



US00D810786S

(12) **United States Design Patent**  
**Chen et al.**

(10) **Patent No.:** **US D810,786 S**  
(45) **Date of Patent:** **\*\* Feb. 20, 2018**

(54) **PARTICLE SEPARATOR FOR MOTOR VEHICLE ENGINE INTAKE**

(71) Applicant: **S & B Filters, Inc.**, Fontana, CA (US)

(72) Inventors: **Pilun Alan Chen**, Fontana, CA (US);  
**Berry Carter**, Fontana, CA (US)

(73) Assignee: **S&B Filters, Inc.**, Fontana, CA (US)

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

(21) Appl. No.: **29/567,011**

(22) Filed: **Jun. 3, 2016**

(51) **LOC (11) Cl.** ..... **15-01**

(52) **U.S. Cl.**  
USPC ..... **D15/5**

(58) **Field of Classification Search**  
USPC ..... D15/5, 1; D23/365  
CPC ..... B01D 45/16; B01D 50/002; F02M 35/02;  
F02M 35/022; F02M 35/10262; F02M  
35/0223; F02M 35/10013; F02M  
35/0215; F02M 35/088; F02M 35/10301;  
F02M 35/10019; F02B 27/00; Y02T  
10/146  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D273,956 S \* 5/1984 Petersen ..... D15/5  
4,971,603 A 11/1990 Prinsloo  
4,985,058 A 1/1991 Prinsloo et al.

(Continued)

**OTHER PUBLICATIONS**

U.S. Appl. No. 15/176,944, filed Jun. 8, 2016, for a Particle Separator for Motor Vehicle Engine Intake, First named inventor Pilun Alan Chen et al., Assigned to S&B Filters, Inc.

*Primary Examiner* — T. Chase Nelson

*Assistant Examiner* — Ania Aman

(74) *Attorney, Agent, or Firm* — Stetina Brunda Garred & Brucker; Lowell Anderson

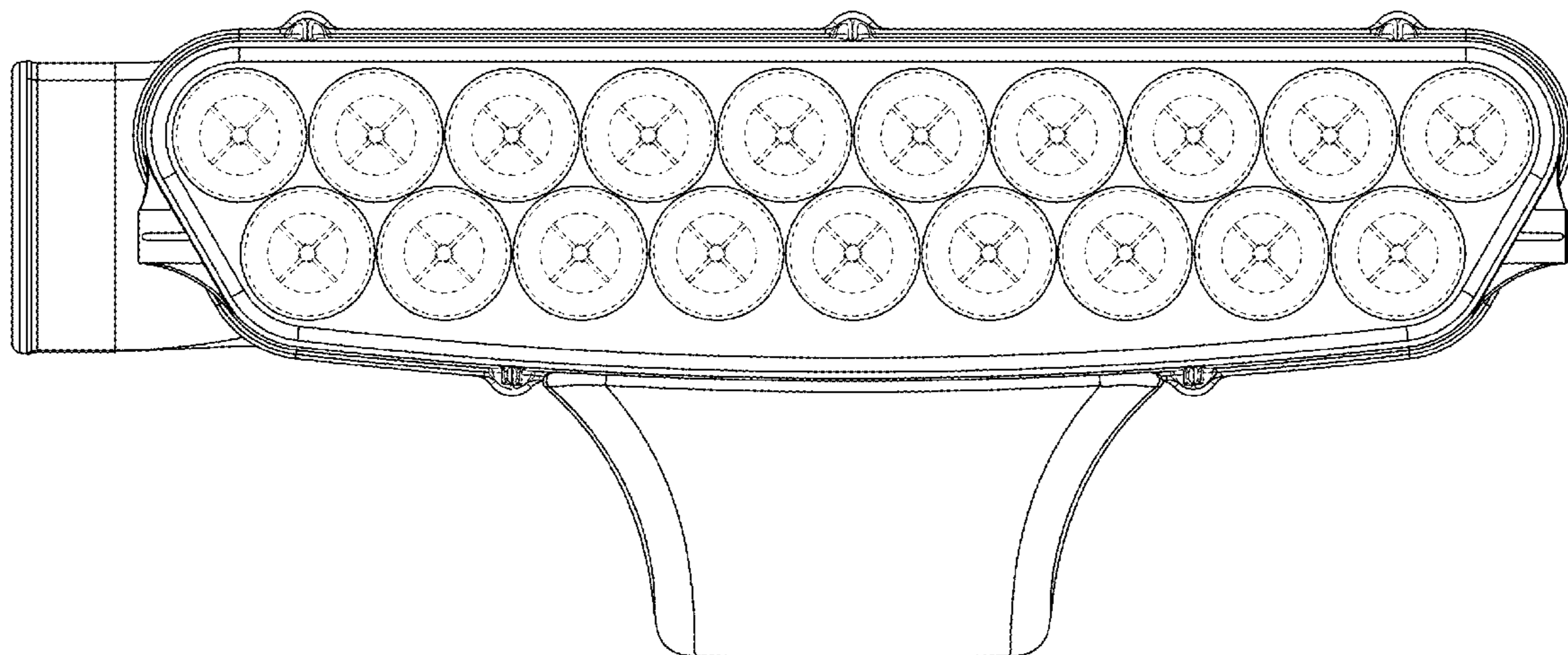
(57) **CLAIM**

The ornamental design for a particle separator for a motor vehicle engine intake, as shown and described.

**DESCRIPTION**

FIG. 1 is a front view of a particle separator looking into a plurality of air inlets on the front;  
FIG. 2 is a top view of the particle separator of FIG. 1;  
FIG. 3 is a left side view of the particle separator of FIG. 1 looking into a circular air outlet opening;  
FIG. 4 is a right side view of the particle separator of FIG. 1;  
FIG. 5 is a bottom view of the particle separator of FIG. 1;  
FIG. 6 is a back view of the particle separator of FIG. 1 looking into a rectangular debris outlet opening;  
FIG. 7 is a top perspective view of the left side and front of the particle separator of FIG. 1;  
FIG. 8 is a bottom perspective of the left side and front of the particle separator of FIG. 1;  
FIG. 9 is a top perspective view of the right side and front of the particle separator of FIG. 1;  
FIG. 10 is a bottom perspective view of right side and front of the particle separator of FIG. 1;  
FIG. 11 is a top perspective view of the right side and back of the particle separator of FIG. 1;  
FIG. 12 is a bottom perspective view of the right side and back of the particle separator of FIG. 1;  
FIG. 13 is a top perspective view of the left side and back of the particle separator of FIG. 1; and,  
FIG. 14 is a bottom perspective view of the left side and back of the particle separator of FIG. 1.  
The broken lines in FIGS. 1 and 7-10 represent the bounds of the claimed design while the broken lines of FIG. 12 are directed to environment and are for illustrative purposes only; the broken lines form no part of the claimed design.

