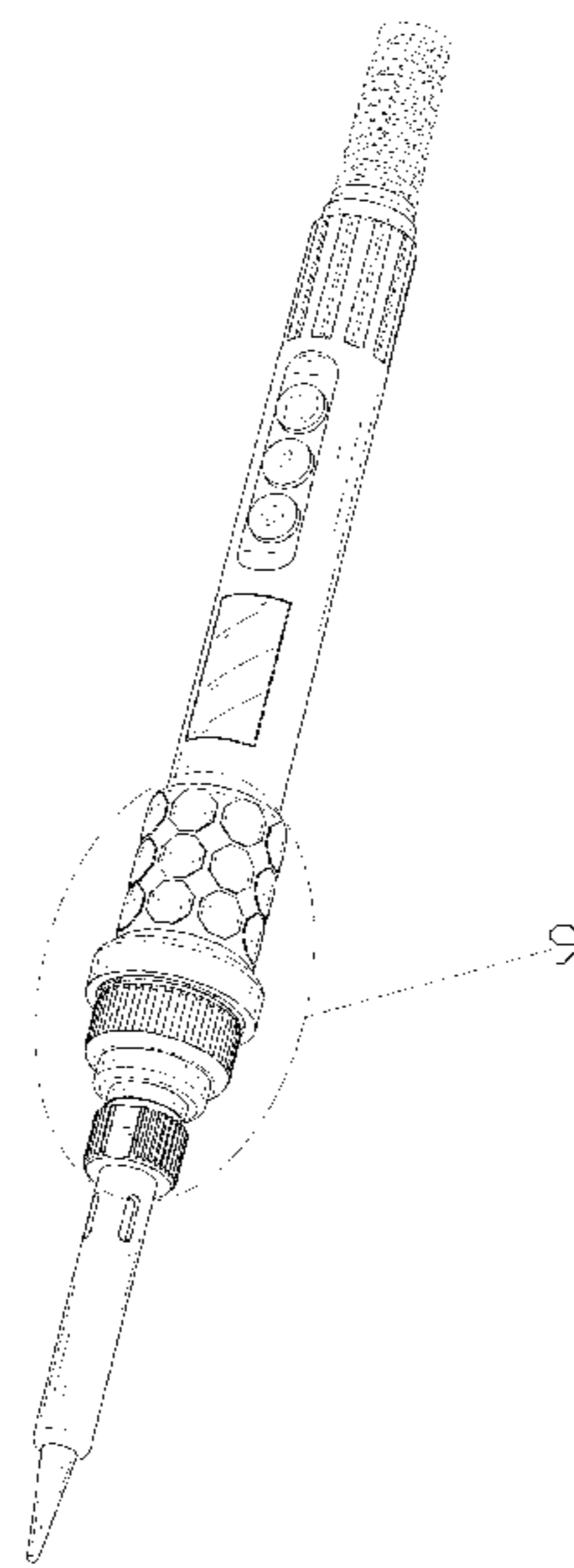
(57) **CLAIM**

The ornamental design for a digital display soldering iron, as shown and described.

**DESCRIPTION**

FIG. 1 is a perspective view of a digital display soldering iron showing my new design;  
FIG. 2 is another perspective view thereof;  
FIG. 3 is a front elevational view thereof;  
FIG. 4 is a rear elevational view thereof;  
FIG. 5 is a left side elevational view thereof;  
FIG. 6 is a right side elevational view thereof;  
FIG. 7 is a top plan view thereof;  
FIG. 8 is a bottom plan view thereof;  
FIG. 9 is an enlarged view of portion 9 shown in FIG. 1;  
FIG. 10 is an enlarged top plan view thereof; and,  
FIG. 11 is an enlarged bottom plan view thereof.  
The broken lines in the drawings depict portions of the digital display soldering iron that form no part of the claimed design.

