



US00D970560S

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

(10) **Patent No.:** **US D970,560 S**

(45) **Date of Patent:** **\*\* Nov. 22, 2022**

(54) **PORTABLE TIRE INFLATOR**

(71) Applicant: **Fuzhou Huodan Electronic Technology Co., Ltd., Fuzhou (CN)**

(72) Inventor: **Yixuan Xu, Shenzhen (CN)**

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

(21) Appl. No.: **29/791,429**

(22) Filed: **Jan. 11, 2022**

(51) **LOC (13) Cl.** ..... **15-02**

(52) **U.S. Cl.**

USPC ..... **D15/9; D15/7**

(58) **Field of Classification Search**

USPC ..... D15/7-9; D14/163, 165, 172, 203.3,  
D14/203.6, 209.1, 214, 221, 497, 499,  
D14/509, 510; D24/168, 186, 213, 217,  
D24/218, 233; D23/225, 231, 232, 366,  
D23/356; D13/107

CPC ..... F04B 53/14; F04B 53/92; F04B 33/00;  
F04B 33/005; F04B 1/005; F04D 13/06;  
F04D 29/22; F04D 29/046; F04D  
29/2266; F16K 11/048; F16K 15/20;  
F16K 31/602; F16L 37/18; F16L 37/20

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D585,822	S	*	2/2009	Hsu	.....	D13/107
D589,985	S	*	4/2009	Steinfels	.....	D15/9
D621,853	S	*	8/2010	Sundheim	.....	D15/7
D670,313	S		11/2012	Ohm et al.		
D811,324	S	*	2/2018	Inskeep	.....	D15/9
D833,385	S	*	11/2018	Inskeep	.....	D15/9
D874,397	S	*	2/2020	Sun	.....	D13/107
D874,398	S	*	2/2020	Sun	.....	D13/107
D899,357	S	*	10/2020	Liu	.....	D13/107

D917,569	S	*	4/2021	Youngblutt	.....	D15/7
D942,932	S	*	2/2022	Yin	.....	D13/107
D949,098	S	*	4/2022	Wang	.....	D13/116

**OTHER PUBLICATIONS**

AVID, Power Tire Inflator Air Compressor, 12V DC / 110V AC Dual Power Tire Pump, (date first available May 8, 2019), Amazon.com, URL:<<https://www.amazon.com/Compressor-Power-Inflation-Deflation-Avid/dp/B07RM5D9C3>> (Year: 2019).\*

AstroAI, Tire Inflator Air Compressor Portable Cordless Car Tire Pump, (first available Dec. 19, 2021), Amazon.com, URL:<<https://www.amazon.com/AstroAI-Inflator-Compressor-Inflation-Deflation/dp/B094XLW473>> (Year: 2021).\*

VacLife, Tire Inflator, 12V DC/110V AC Portable Air Compressor, (first available May 8, 2022), Amazon.com, URL:<<https://www.amazon.com/VacLife-Tire-Inflator-AC-Portable-Compressor-Inflatable/dp/B09NKPGLX1>> (Year: 2022).\*

\* cited by examiner

*Primary Examiner* — Calvin E Vansant  
*Assistant Examiner* — Mark T. Philipps

(57)

