



US00D873433S

(12) **United States Design Patent** (10) **Patent No.:** **US D873,433 S**
Hagiwara (45) **Date of Patent:** **** Jan. 21, 2020**

(54) **CELL COLLECTION APPARATUS**

(71) Applicant: **NIPRO CORPORATION**, Osaka-shi,
Osaka (JP)

(72) Inventor: **Yui Hagiwara**, Osaka (JP)

(73) Assignee: **NIPRO CORPORATION**, Osaka-Shi
(JP)

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

(21) Appl. No.: **29/605,959**

(22) Filed: **May 31, 2017**

(30) **Foreign Application Priority Data**

Apr. 28, 2017 (JP) 2017-009516
Apr. 28, 2017 (JP) 2017-009517

(51) **LOC (12) Cl.** **24-01**

(52) **U.S. Cl.**
USPC **D24/216**

(58) **Field of Classification Search**
USPC D24/216, 223, 231, 186, 107, 119, 133,
D24/146, 147, 141; D14/127, 128
CPC B01L 3/5029; A61B 10/02; A61B
2010/0216; A61B 2010/0074
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,227,537 A * 10/1980 Suci A61B 10/0291
600/569
5,191,899 A * 3/1993 Strickland A61B 10/0291
600/569
D474,271 S * 5/2003 Iori D24/119
D552,238 S * 10/2007 Zwart D24/146
D580,070 S * 11/2008 Riley D24/216
D639,564 S * 6/2011 Kulik D4/128
D640,794 S * 6/2011 Sunstrum D24/216
D656,739 S * 4/2012 Edmondson D4/128

D731,056 S * 6/2015 Tsai D24/146
D780,919 S * 3/2017 Sasayama D24/146
D809,140 S * 1/2018 Sasayama D24/147

(Continued)

FOREIGN PATENT DOCUMENTS

CN 201530162423 * 11/2015
JP D1529703 S 7/2015

OTHER PUBLICATIONS

Japanese Office Action issued in Japanese Application No. 2017-009516 dated Aug. 29, 2017, together with an English translation.