**1 Claim, 13 Drawing Sheets**



(56)

**References Cited**

U.S. PATENT DOCUMENTS

5,002,671	A	3/1991	de Villiers et al.	
7,008,467	B2 *	3/2006	Krisko .....	B01D 45/12 55/337
D525,267	S *	7/2006	Canova .....	D15/5
8,641,795	B2 *	2/2014	Coulonvaux .....	B01D 46/0023 55/357
8,915,985	B2 *	12/2014	Dewit .....	B01D 46/0005 55/357
9,095,806	B2 *	8/2015	Menßen .....	B01D 45/16
D749,641	S *	2/2016	Menssen .....	D15/5
2003/0217534	A1 *	11/2003	Krisko .....	B01D 45/12 55/337
2007/0289265	A1 *	12/2007	Coulonvaux .....	B01D 46/0023 55/324
2012/0124947	A1 *	5/2012	Dewit .....	B01D 46/0005 55/321
2012/0198802	A1 *	8/2012	Menssen .....	B01D 45/16 55/337
2013/0031878	A1 *	2/2013	Menssen .....	B01D 45/16 55/345
2013/0255203	A1 *	10/2013	Muenkel .....	B01D 46/0021 55/337
2014/0373490	A1 *	12/2014	Wuebbeling .....	B01D 45/16 55/345
2016/0243479	A1 *	8/2016	Gossez .....	B01D 45/16
2016/0305375	A1 *	10/2016	Finn .....	B01D 46/0002