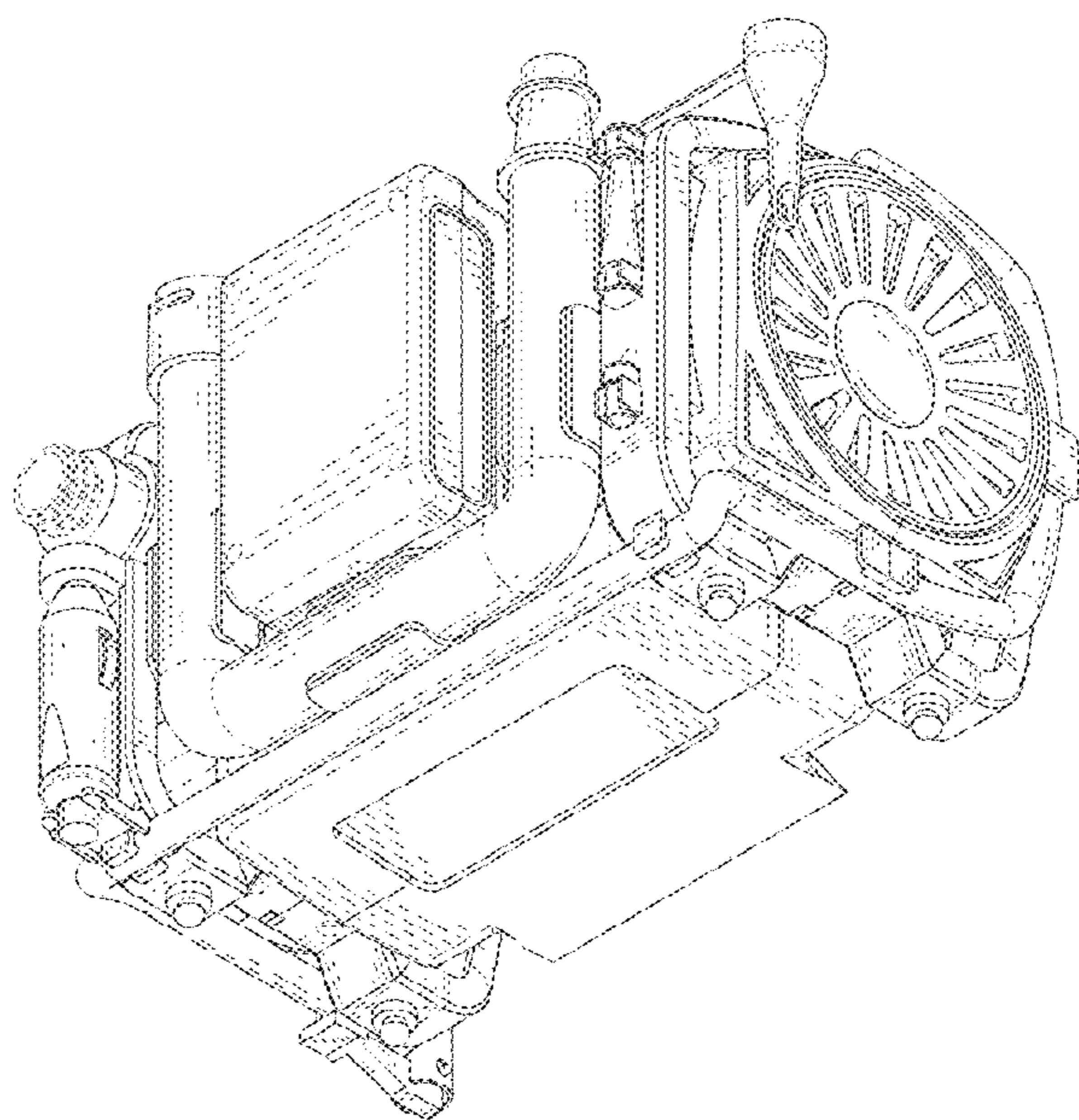
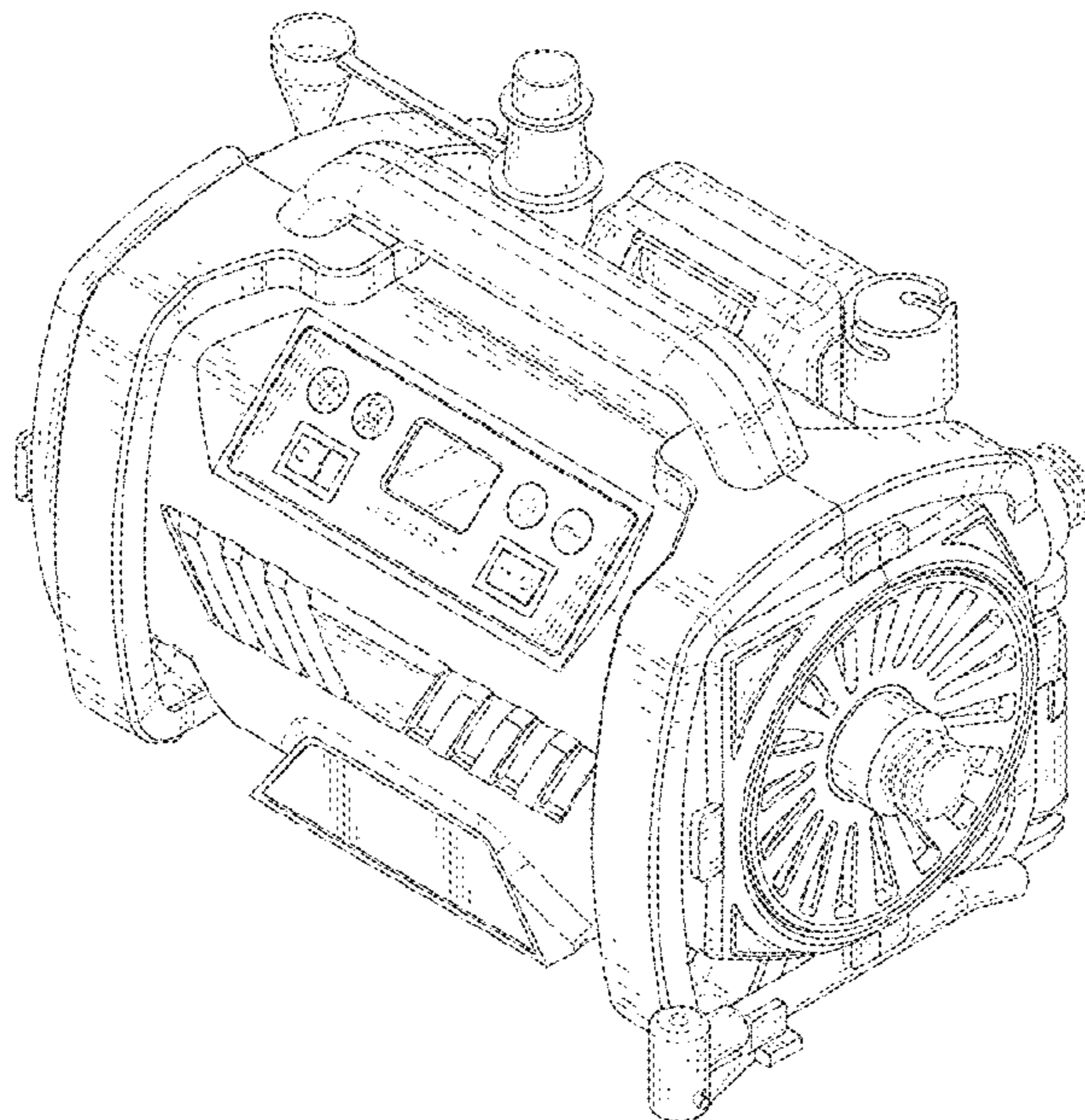
**CLAIM**

The ornamental design for a portable tire inflator, as shown and described.