Primary Examiner — Anhdao Doan

(74) *Attorney, Agent, or Firm* — Birch, Stewart, Kolasch & Birch, LLP

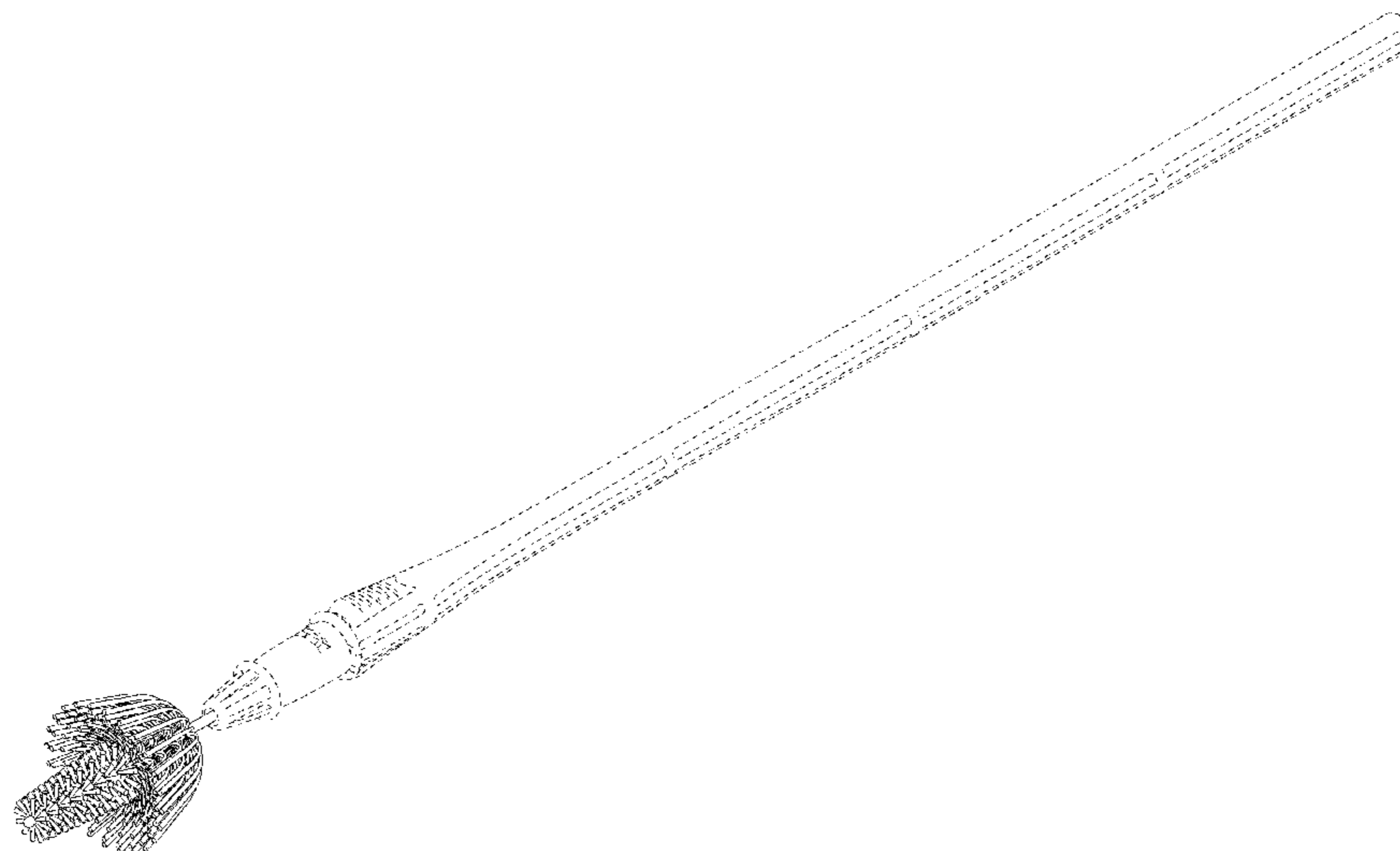
(57) **CLAIM**

The ornamental design for a cell collection apparatus, as shown and described.

DESCRIPTION

FIG. 1 is a front view of a cell collection apparatus showing my new design;
FIG. 2 is a rear view thereof;
FIG. 3 is a right view thereof;
FIG. 4 is a left view thereof;
FIG. 5 is a top view thereof;
FIG. 6 is a bottom view thereof;
FIG. 7 is a perspective view thereof;
FIG. 8 is a cross sectional view taken along line 8-8 of FIG. 1 thereof;
FIG. 9 is an enlarged view of a portion defined by line 9-9 of FIG. 1 thereof;
FIG. 10 is an enlarged view of FIG. 3 thereof; and,
FIG. 11 is an enlarged view of FIG. 4 thereof.
The even dashed broken lines shown in the drawings represent portions of the cell collection apparatus that form no part of the claimed design.

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

2007/0073186 A1* 3/2007 Decker A61B 10/0045
600/569
2016/0074022 A1* 3/2016 Oliva A61B 10/0291
600/569

