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(12) **United States Design Patent** (10) **Patent No.:** **US D819,084 S**
Brady et al. (45) **Date of Patent:** **** May 29, 2018**

- (54) **SUPERCHARGER HOUSING HAVING INTEGRATED COOLING FINS**
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- (73) Assignee: **Eaton Corporation**, Cleveland, OH (US)
- (**) Term: **15 Years**
- (21) Appl. No.: **29/604,042**
- (22) Filed: **May 15, 2017**

Related U.S. Application Data

- (63) Continuation-in-part of application No. 29/544,269, filed on Nov. 2, 2015, now Pat. No. Des. 786,934.
- (51) **LOC (11) Cl.** **15-01**
- (52) **U.S. Cl.**
USPC **D15/5**
- (58) **Field of Classification Search**
USPC D15/1-5; 123/559.1; 29/888.02; 418/178, 179, 1, 206.5; 415/9, 173.4, 415/174.4; 464/127, 72, 74, 75
CPC F16D 2500/1068; F16D 3/70; F16D 3/64; F16D 3/68; F16D 3/78; F16D 3/12; F16D 41/20; F16D 3/00; F02B 39/12; F02B 39/04; F02B 37/04; F02B 33/38; F02B 33/00; F04C 29/122; F04C 27/005; F04C 18/126; F16C 1/00

See application file for complete search history.

- (56) **References Cited**
- U.S. PATENT DOCUMENTS
- | | | | |
|----------------|---------|----------------|------------------------------|
| 6,994,603 B2 | 2/2006 | Clark et al. | |
| 7,488,164 B2 * | 2/2009 | Swartzlander | F04C 18/084
418/196 |
| 7,604,467 B2 | 10/2009 | Prior | |
| 7,726,286 B2 | 6/2010 | Gregory et al. | |
| 7,765,993 B2 | 8/2010 | Wu et al. | |
- (Continued)

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(57) **CLAIM**

The ornamental design for a supercharger housing having integrated cooling fins, as shown and described.

DESCRIPTION

FIG. 1 is a bottom perspective view of a supercharger housing having integrated cooling fins in accordance with the present teachings.

FIG. 2 is a top perspective view of the supercharger housing having integrated cooling fins of FIG. 1.

FIG. 3 is a bottom view of the supercharger housing having integrated cooling fins of FIG. 1.

FIG. 4 is a top view of the supercharger housing having integrated cooling fins of FIG. 1.

FIG. 5 is a first side view of the supercharger housing having integrated cooling fins of FIG. 1.