\* cited by examiner

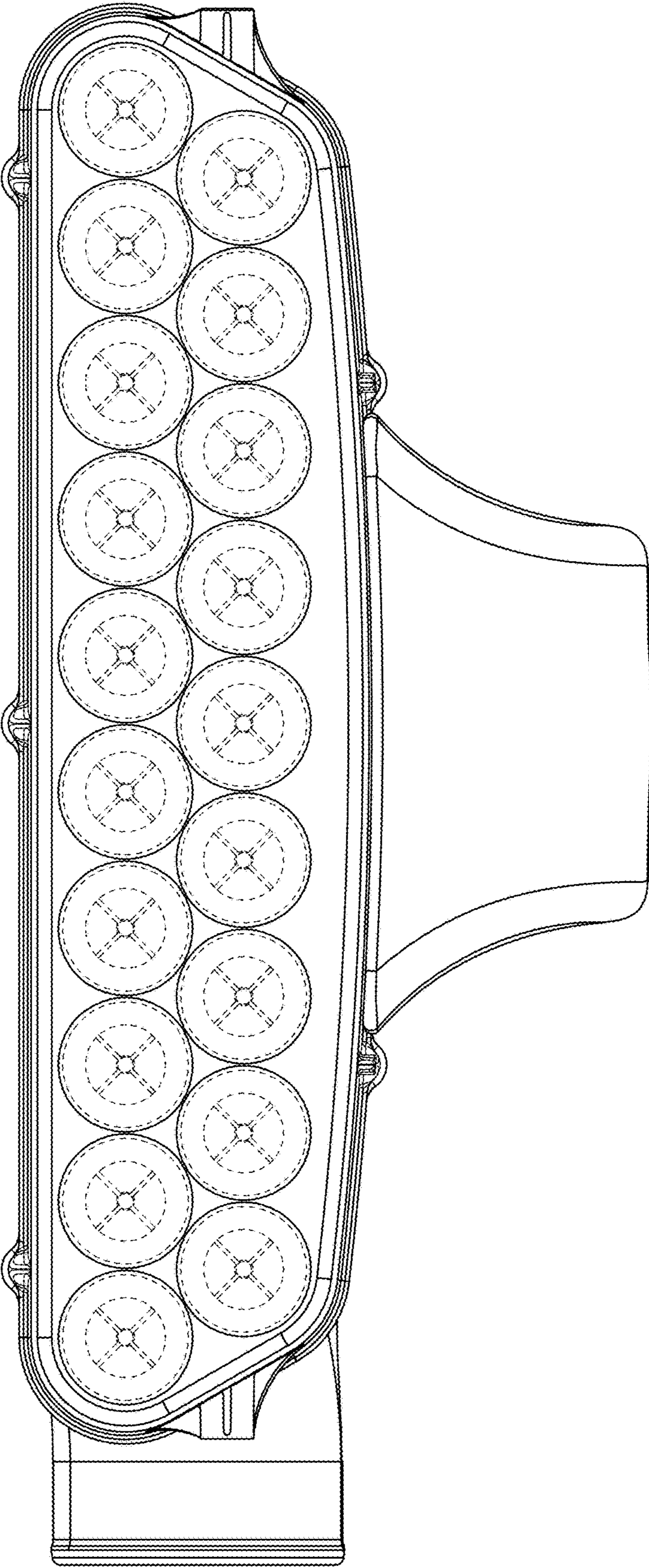


FIG. 1

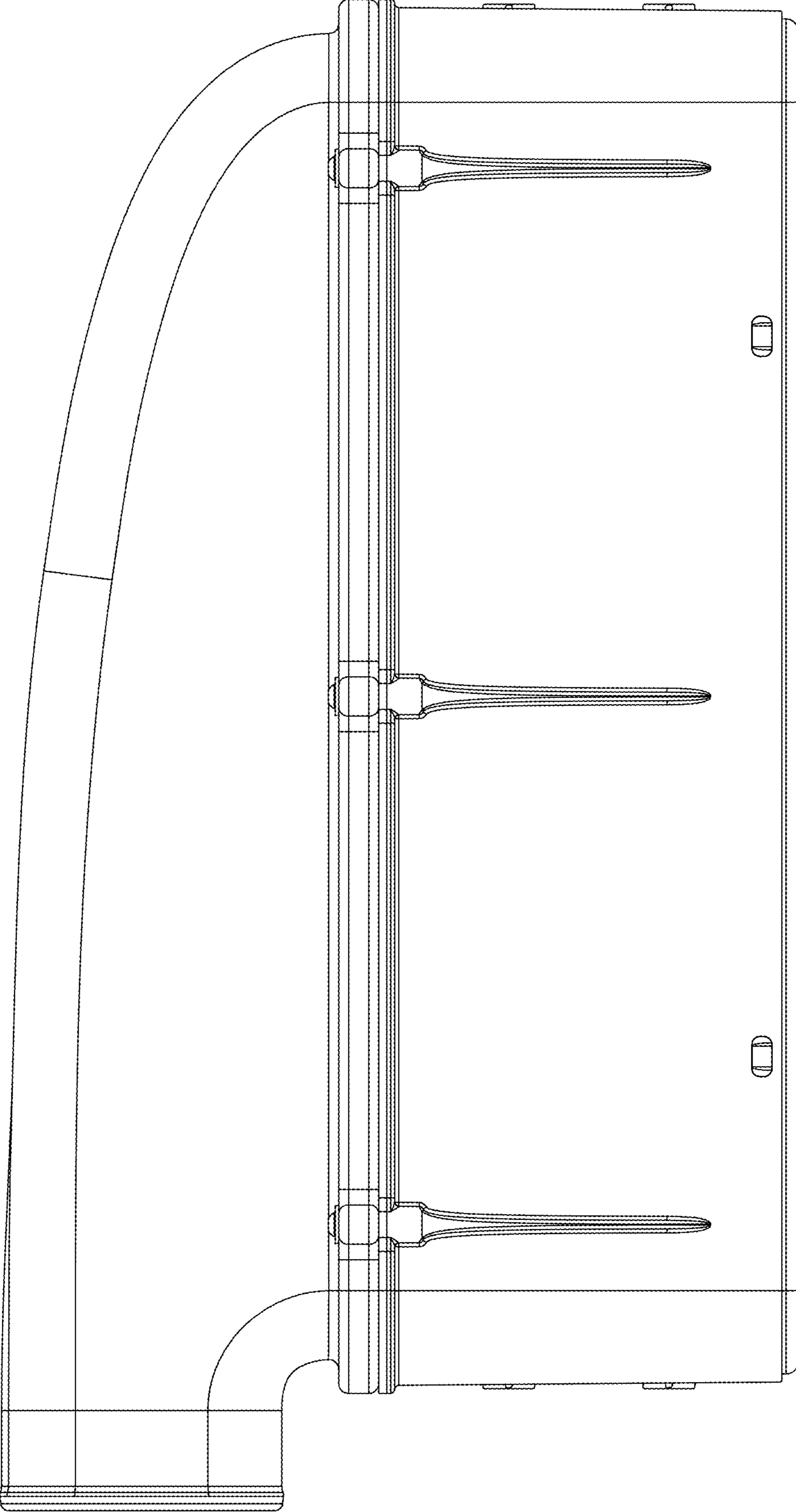


FIG. 2