**1 Claim, 11 Drawing Sheets**



(56)

**References Cited**

U.S. PATENT DOCUMENTS

2013/0105466 A1\* 5/2013 Teraoka ..... B23K 3/033  
219/538  
2017/0368627 A1\* 12/2017 Shigekawa ..... B23K 3/0338

\* cited by examiner

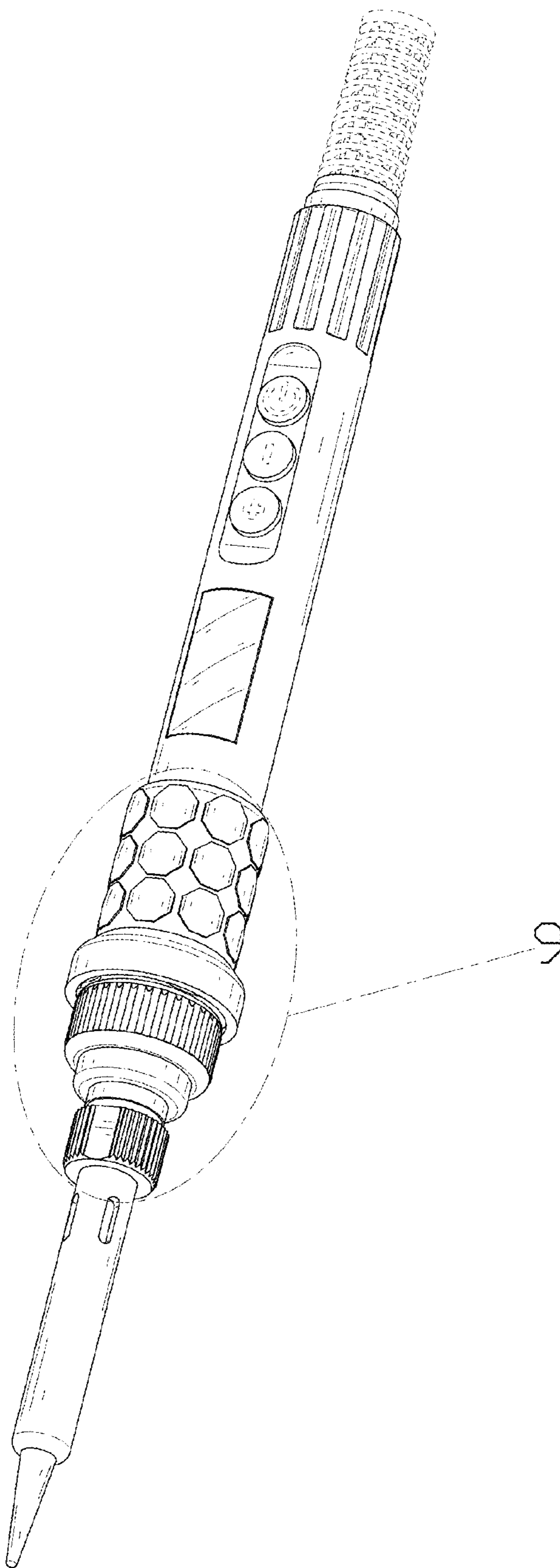