**DESCRIPTION**

FIG. 1 is a front and top perspective view of a portable tire inflator, showing my new design;  
FIG. 2 is a rear and bottom perspective view thereof;  
FIG. 3 is a front elevation view thereof;  
FIG. 4 is a rear elevation view thereof;  
FIG. 5 is a left side elevation view thereof;  
FIG. 6 is a right side elevation view thereof;  
FIG. 7 is a top plan view thereof; and,  
FIG. 8 is a bottom plan view thereof.  
The broken lines in the figures illustrate portions of the portable tire inflator that form no part of the claimed design.

**1 Claim, 8 Drawing Sheets**



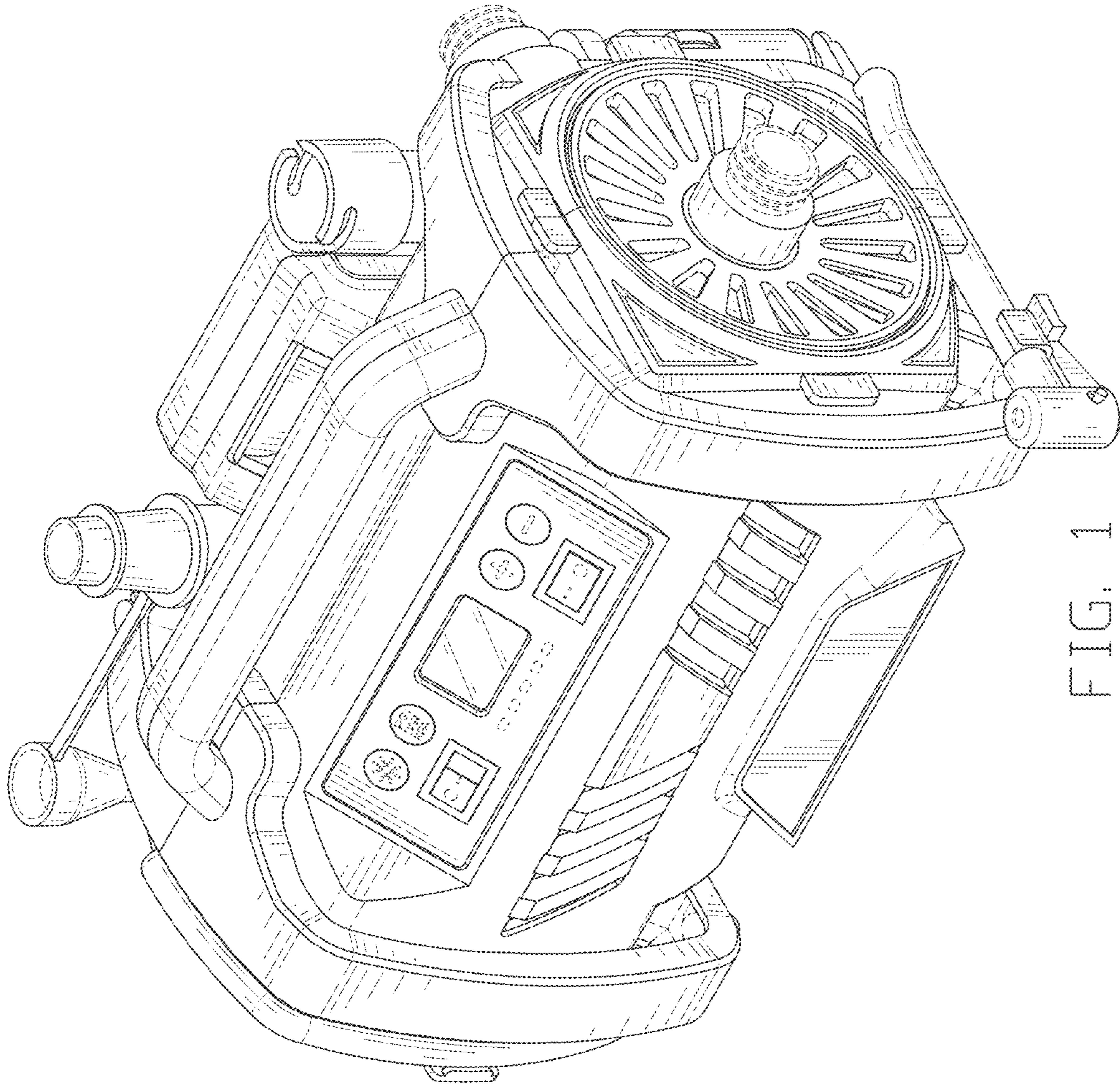


FIG. 1

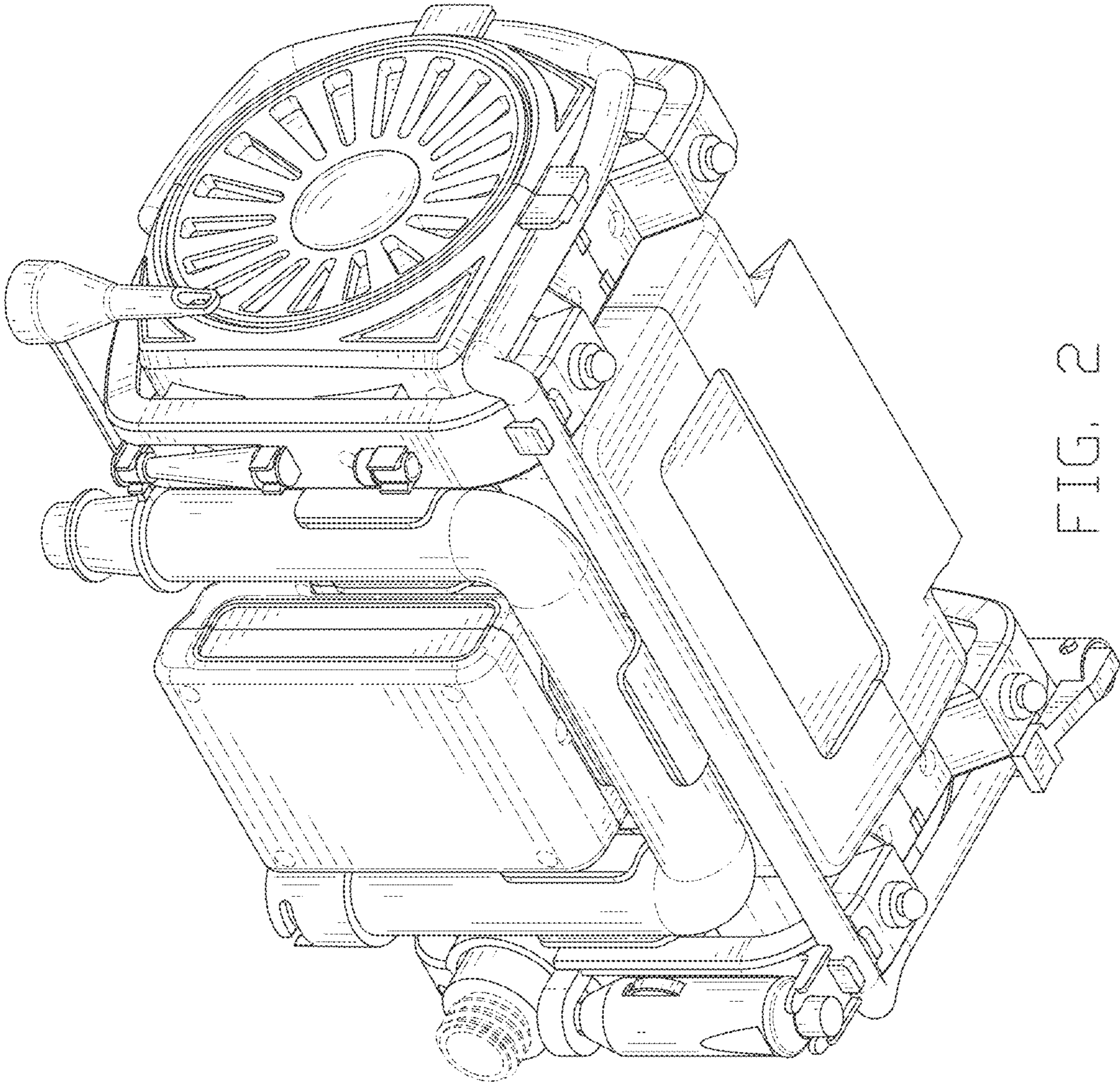