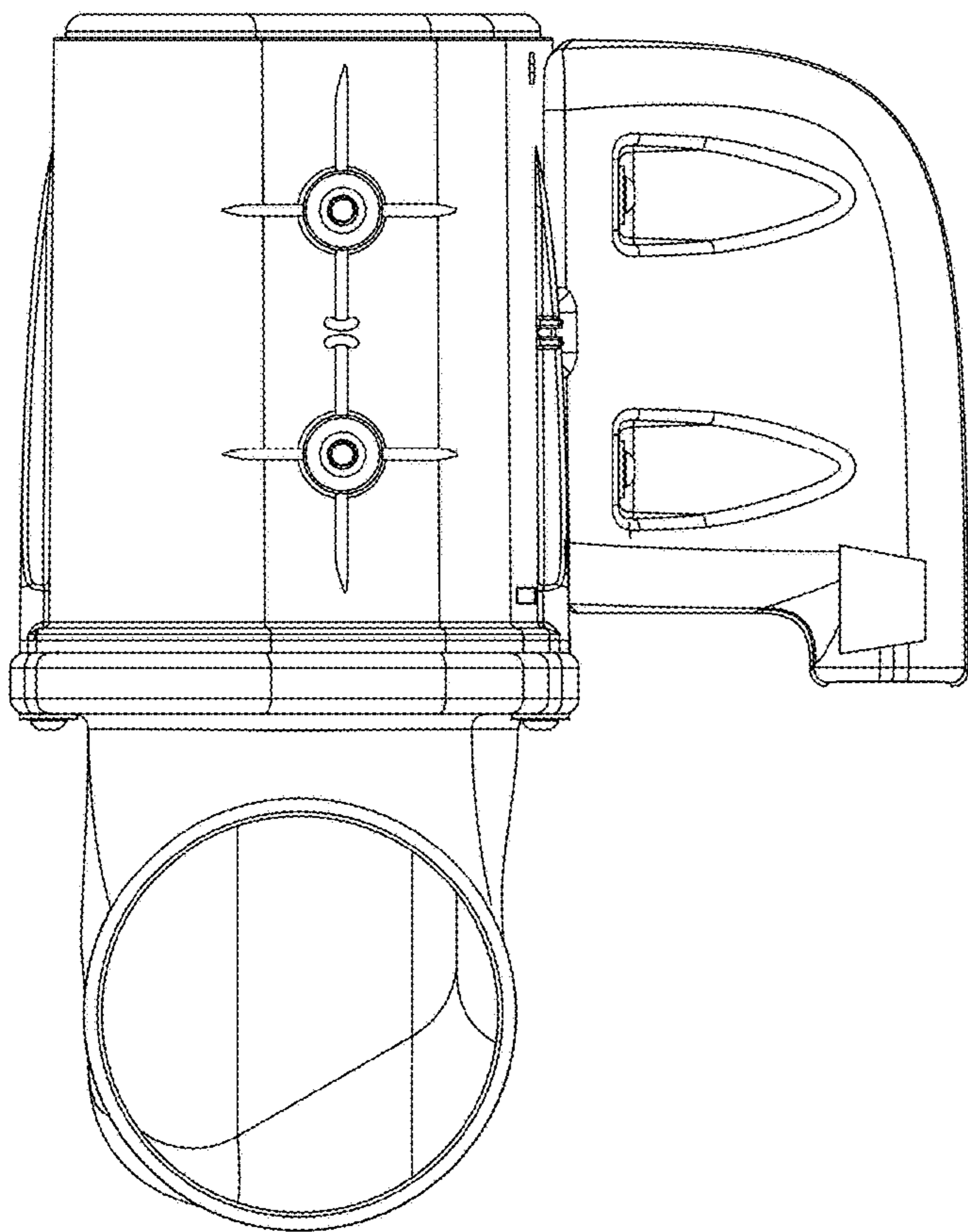


FIG. 3

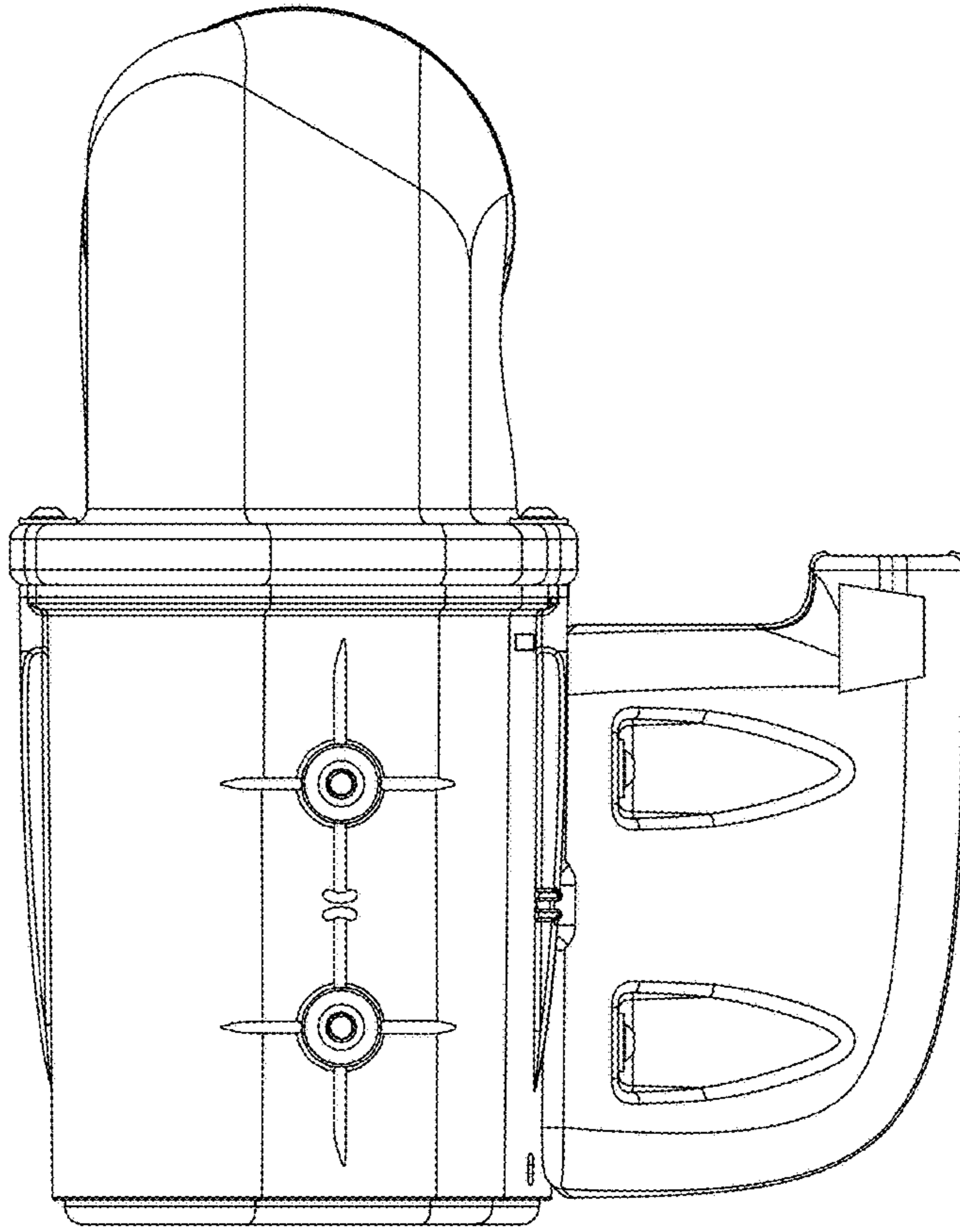


FIG. 4

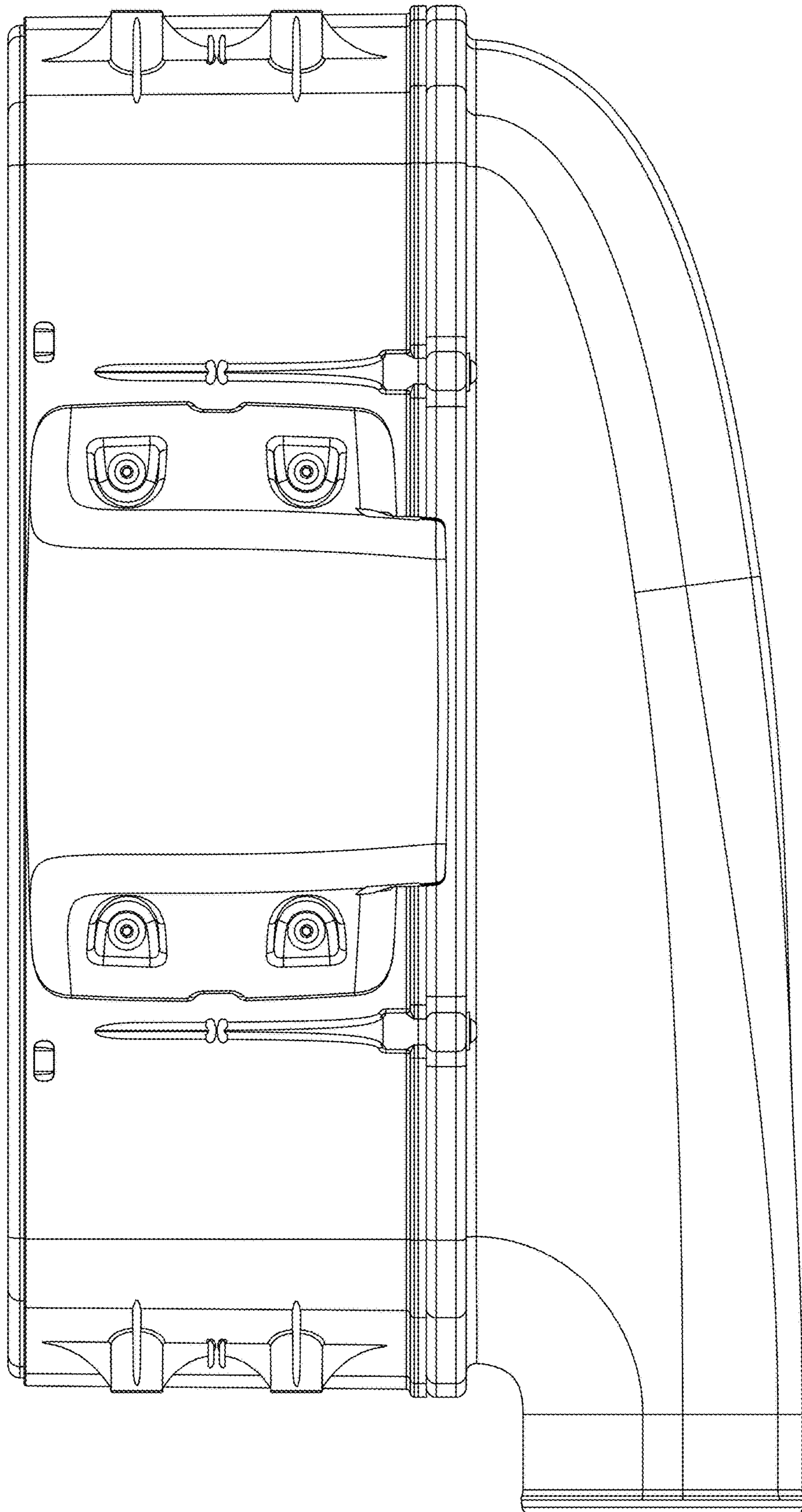