FIG. 1

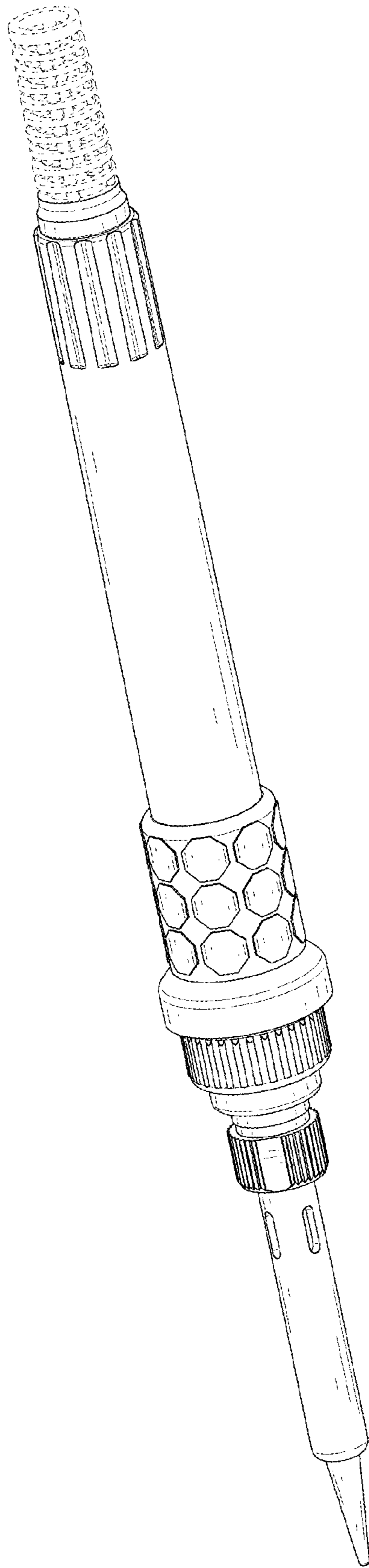


FIG. 2

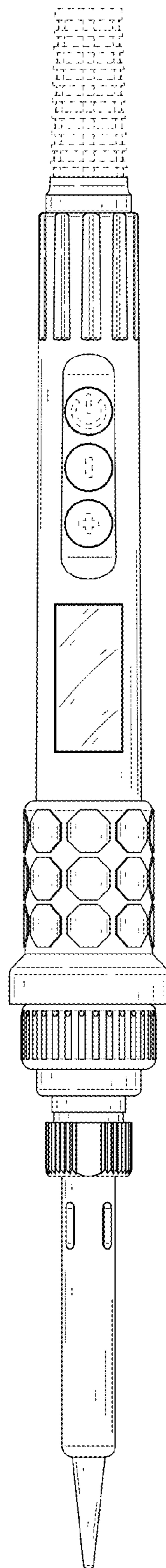


FIG. 3