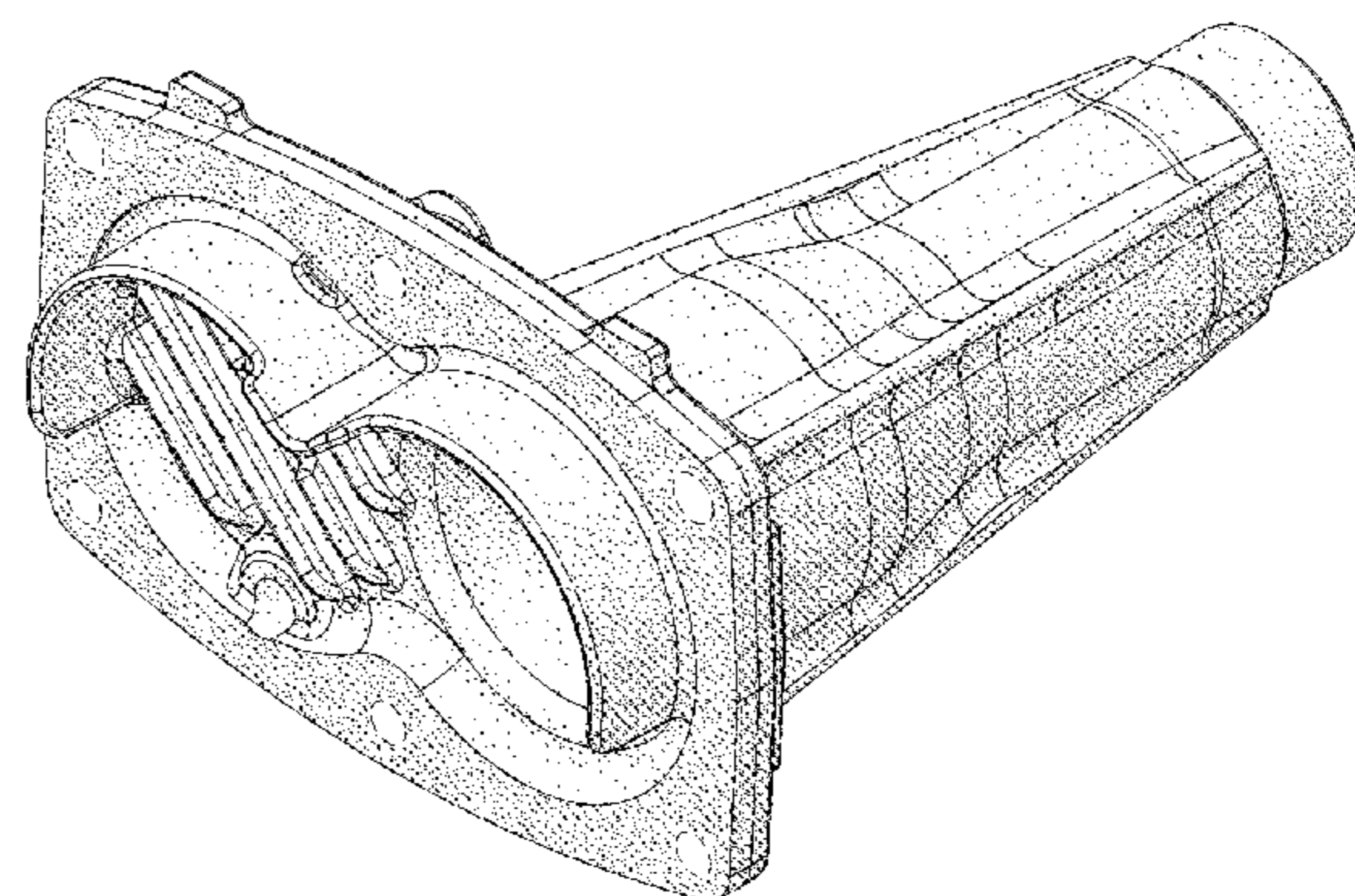
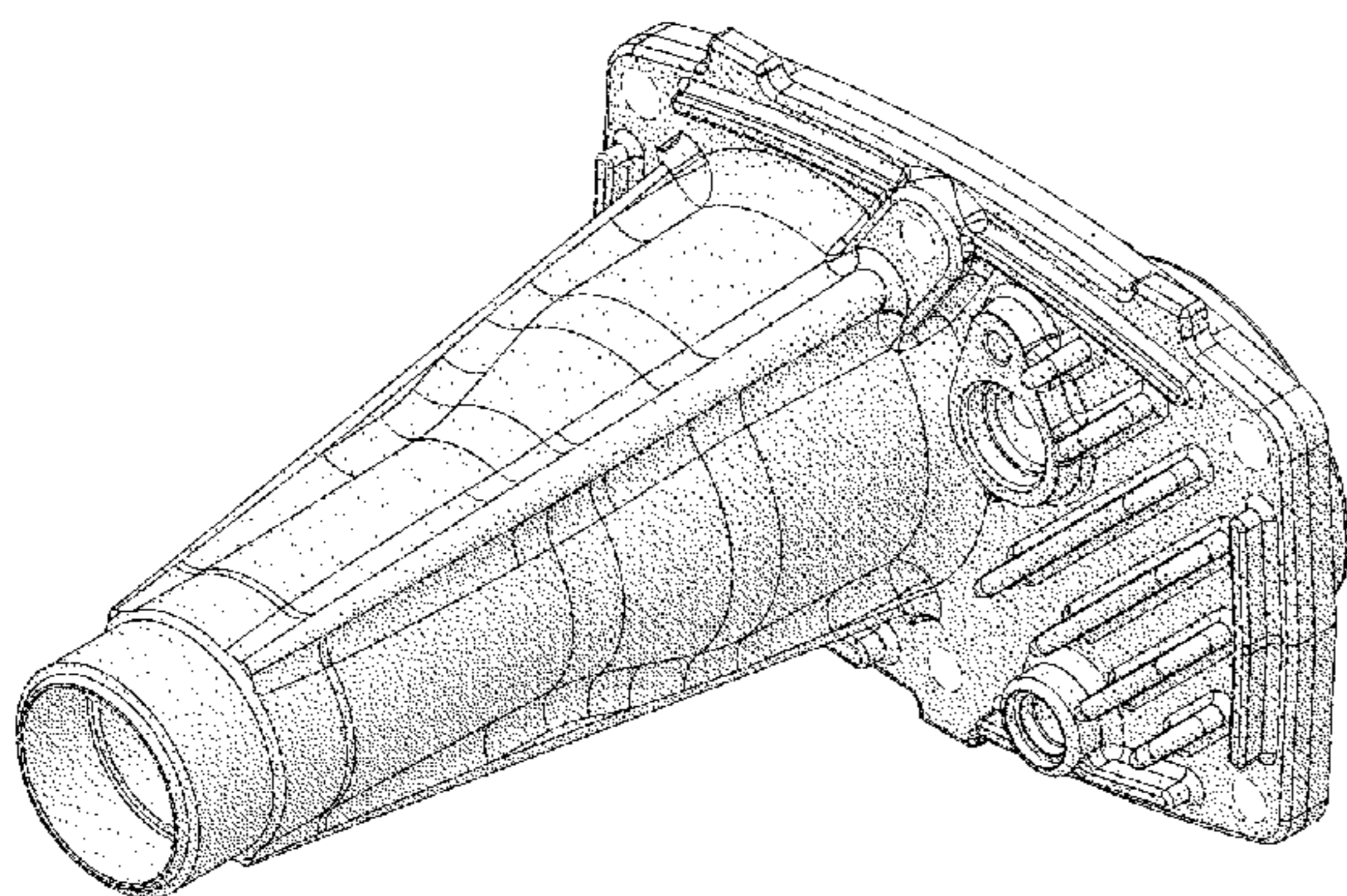
FIG. 6 is a second side view of the supercharger housing having integrated cooling fins of FIG. 1.

