



US00D830447S

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

(10) **Patent No.:** **US D830,447 S**
(45) **Date of Patent:** **** Oct. 9, 2018**

(54) **PLANETARIUM PROJECTOR**
(71) Applicant: **KONICA MINOLTA**
PLANETARIUM CO., LTD.,
Toshima-ku, Tokyo (JP)
(72) Inventor: **Agato Nagata**, Hino (JP)
(73) Assignee: **KONICA MINOLTA**
PLANETARIUM CO., LTD., Tokyo
(JP)

4,020,568 A * 5/1977 Tajima G09B 27/02
434/286
4,588,384 A * 5/1986 Shiba G09B 27/00
434/286
4,606,627 A * 8/1986 Hattori G09B 27/00
353/119
4,639,224 A * 1/1987 Maejima G09B 27/00
434/286
4,643,681 A * 2/1987 Suzuki G09B 27/00
434/286

(Continued)

(**) Term: **15 Years**
(21) Appl. No.: **29/587,696**
(22) Filed: **Dec. 15, 2016**

FOREIGN PATENT DOCUMENTS

JP 1502358 S 7/2014

OTHER PUBLICATIONS

Johann Ambrosius Barth, "Der Himmel Auf Erden", Die Welt der Planetarien, 1992, pp. 38 and 48.

(30) **Foreign Application Priority Data**
Jun. 15, 2016 (JP) 2016-012743
(51) **LOC (11) Cl.** **16-02**
(52) **U.S. Cl.**
USPC **D16/221; D16/225**
(58) **Field of Classification Search**
USPC D16/221, 225, 229-231; D21/514;
D19/59, 62
CPC G03B 21/00; G03B 21/001; G03B 21/003;
G03B 21/14; G03B 21/142; G09B 27/00;
G09B 27/02
See application file for complete search history.

Primary Examiner — Wan Laymon

(74) *Attorney, Agent, or Firm* — Buchanan Ingersoll & Rooney PC

(57) **CLAIM**

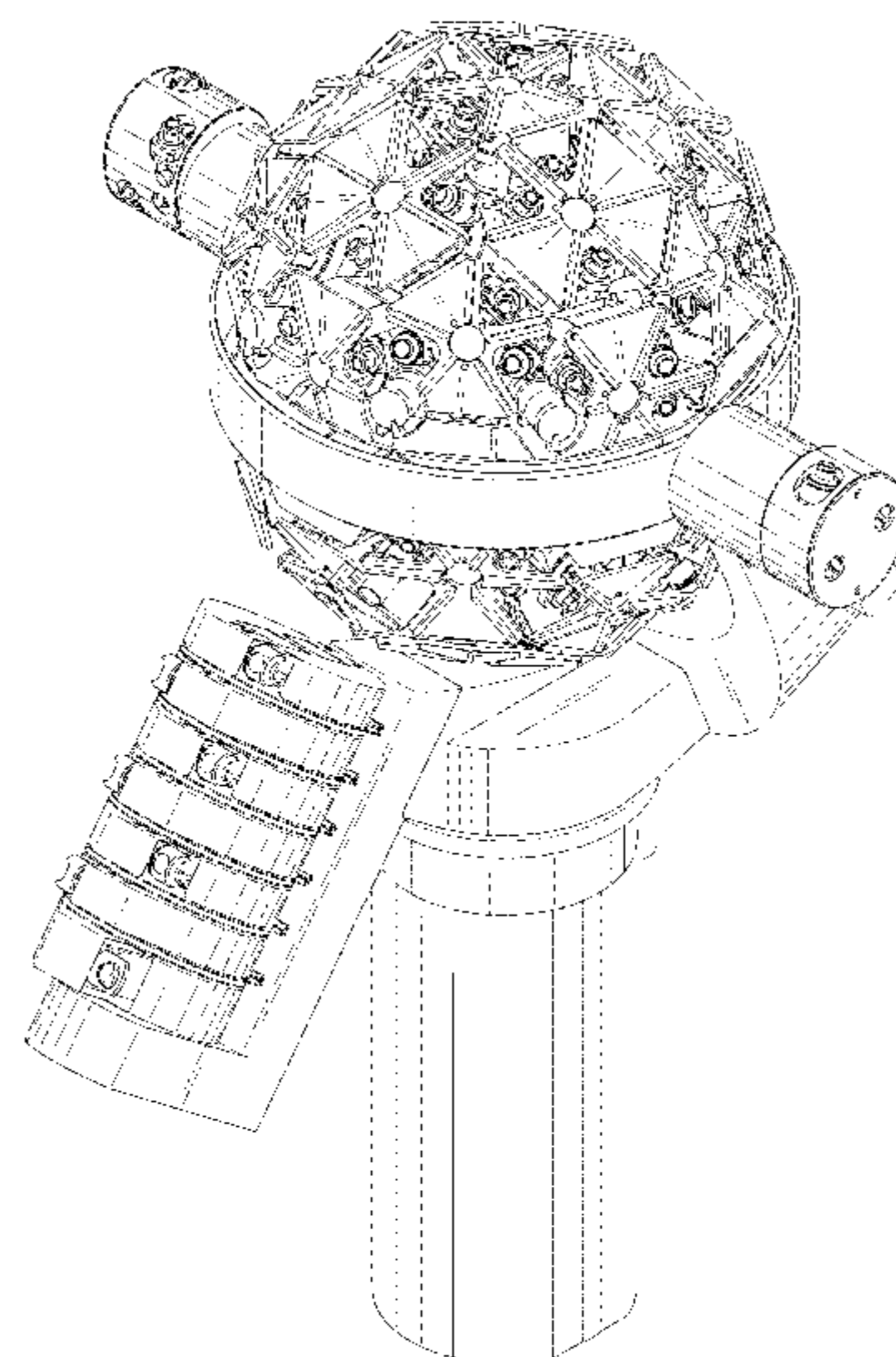
The ornamental design for a planetarium projector, as shown and described.