* cited by examiner

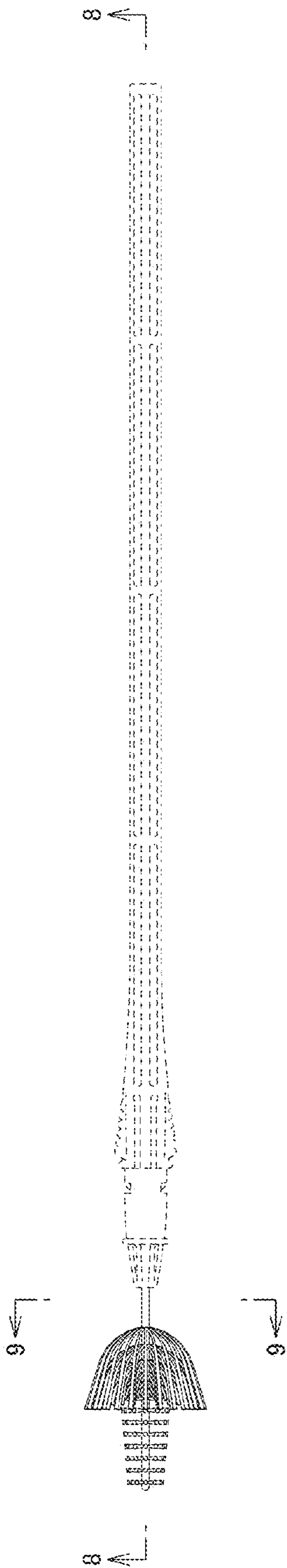


FIG. 1

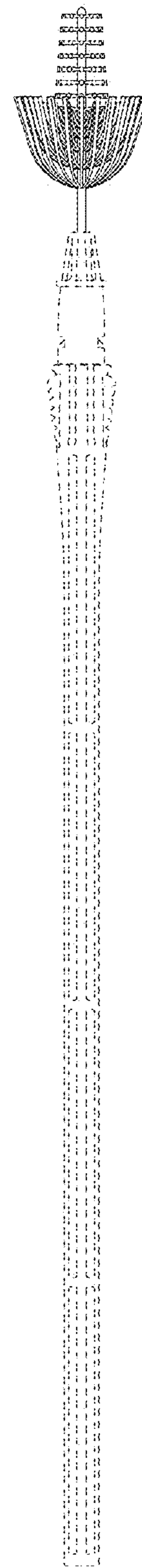


FIG. 2

FIG. 3

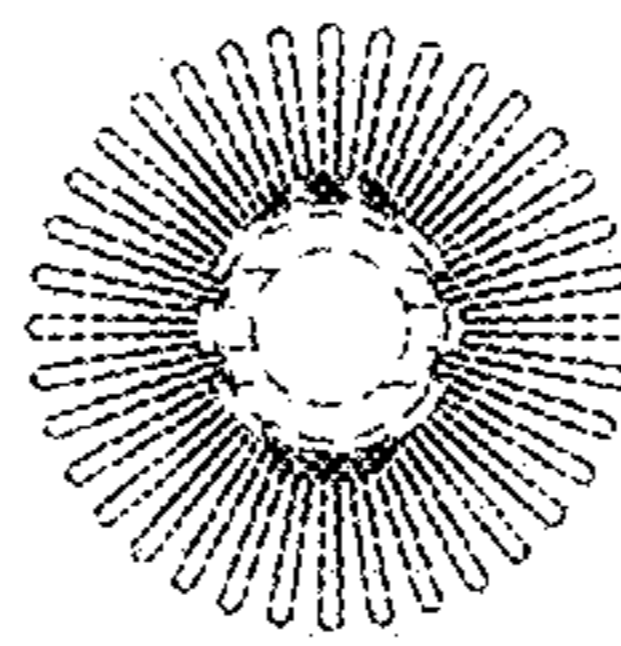


FIG. 4