FIG. 5

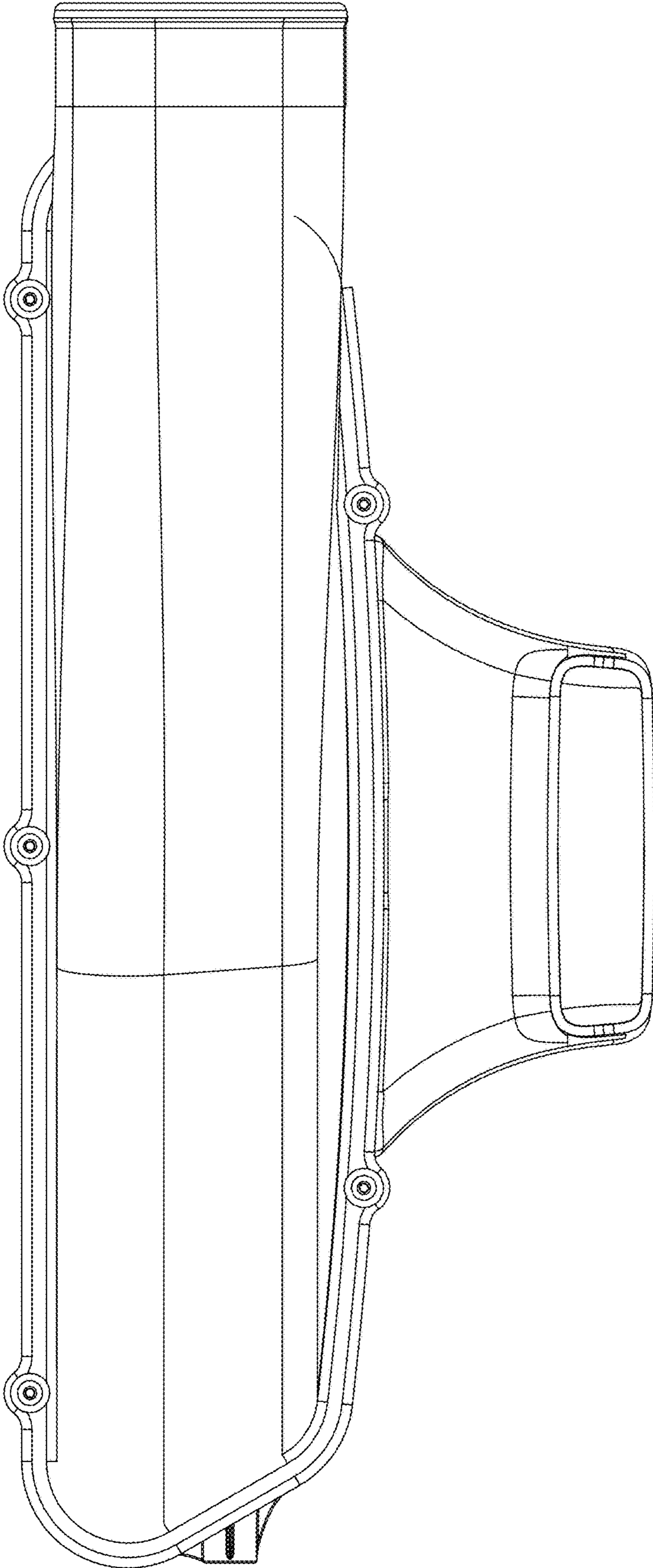


FIG. 6

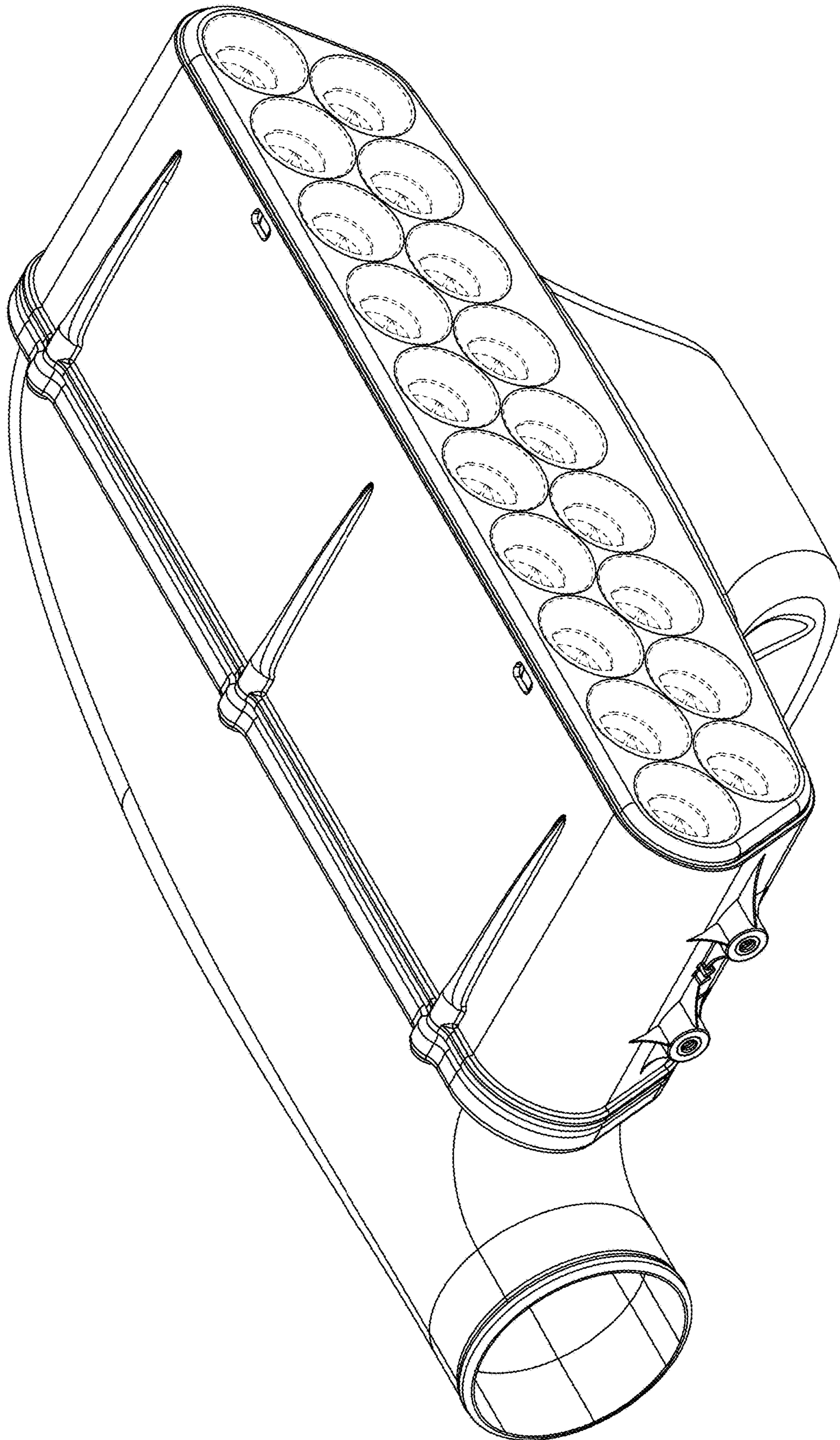