FIG. 7 is front view of the supercharger housing having integrated cooling fins of FIG. 1; and,

FIG. 8 is a rear view of the supercharger housing having integrated cooling fins of FIG. 1.

The broken line showing portions of the supercharger housing having integrated cooling fins form no part of the claimed design.

1 Claim, 3 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

8,464,697	B2	6/2013	Ouwenga et al.	
8,701,635	B2	4/2014	Simons et al.	
D718,043	S	11/2014	Hamburger	
D732,081	S	6/2015	Northrop et al.	
9,086,012	B2 *	7/2015	Creager	F02B 39/12
9,617,998	B2 *	4/2017	Knutsson	F04C 29/065
9,822,781	B2 *	11/2017	Swartzlander	F04C 29/12
2004/0208770	A1	10/2004	Prior	
2006/0263230	A1	11/2006	Swartzlander	
2007/0107704	A1	5/2007	Billings et al.	
2008/0271719	A1	11/2008	Prior	
2008/0292452	A1	11/2008	Prior et al.	
2010/0086402	A1	4/2010	Ouwenga et al.	
2010/0108040	A1	5/2010	Simons et al.	
2011/0150671	A1	6/2011	Ouwenga	
2012/0020824	A1	1/2012	Huang et al.	
2012/0037473	A1	2/2012	Ouwenga	
2014/0017101	A1	1/2014	Staley	
2015/0132171	A1	5/2015	Knutsson et al.	
2015/0252719	A1	9/2015	Pryor et al.	
2016/0003129	A1	1/2016	Swartzlander et al.	
2016/0003249	A1	1/2016	Ouwenga et al.	
2016/0003250	A1	1/2016	McWilliams et al.	
2016/0222876	A1	8/2016	Ouwenga	