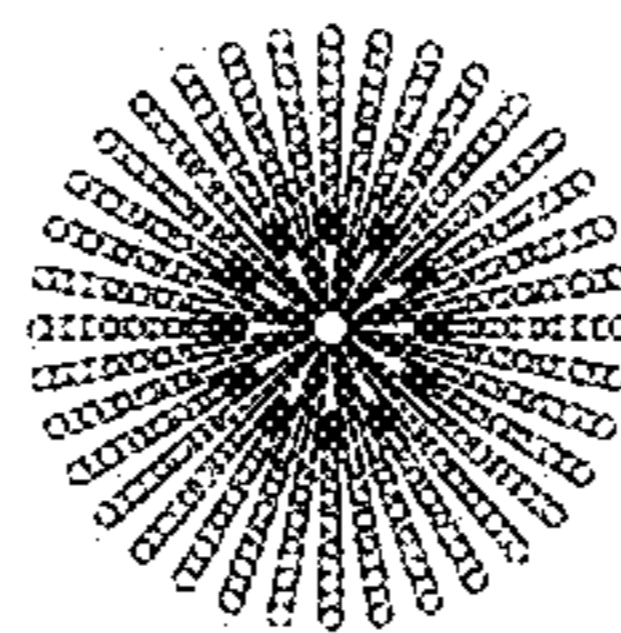


FIG. 5

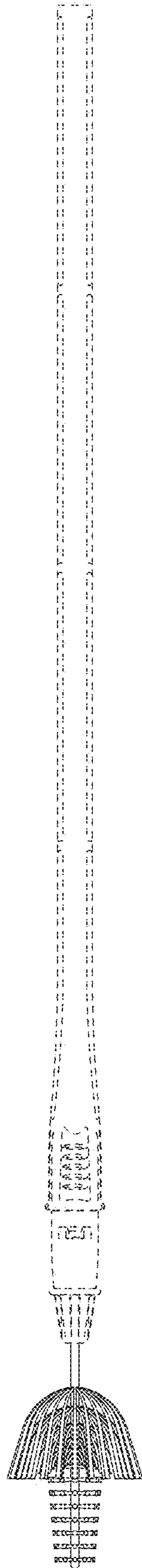


FIG. 6

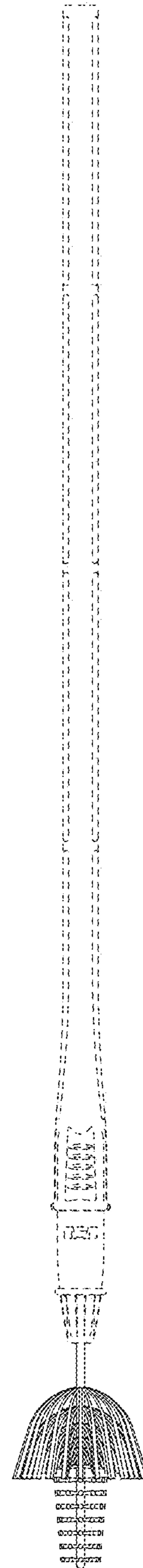
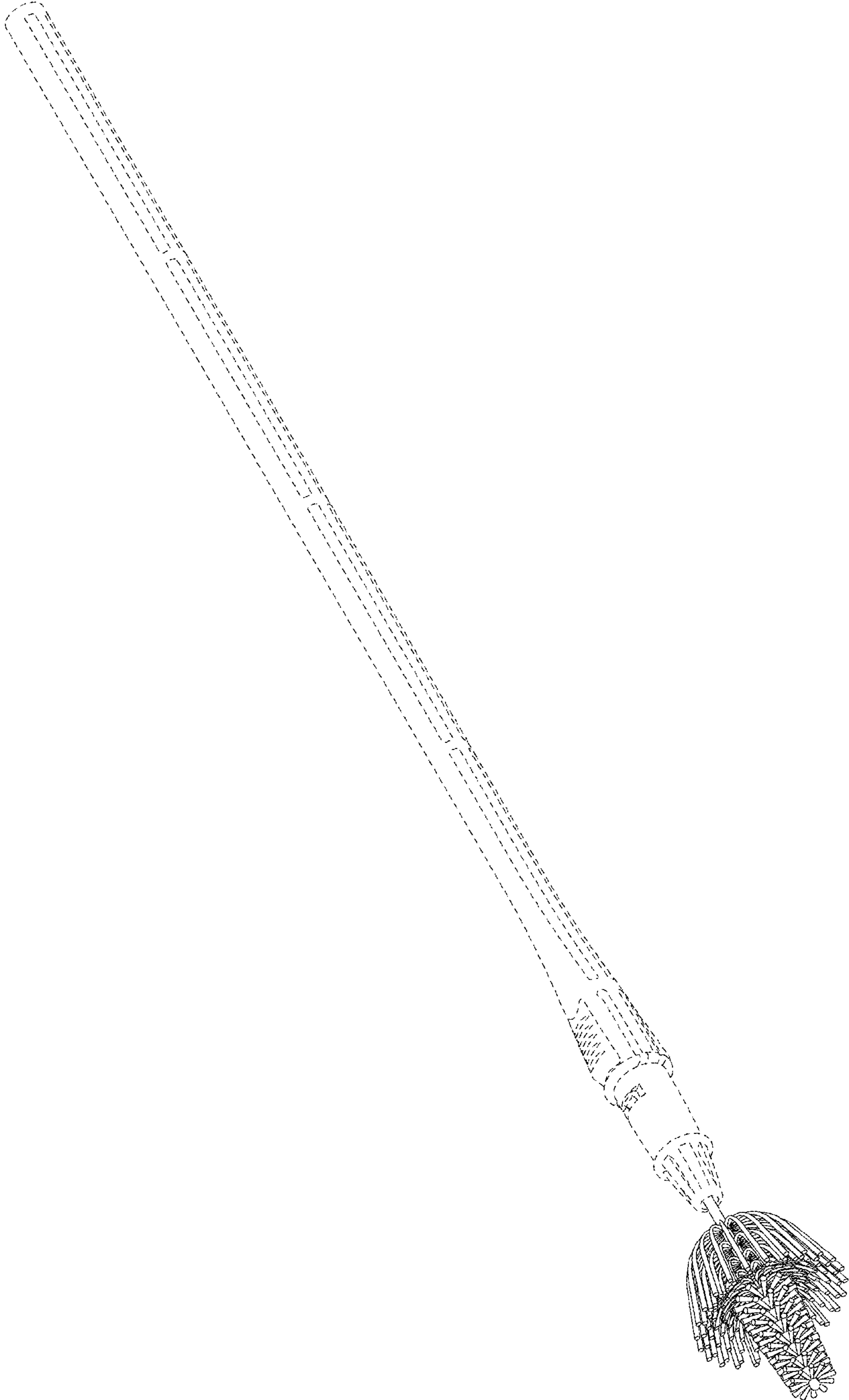