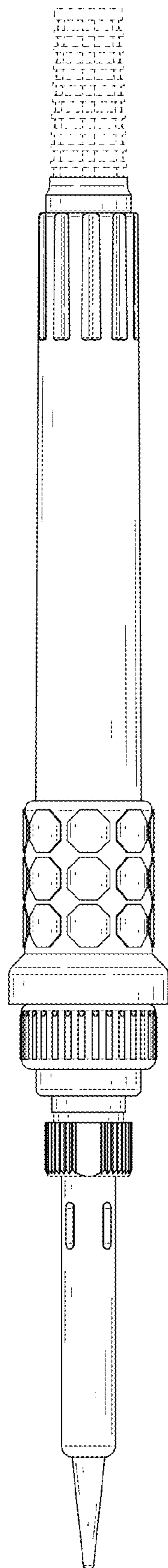


FIG. 4

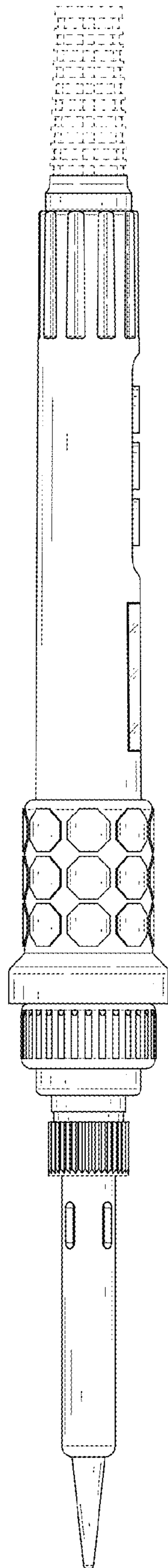


FIG. 5

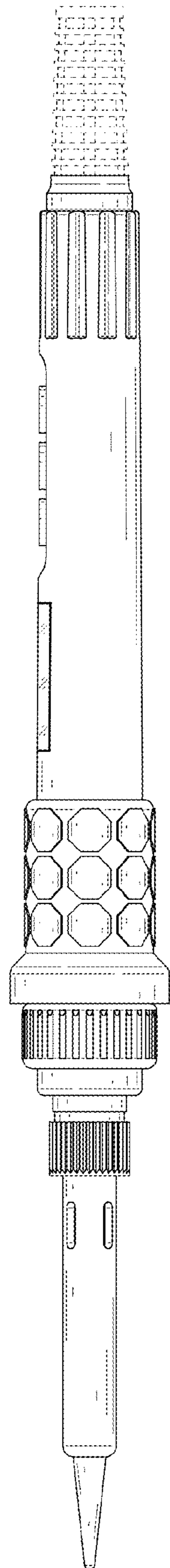