FIG. 7



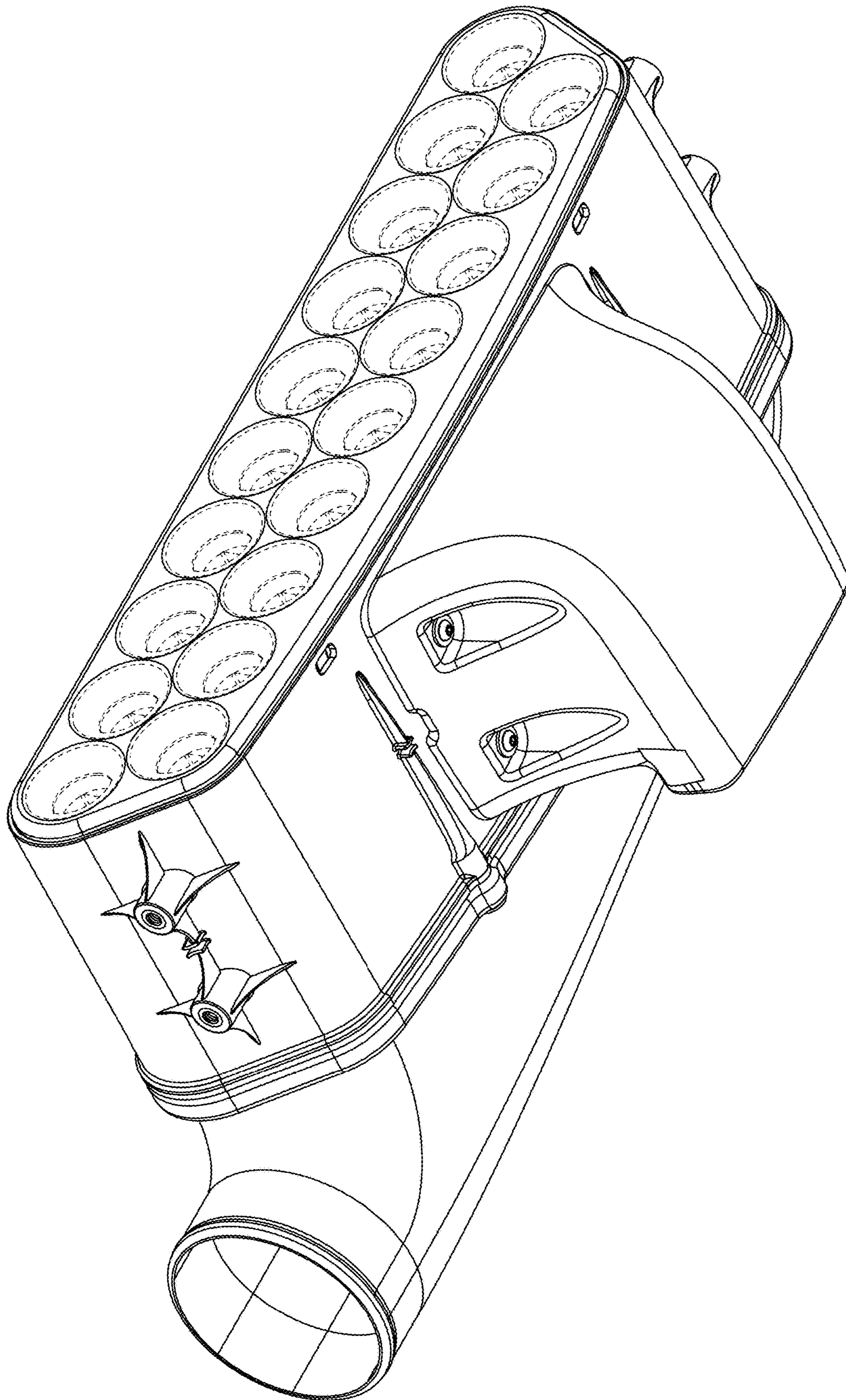


FIG. 8

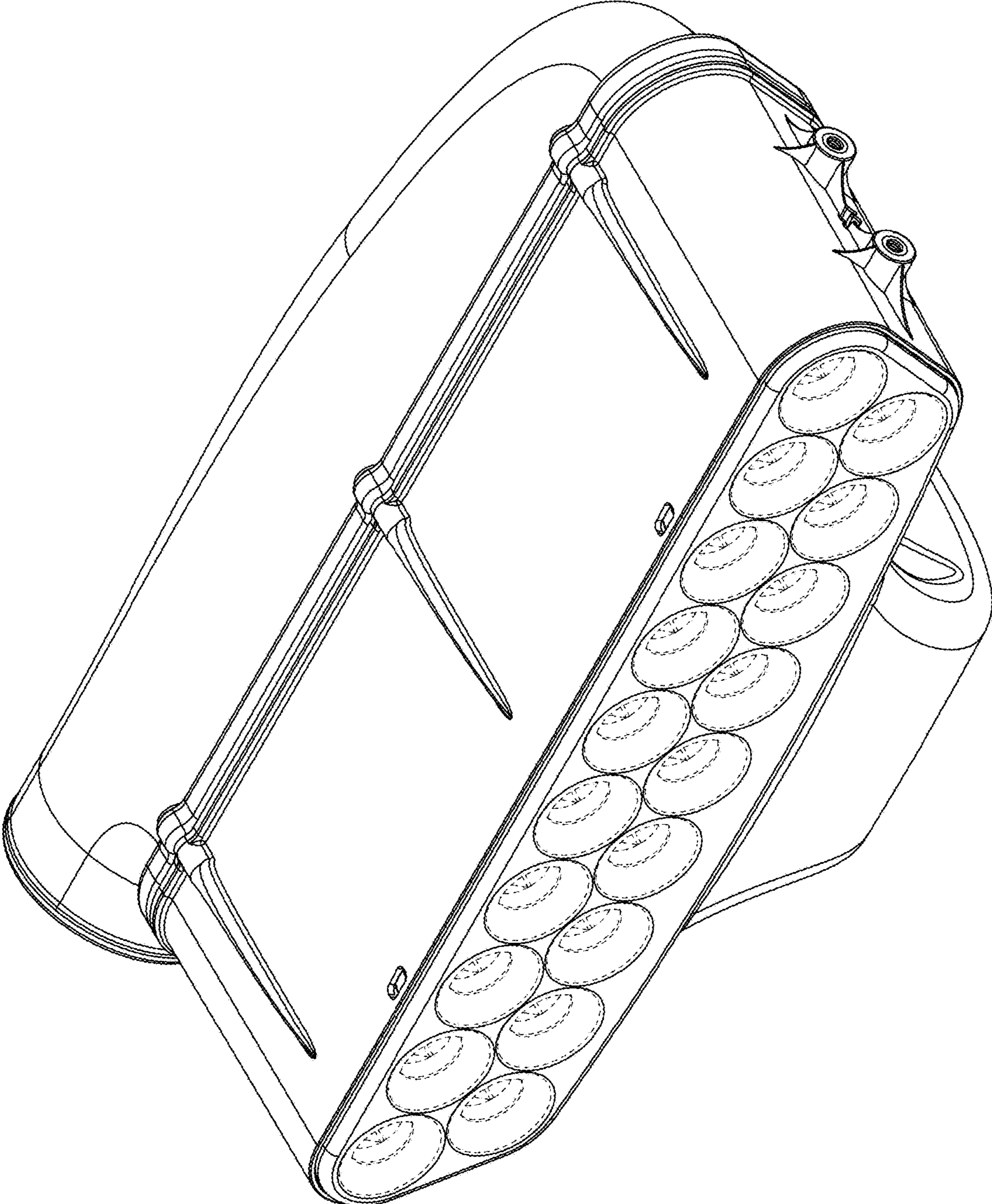


FIG. 9