FIG. 7



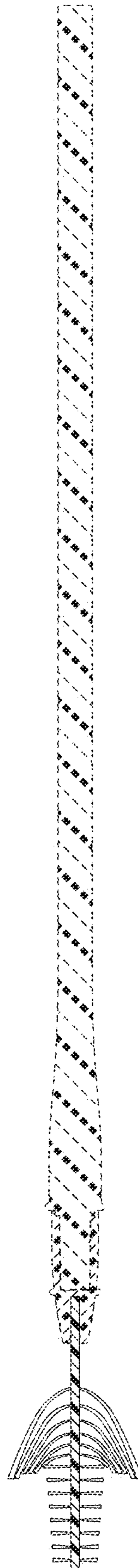


FIG.8

FIG. 9

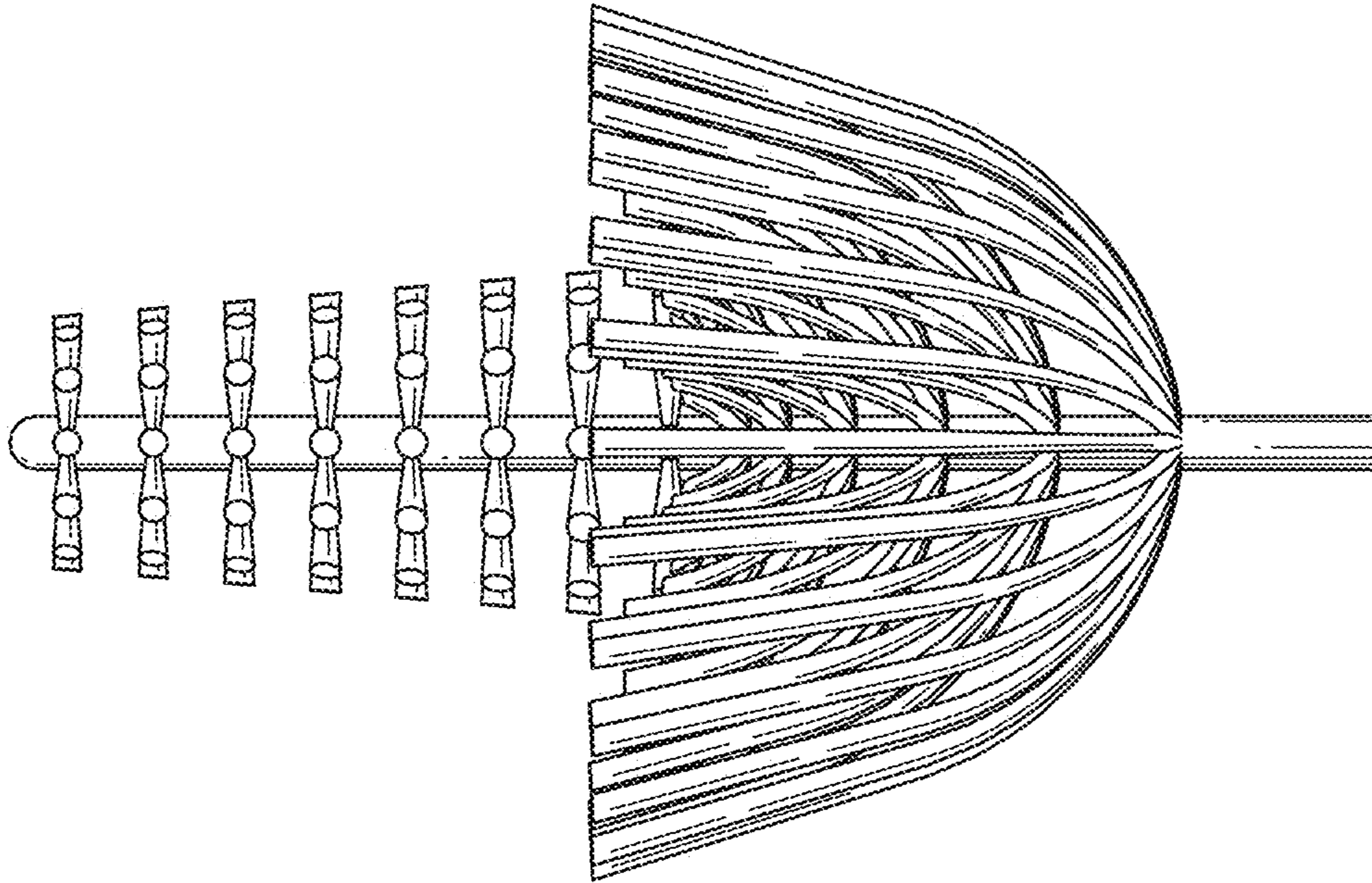


FIG. 10

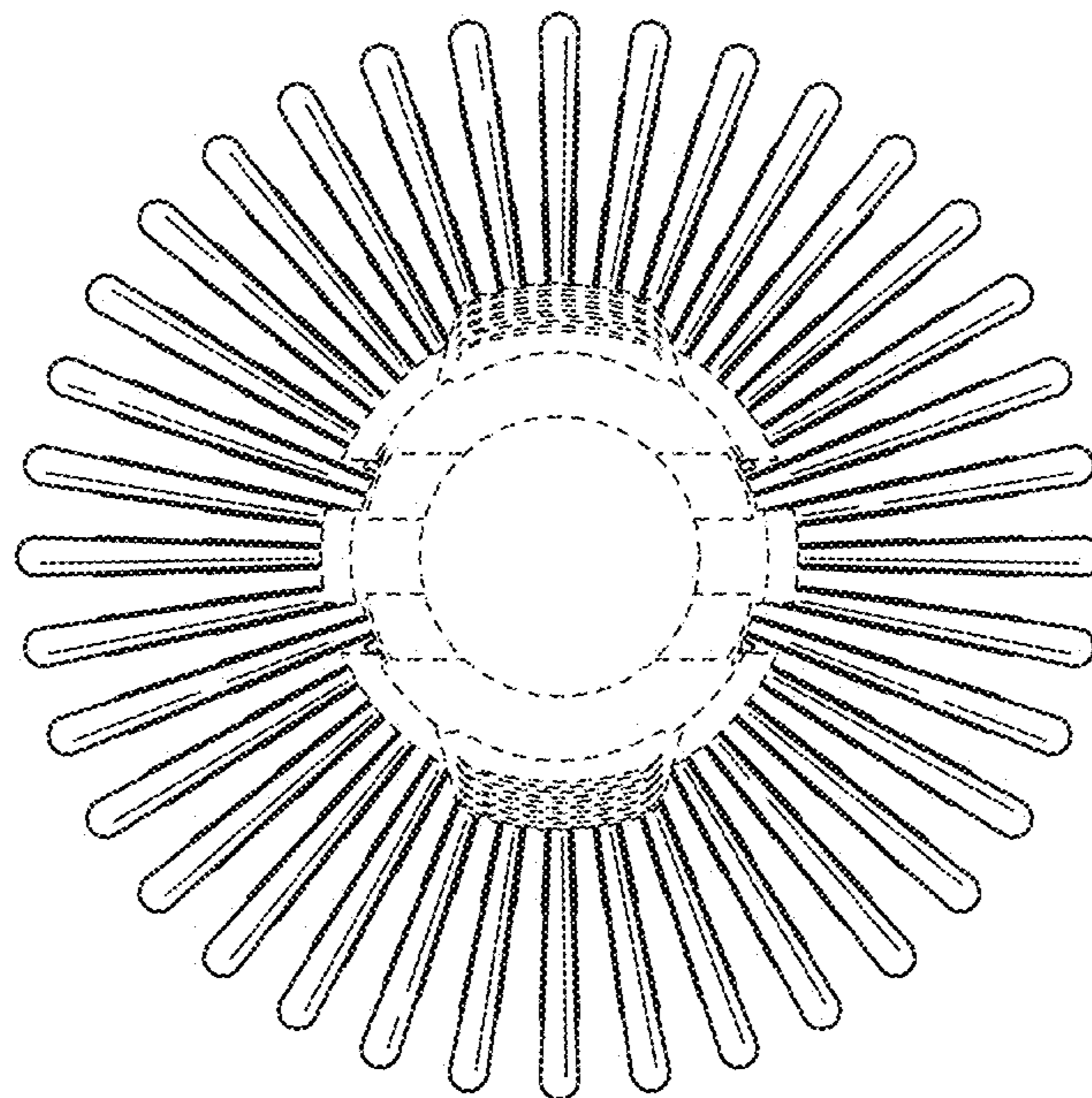


FIG. 11