DESCRIPTION

FIG. 1 is a first perspective view of a planetarium projector; FIG. 2 is a second perspective view thereof; FIG. 3 is a front view thereof; FIG. 4 is a rear view thereof; FIG. 5 is a left side view thereof; FIG. 6 is a right side view thereof; FIG. 7 is a top view thereof; and, FIG. 8 is a bottom view thereof. The broken line showing in the drawings is for environmental purposes and forms no part of the claimed design.

(56) **References Cited**
U.S. PATENT DOCUMENTS
1,616,736 A * 2/1927 Bauersfeld G03B 21/00
352/69
2,827,827 A * 3/1958 Spitz G03B 21/00
434/286
3,813,156 A * 5/1974 Davis G09B 27/02
353/119
3,863,363 A * 2/1975 Miyajima G09B 27/02
434/286

1 Claim, 8 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D294,715 S * 3/1988 Hattori D19/62
D773,549 S * 12/2016 Tompkin D16/225

* cited by examiner

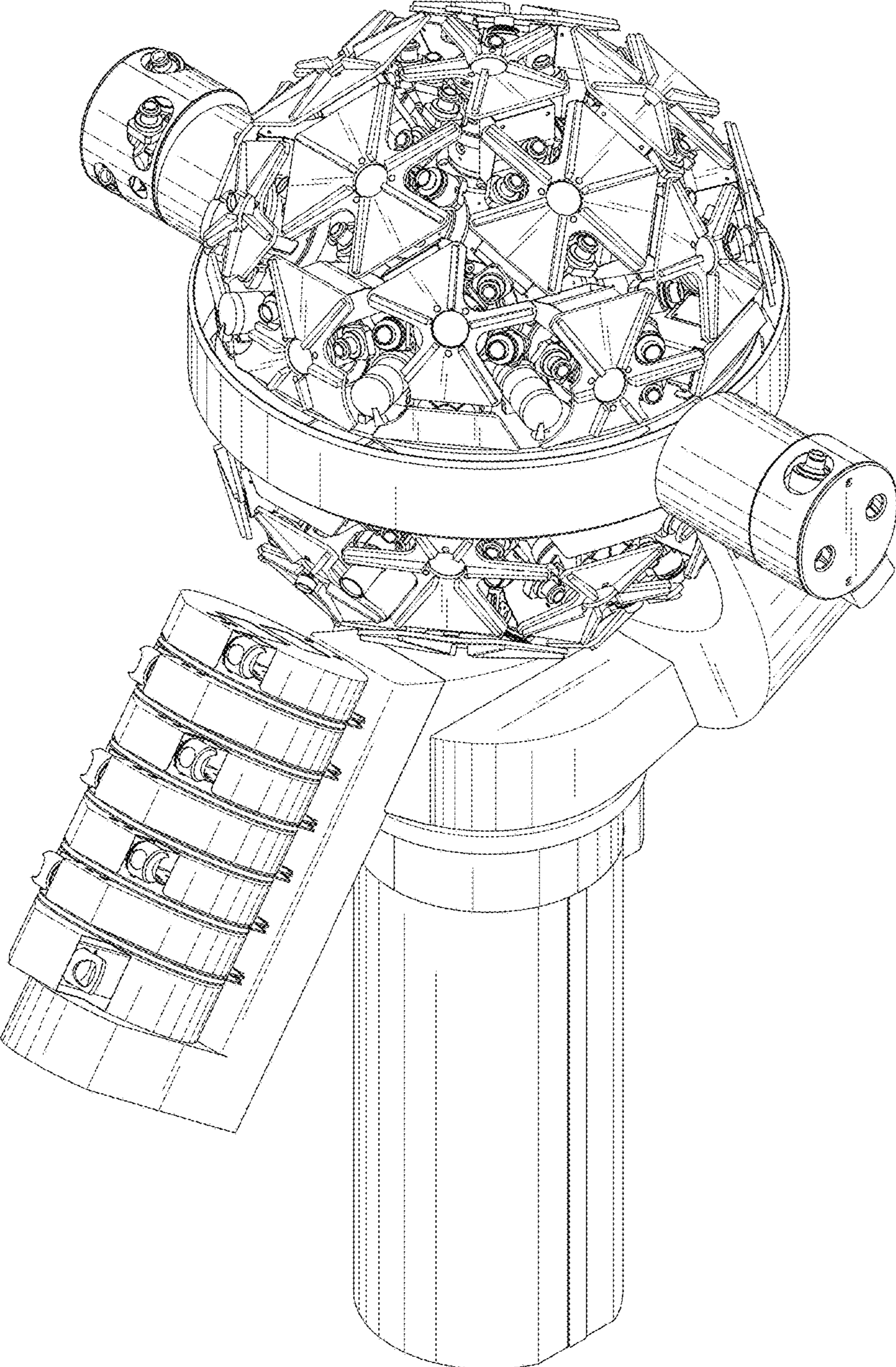


FIG. 1