FIG. 2

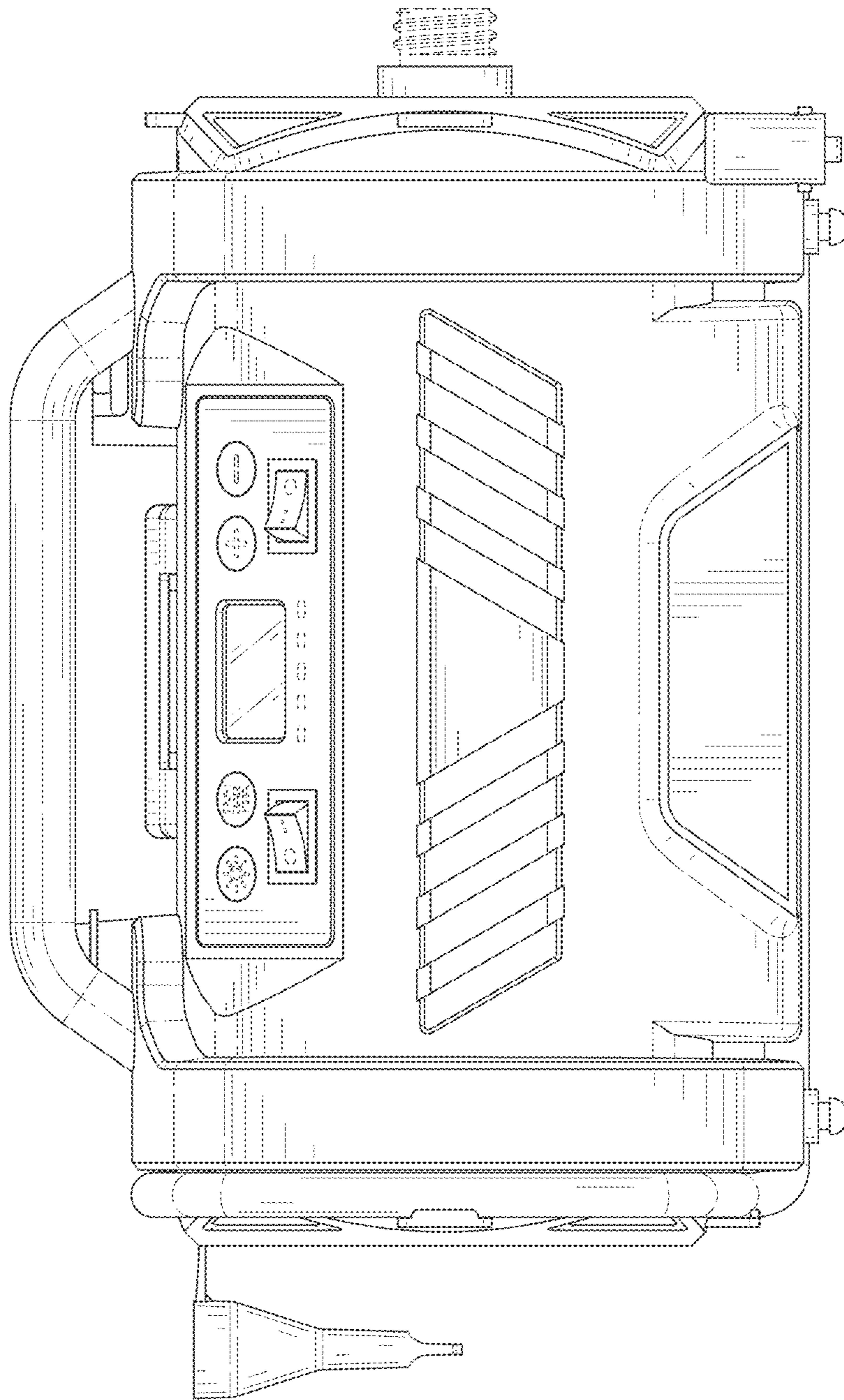


FIG. 3

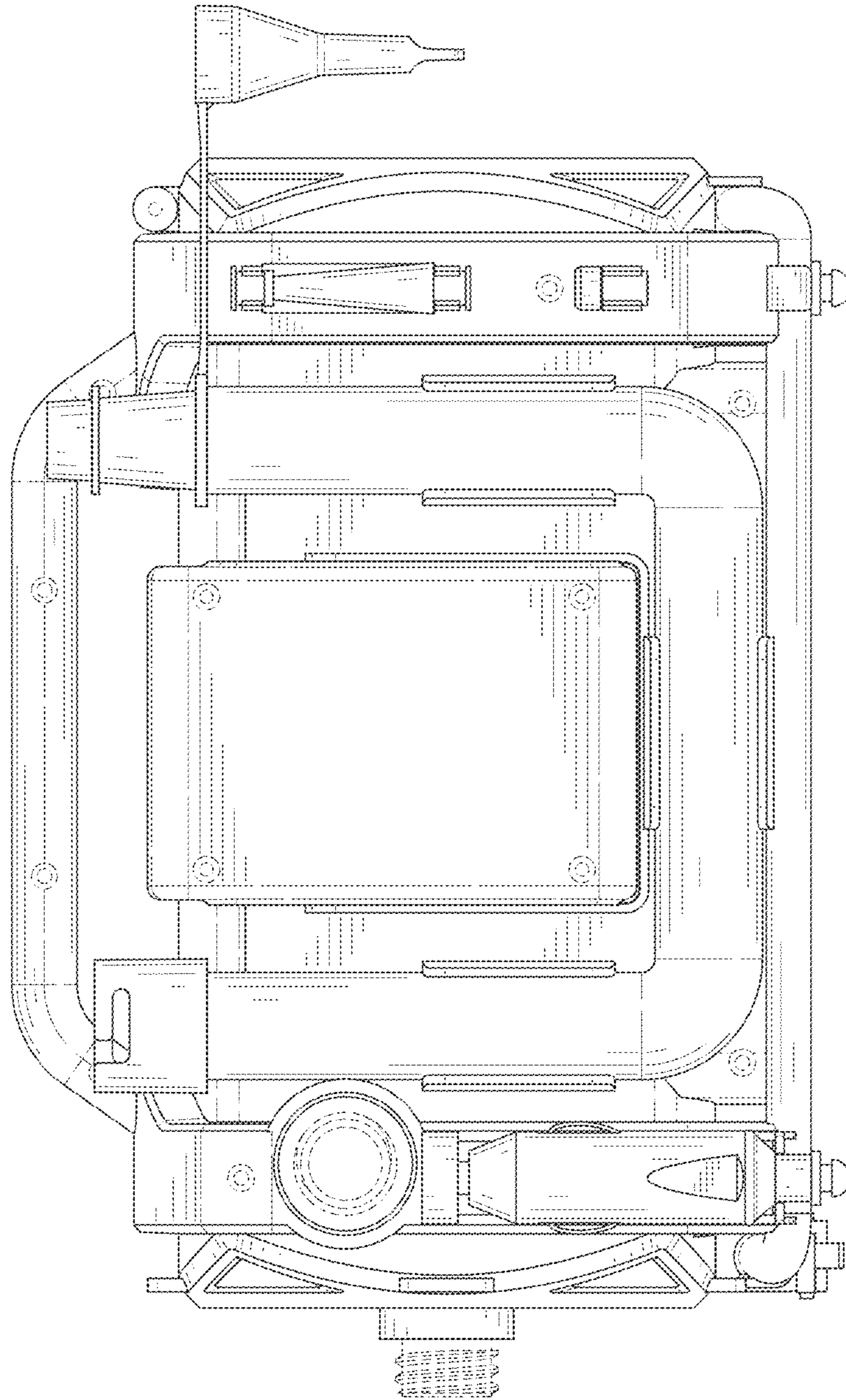


FIG. 4

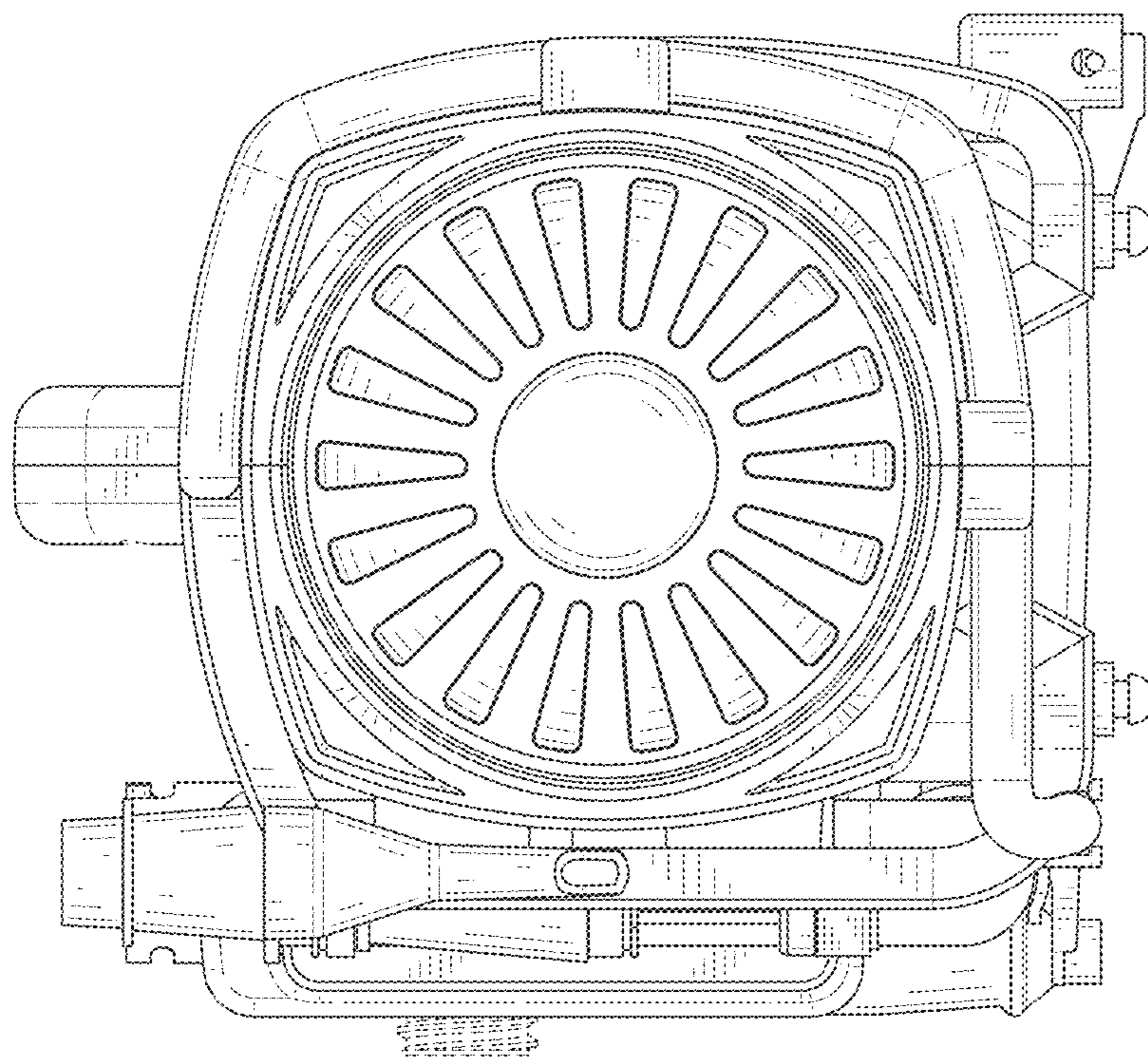