* cited by examiner

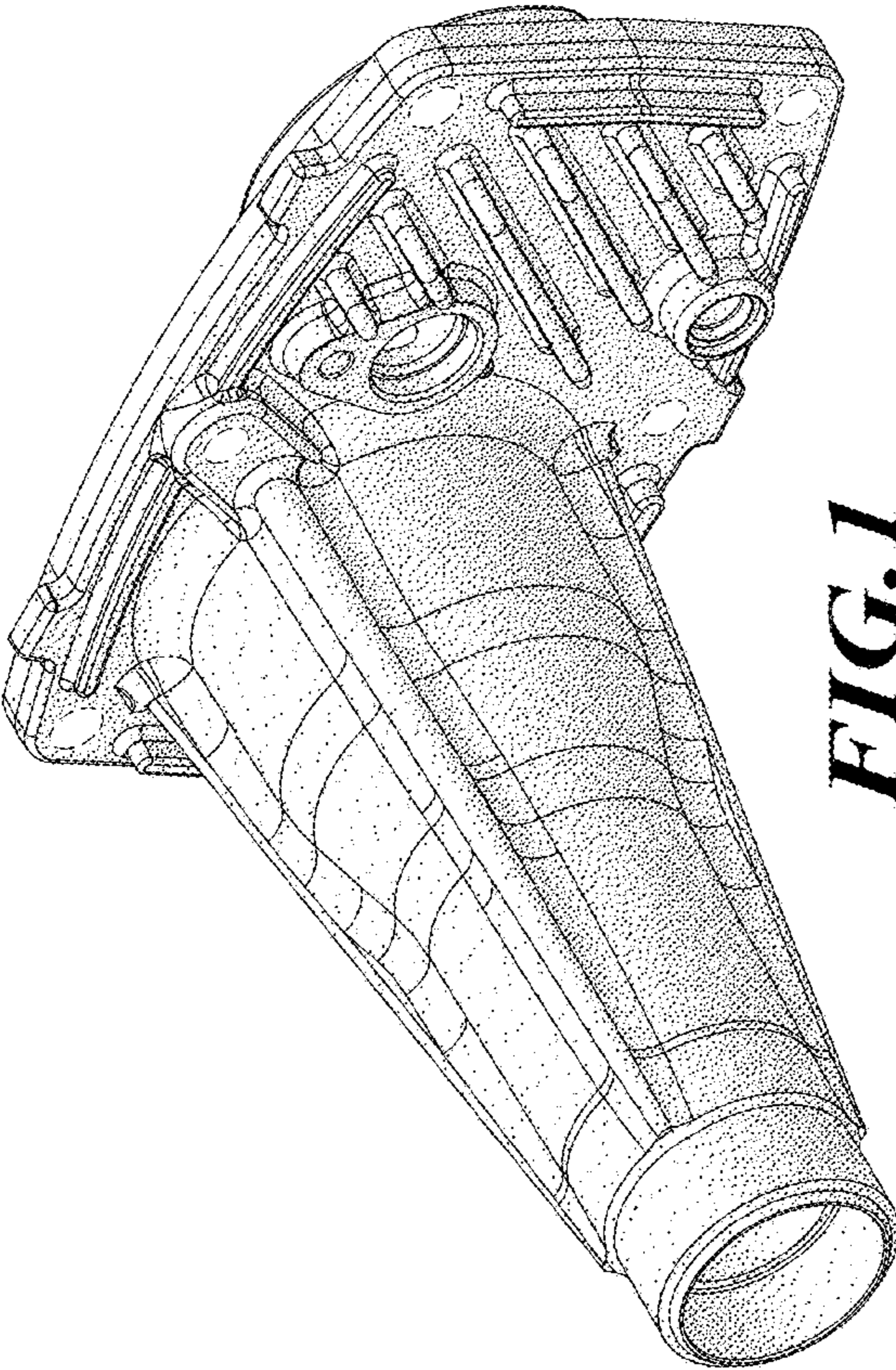


FIG. 1