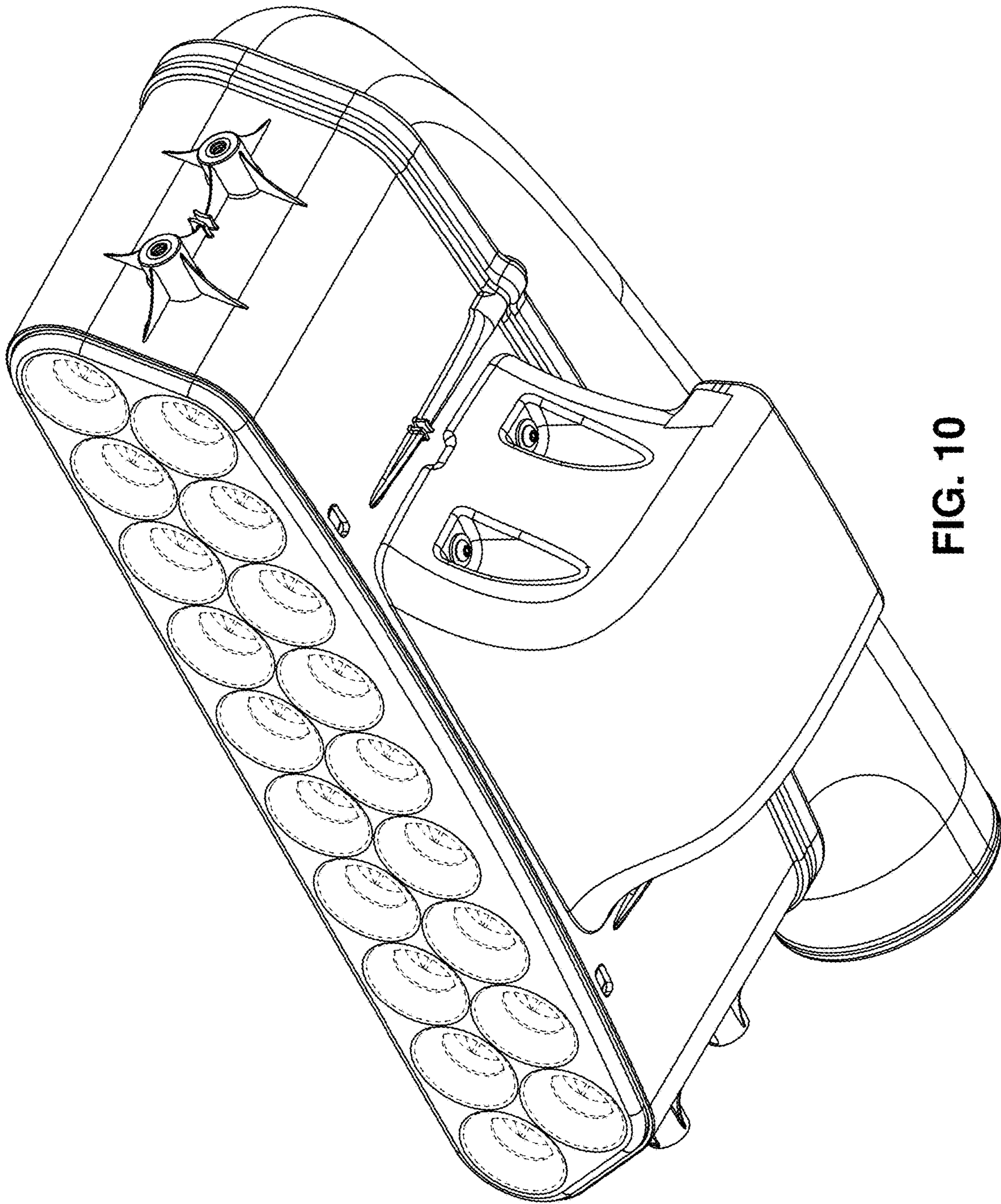


FIG. 10

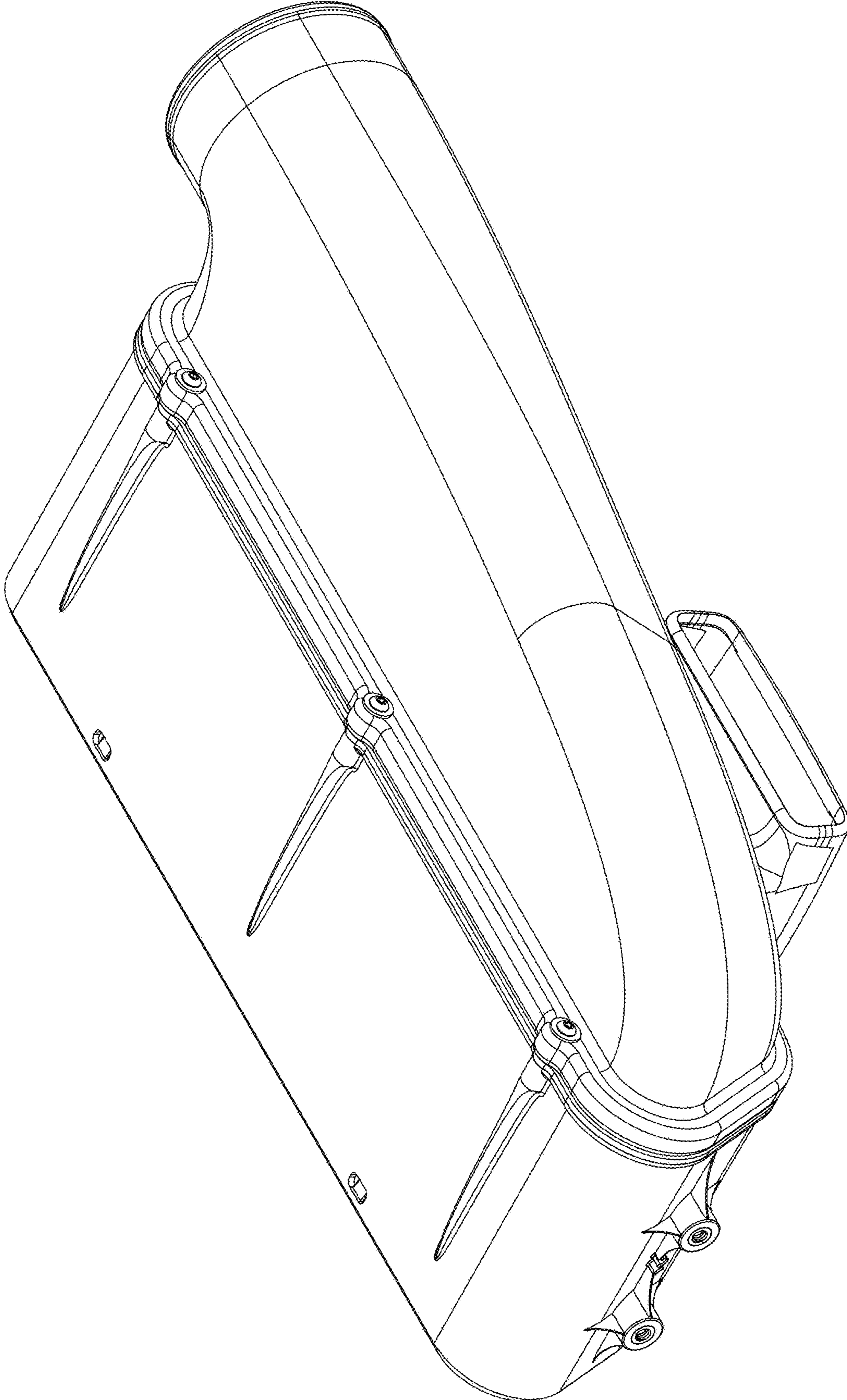


FIG. 11

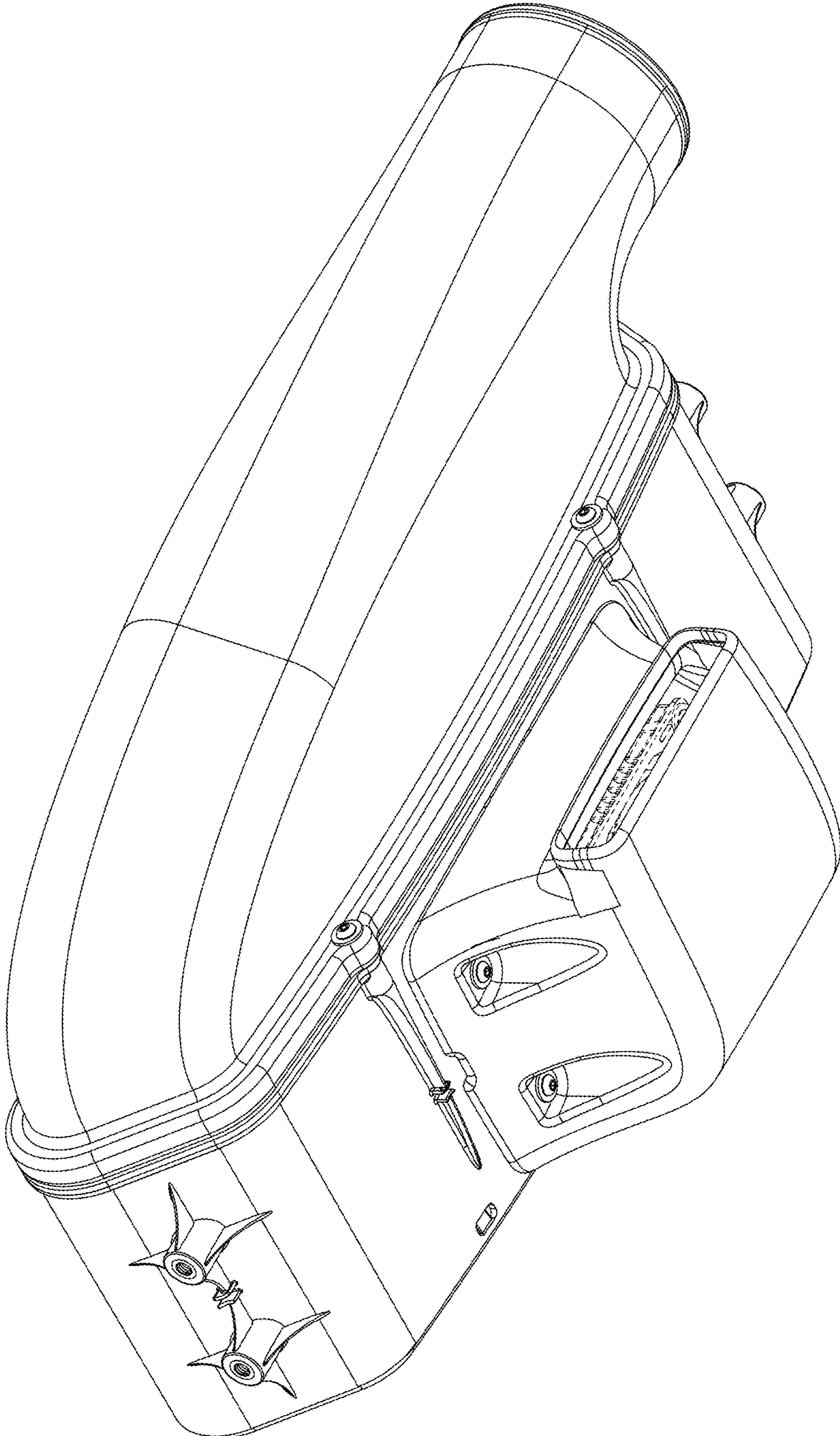