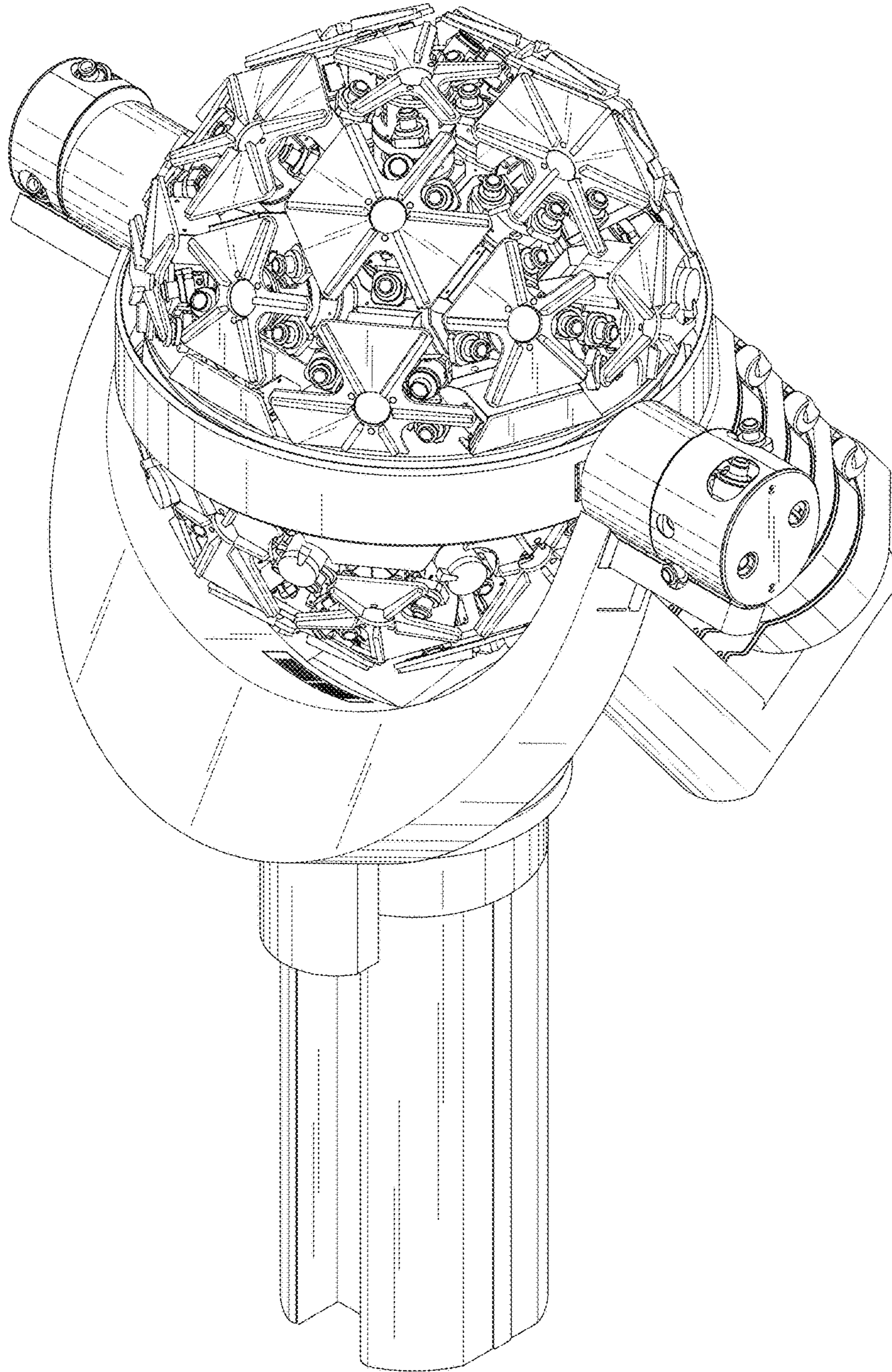


FIG.2

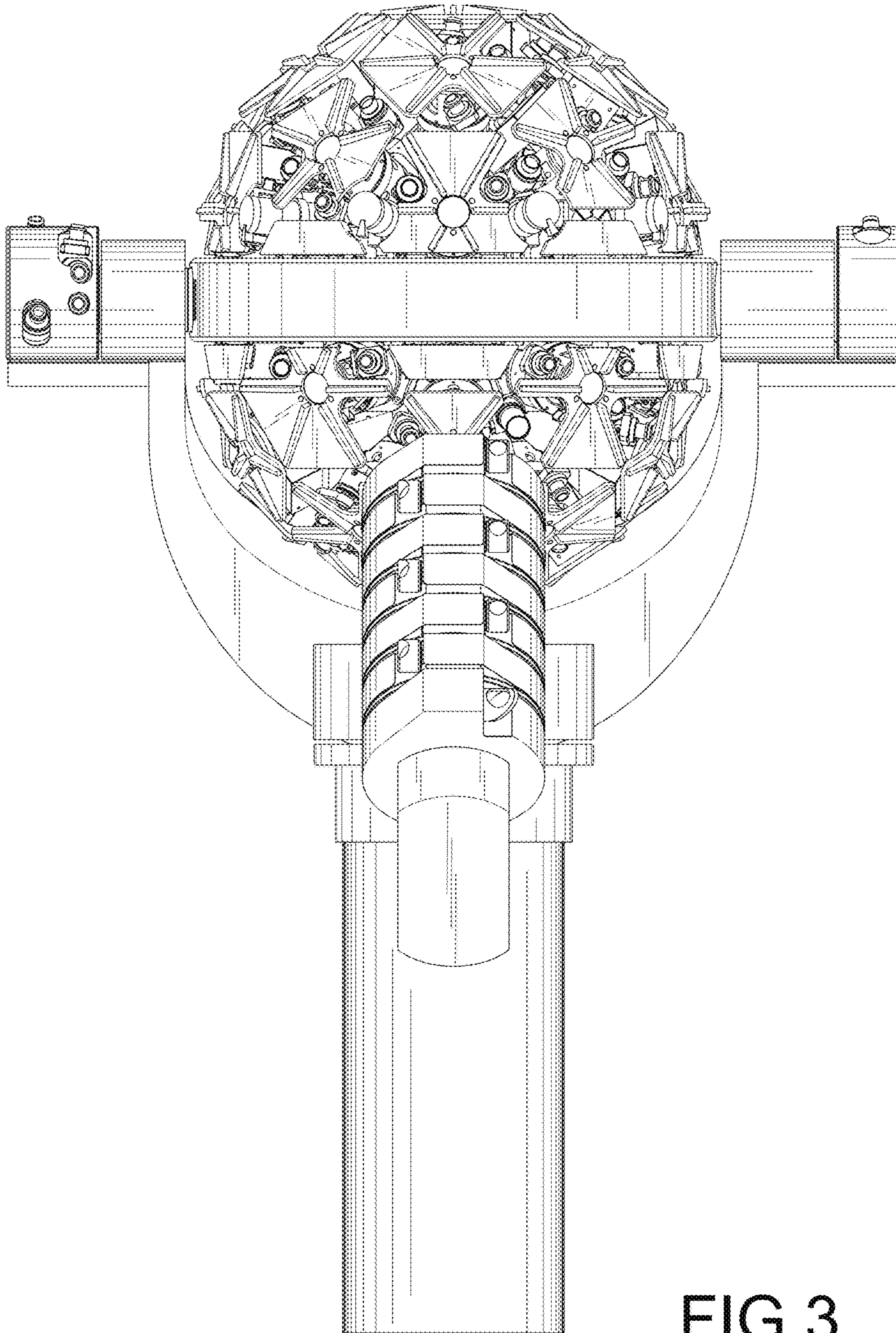


FIG. 3

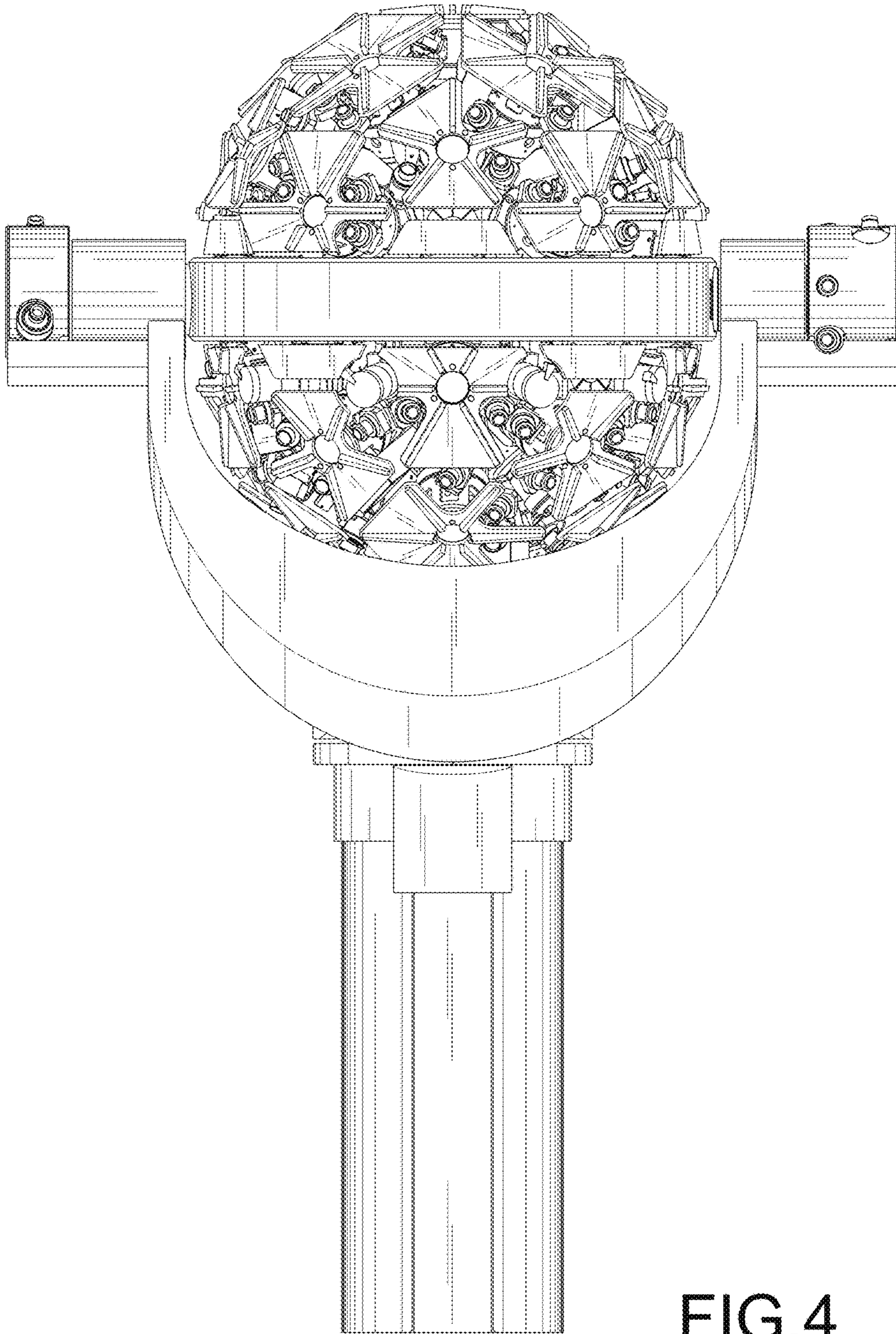


FIG.4

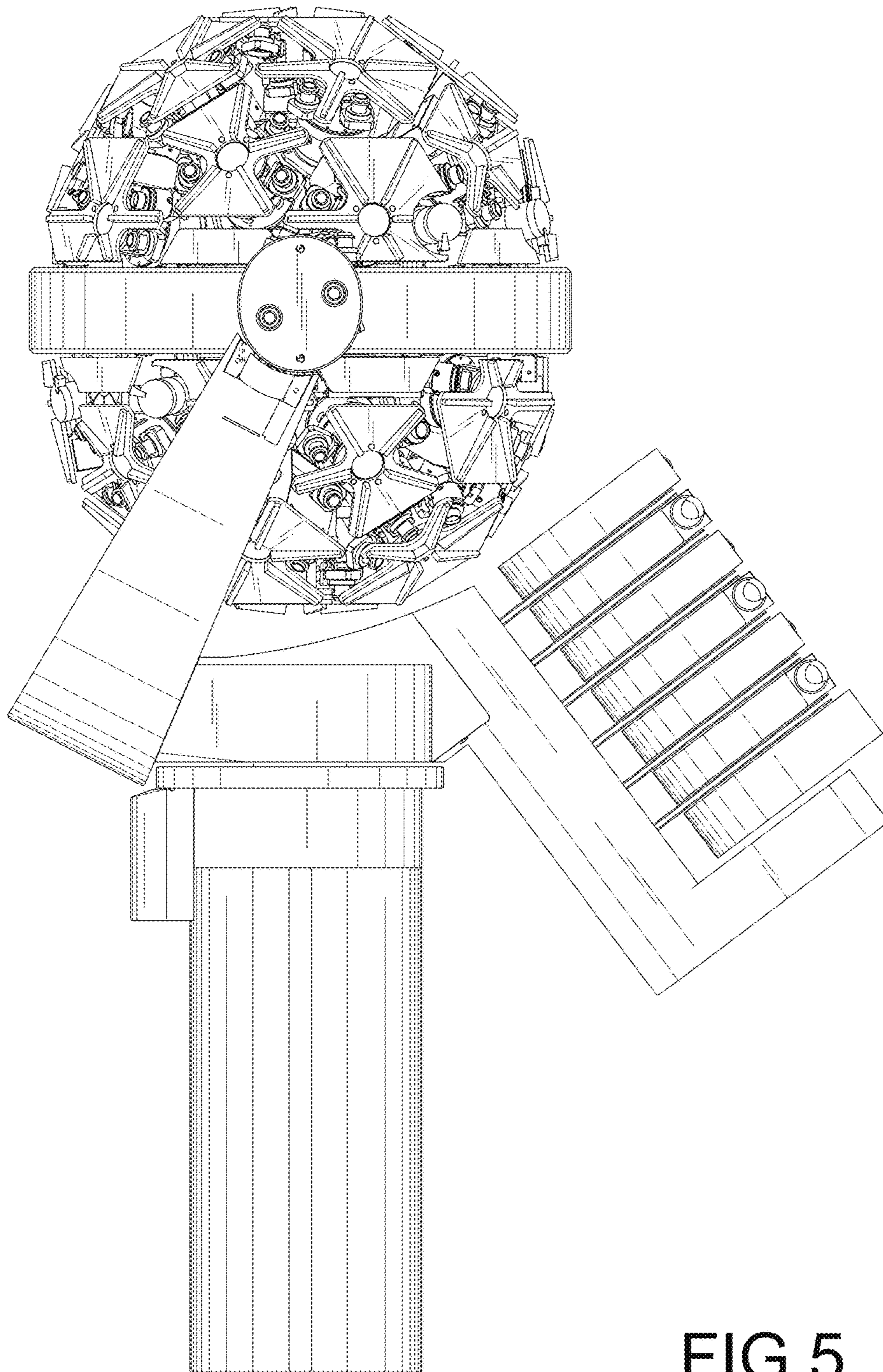