FIG. 5

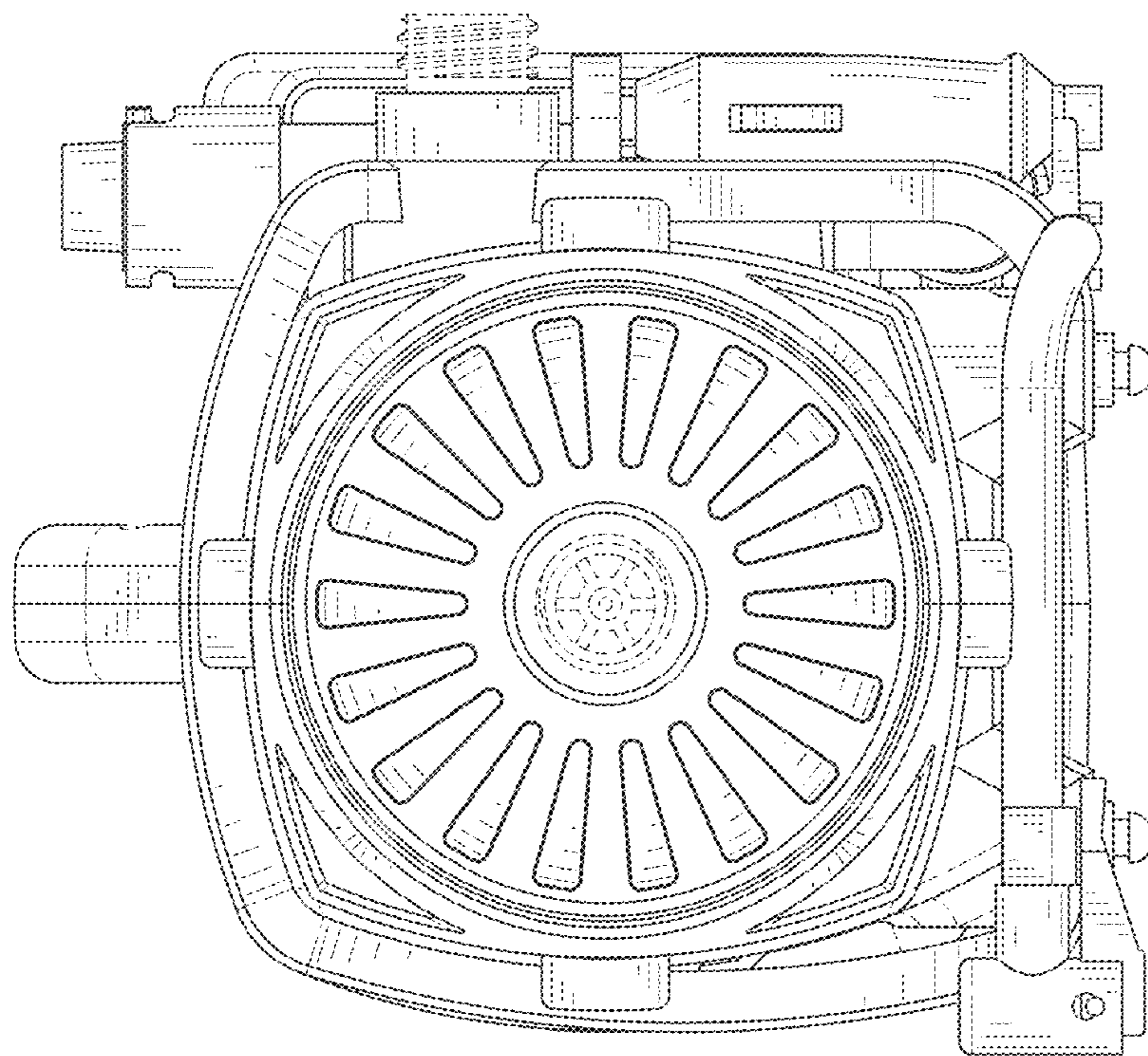


FIG. 6

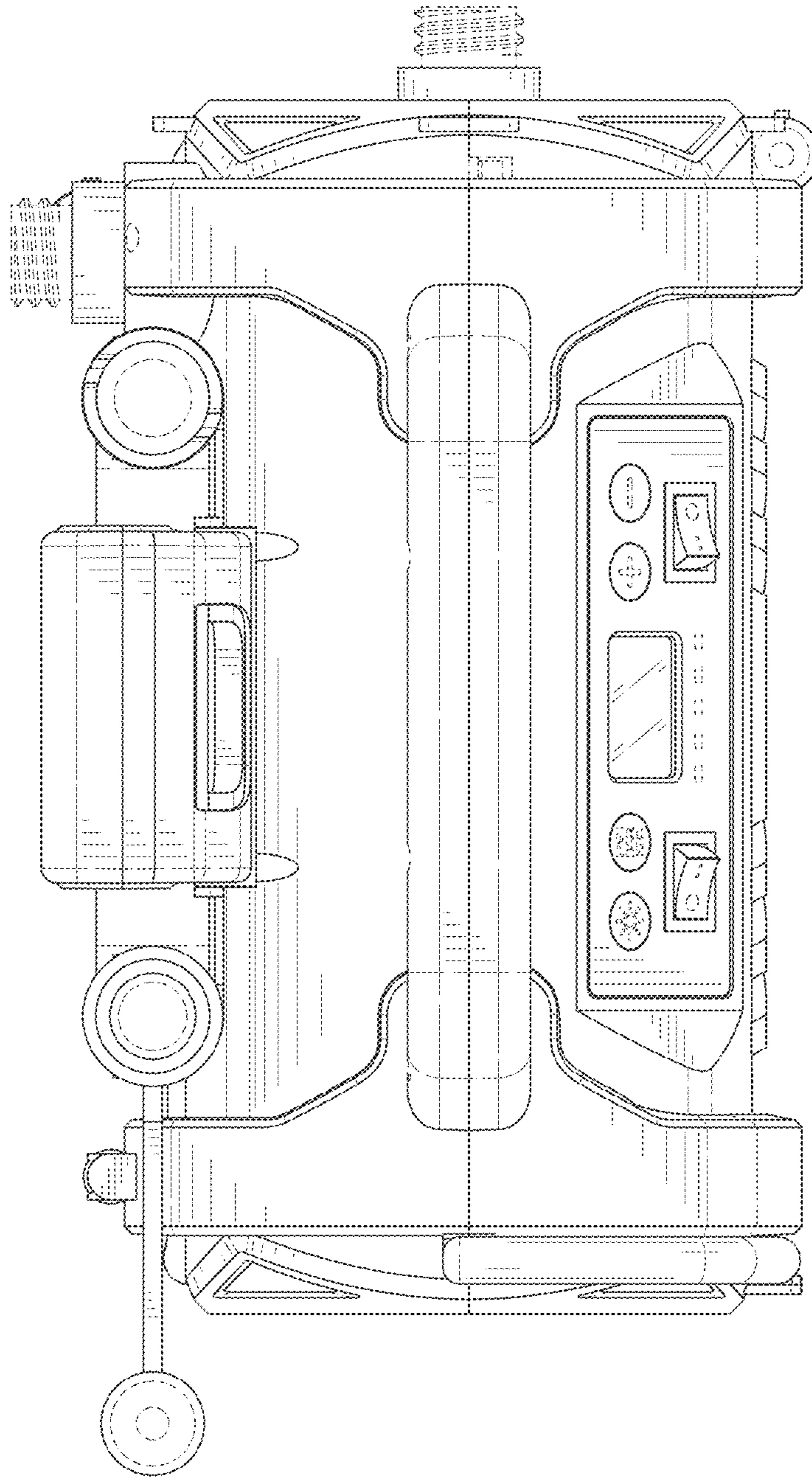


FIG. 7



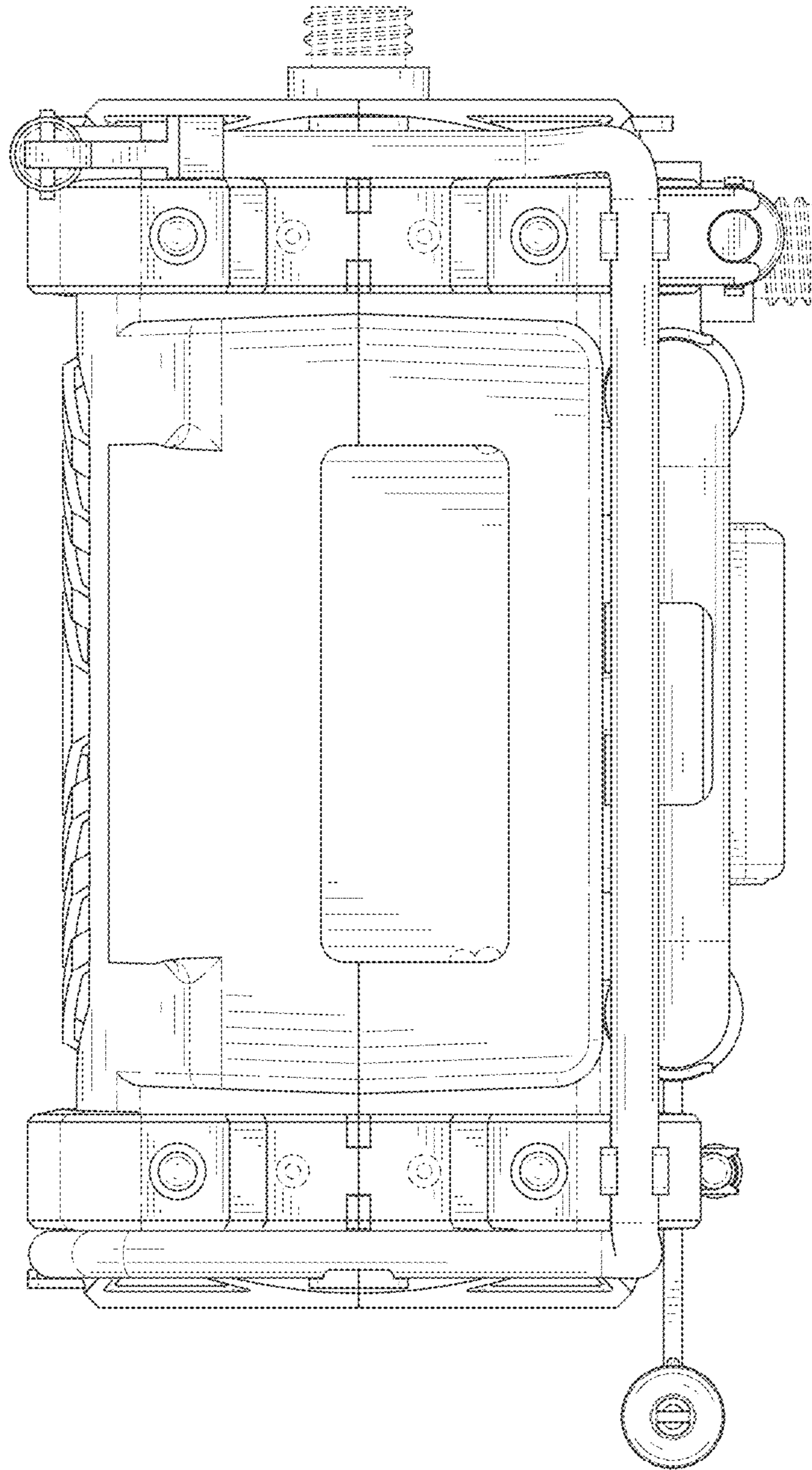


FIG. 8