FIG. 12

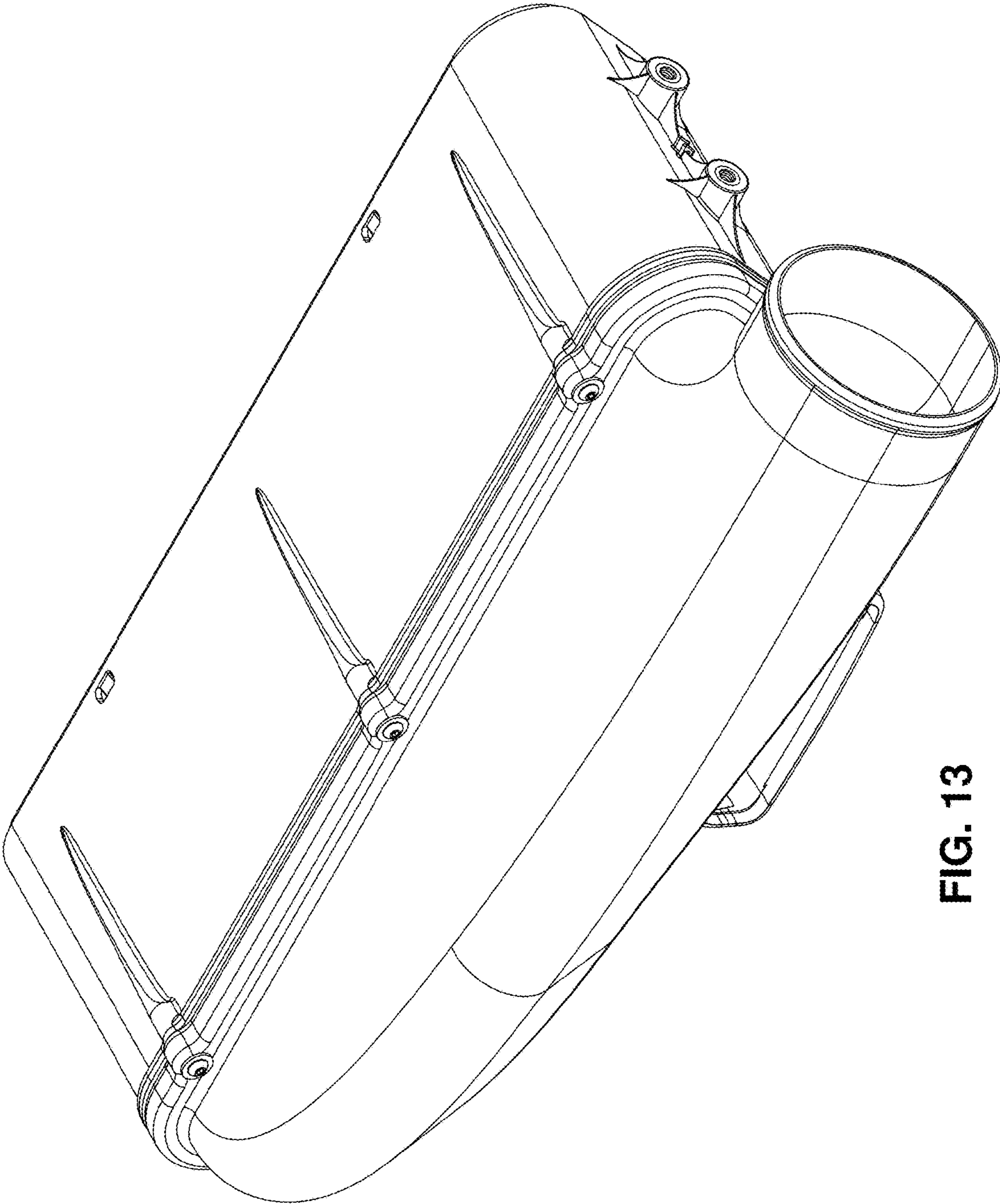


FIG. 13

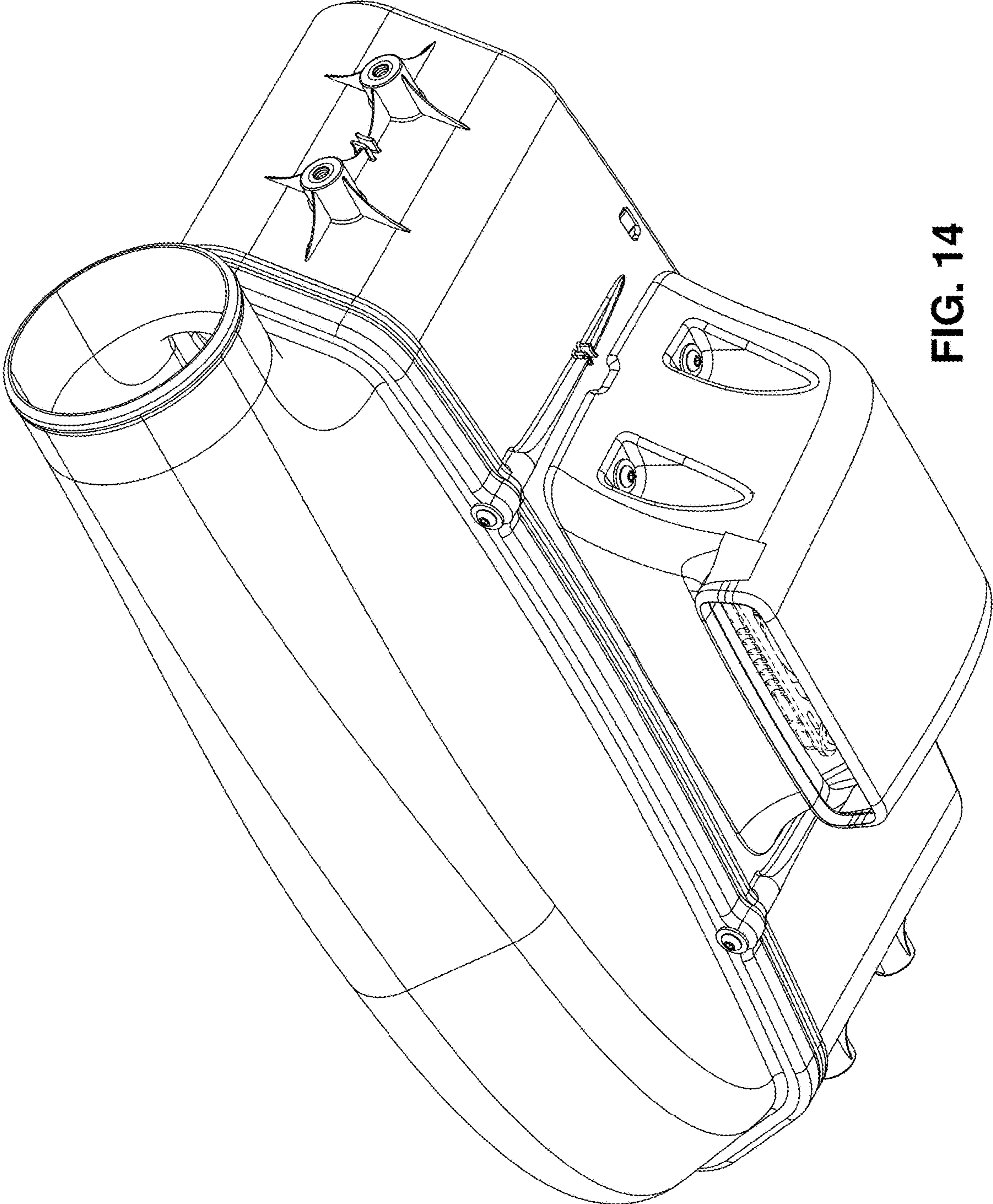


FIG. 14