FIG. 6



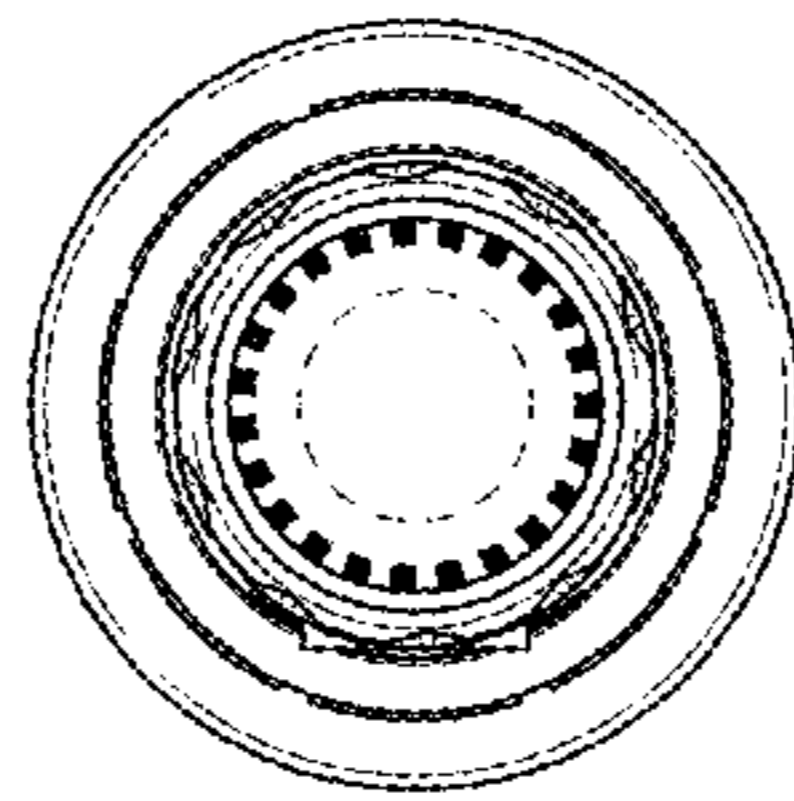


FIG. 7

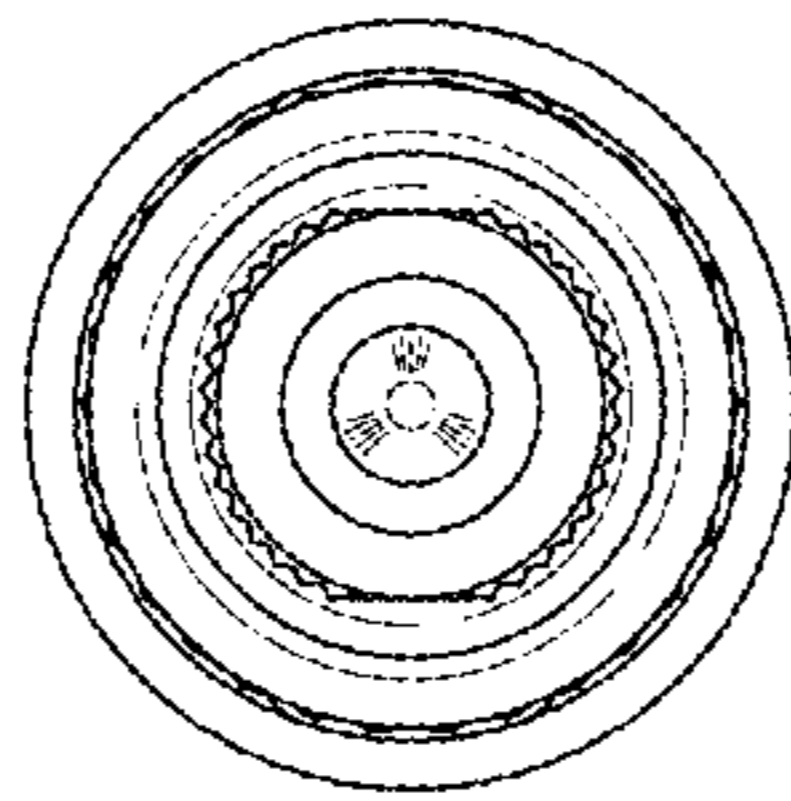


FIG. 8

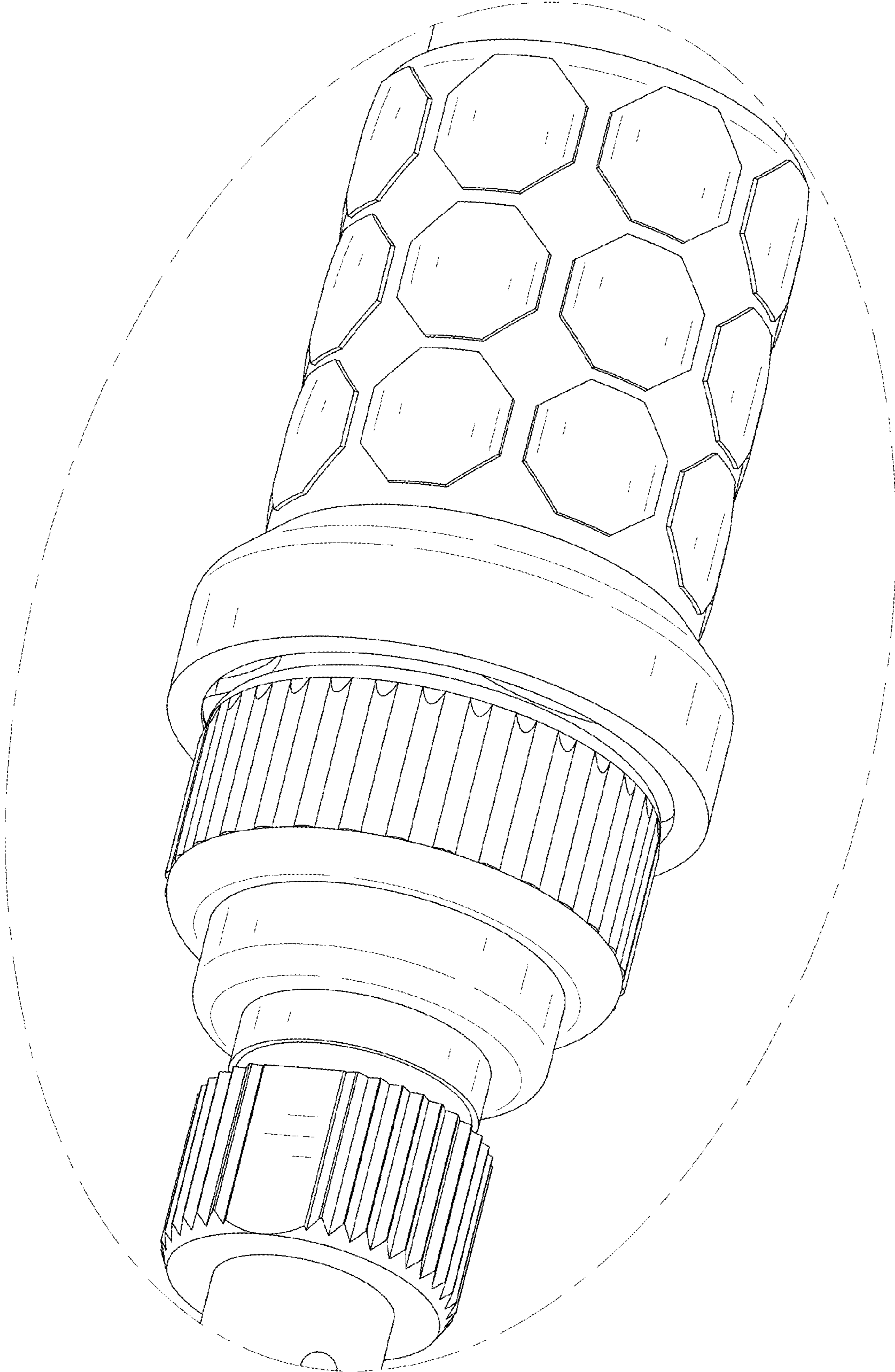