FIG. 5

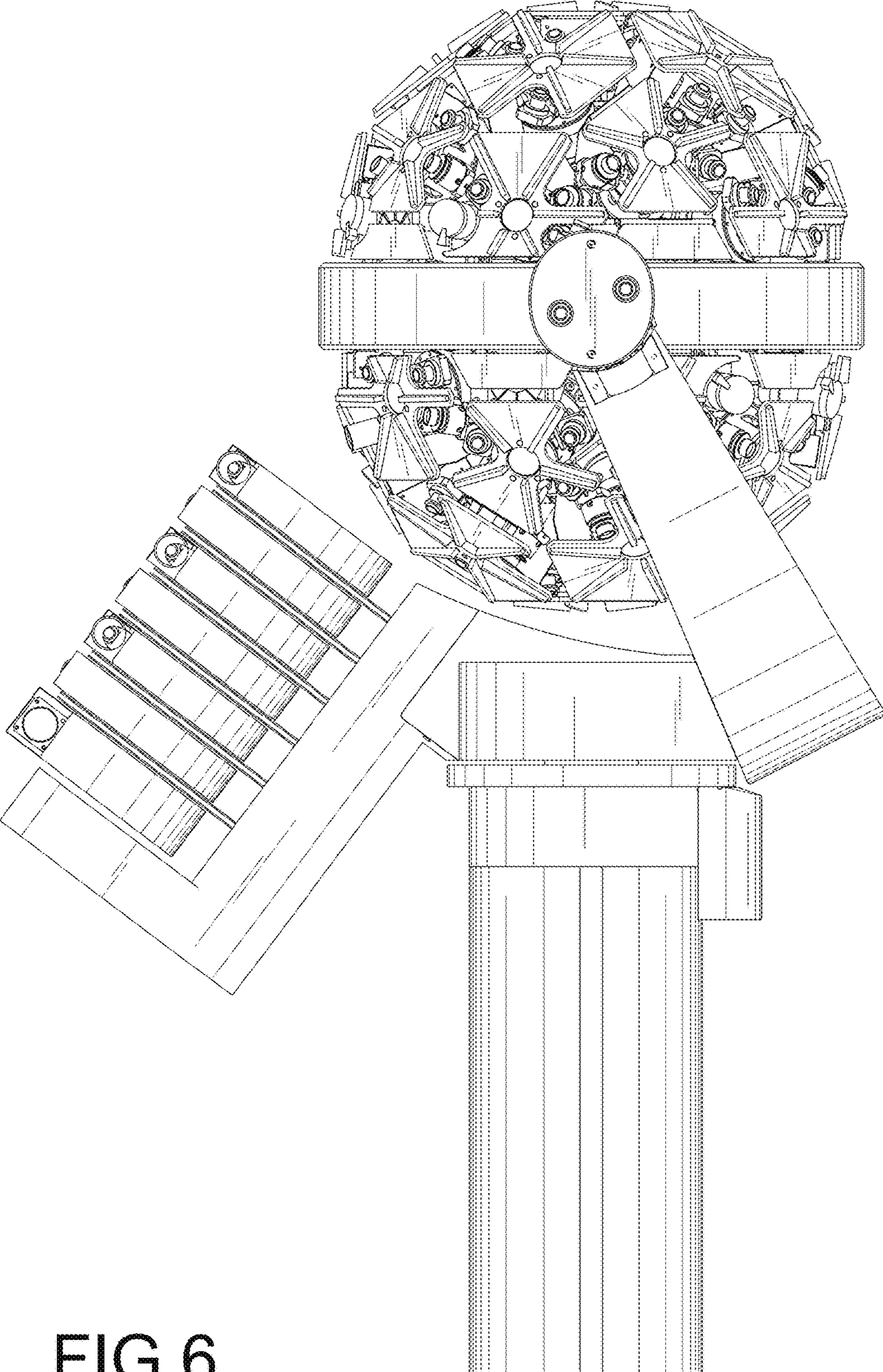


FIG.6

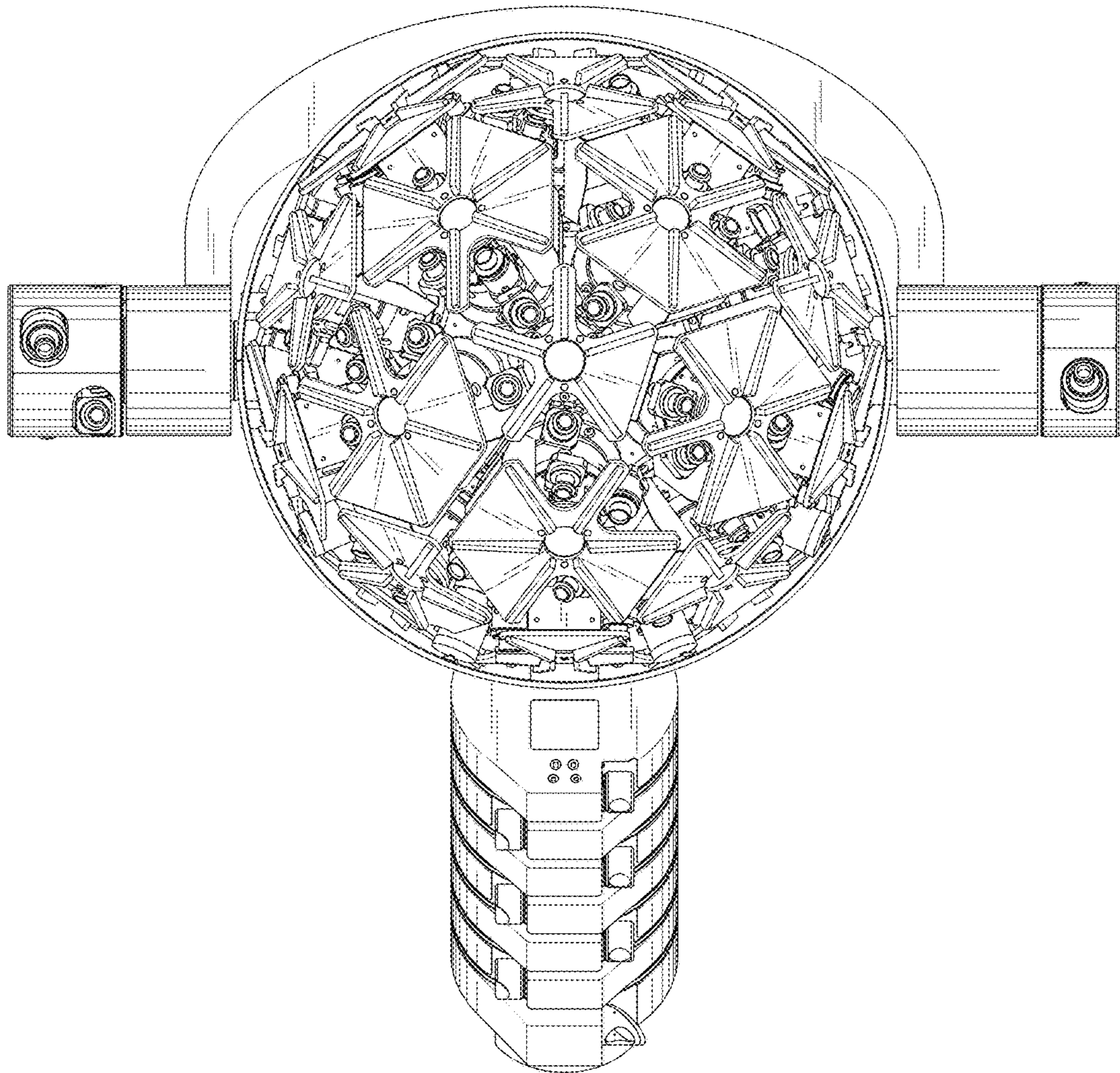


FIG.7

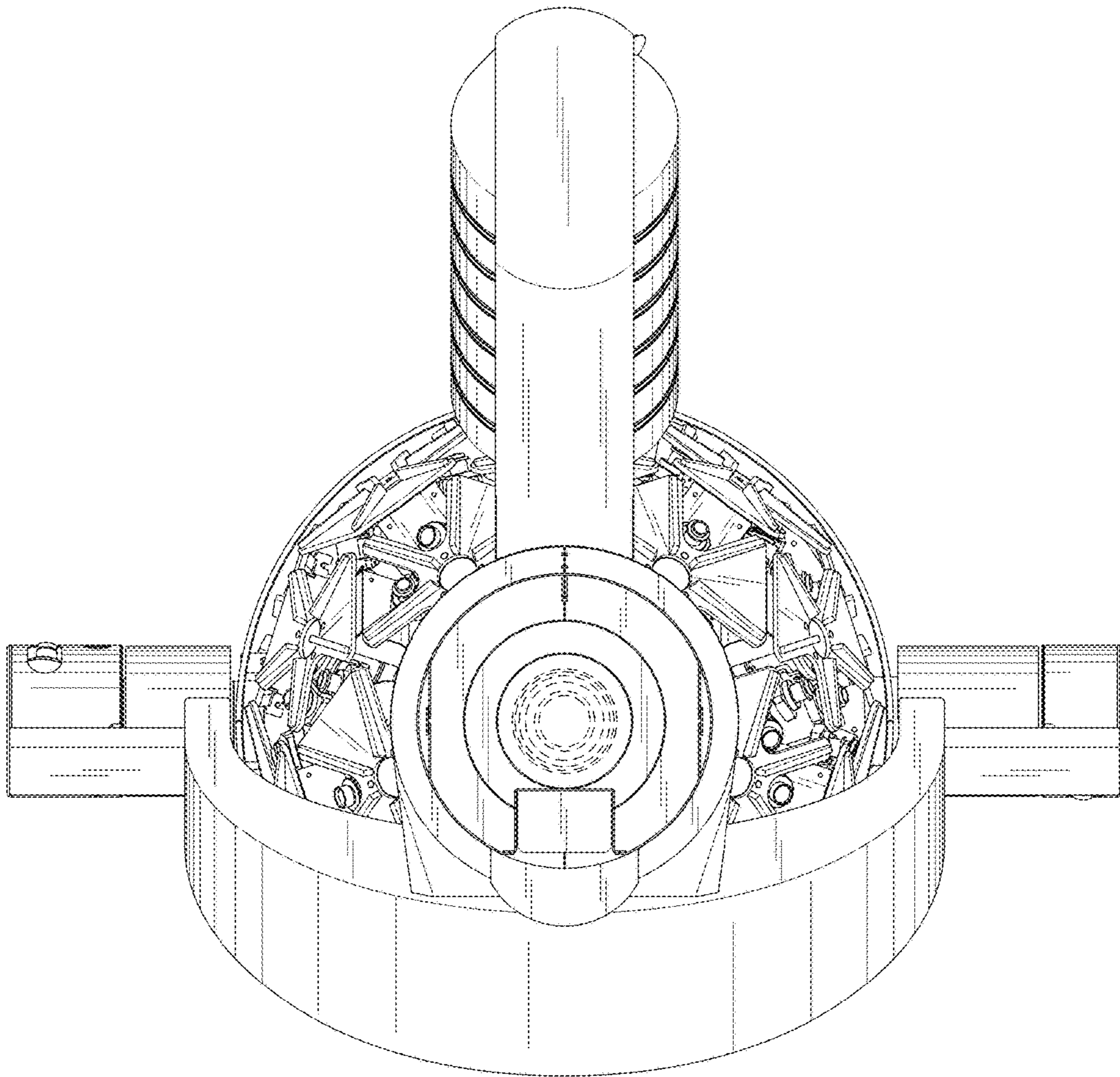


FIG.8