FIG. 9

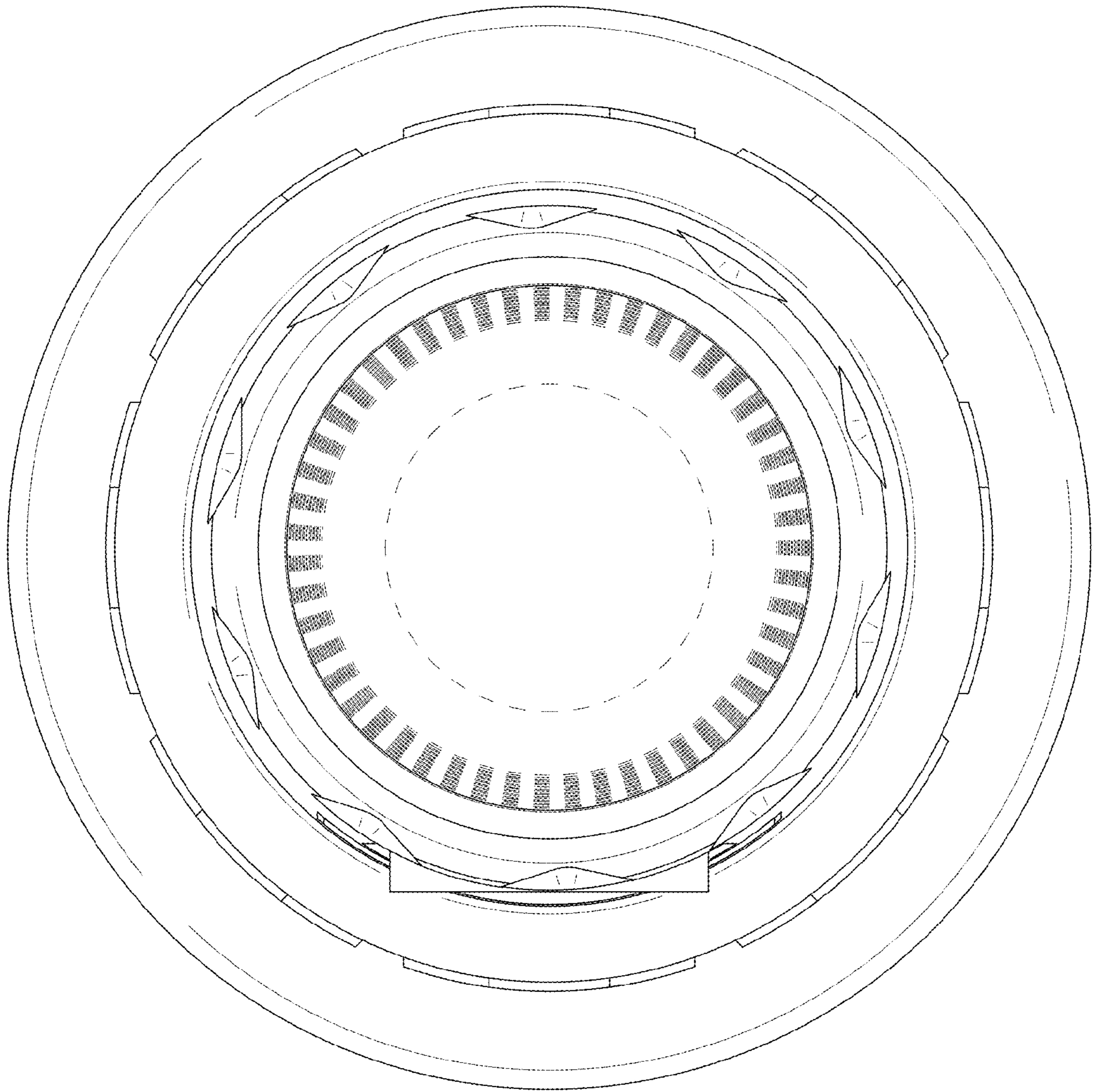


FIG. 10

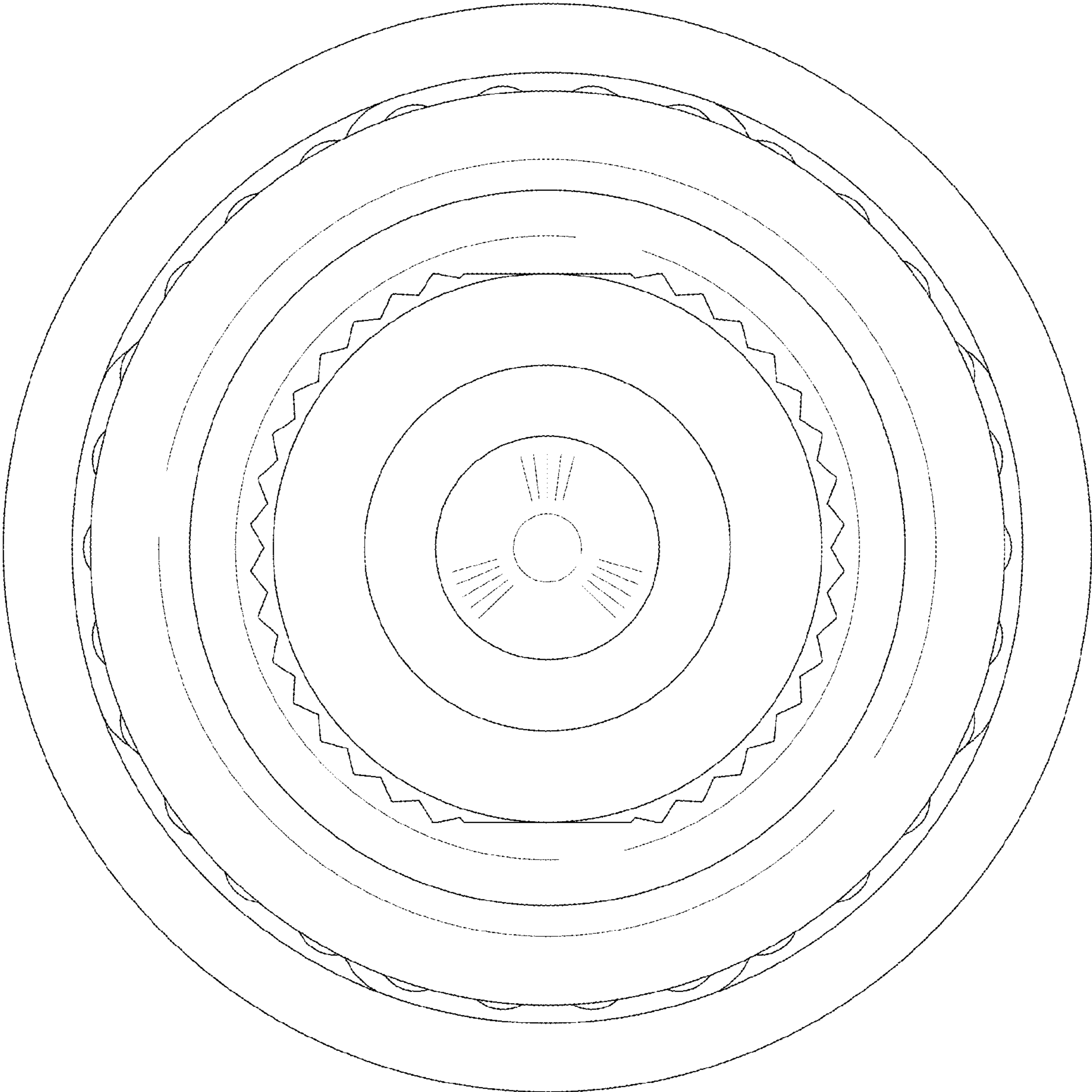


FIG. 11