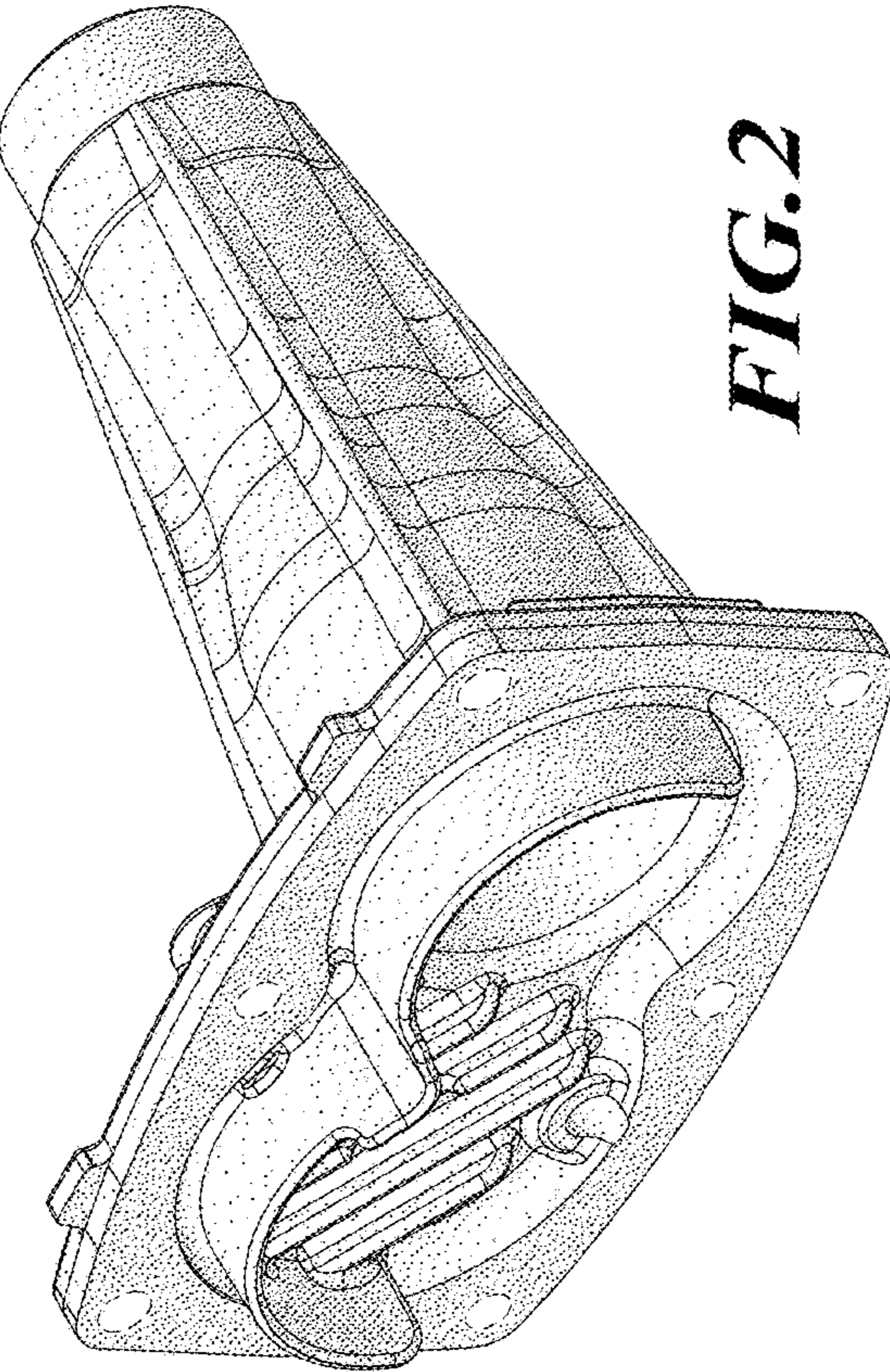


FIG. 2

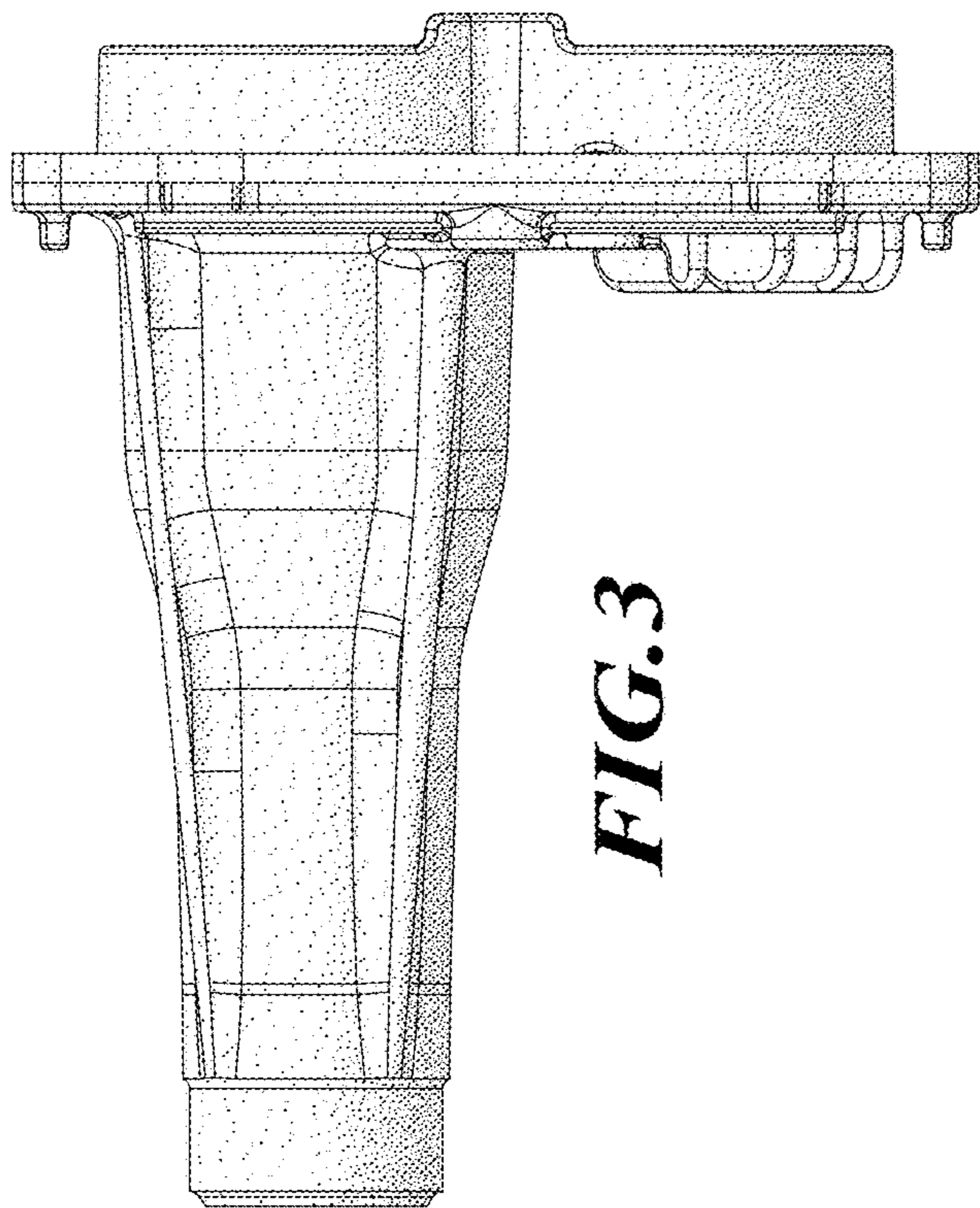


FIG. 3

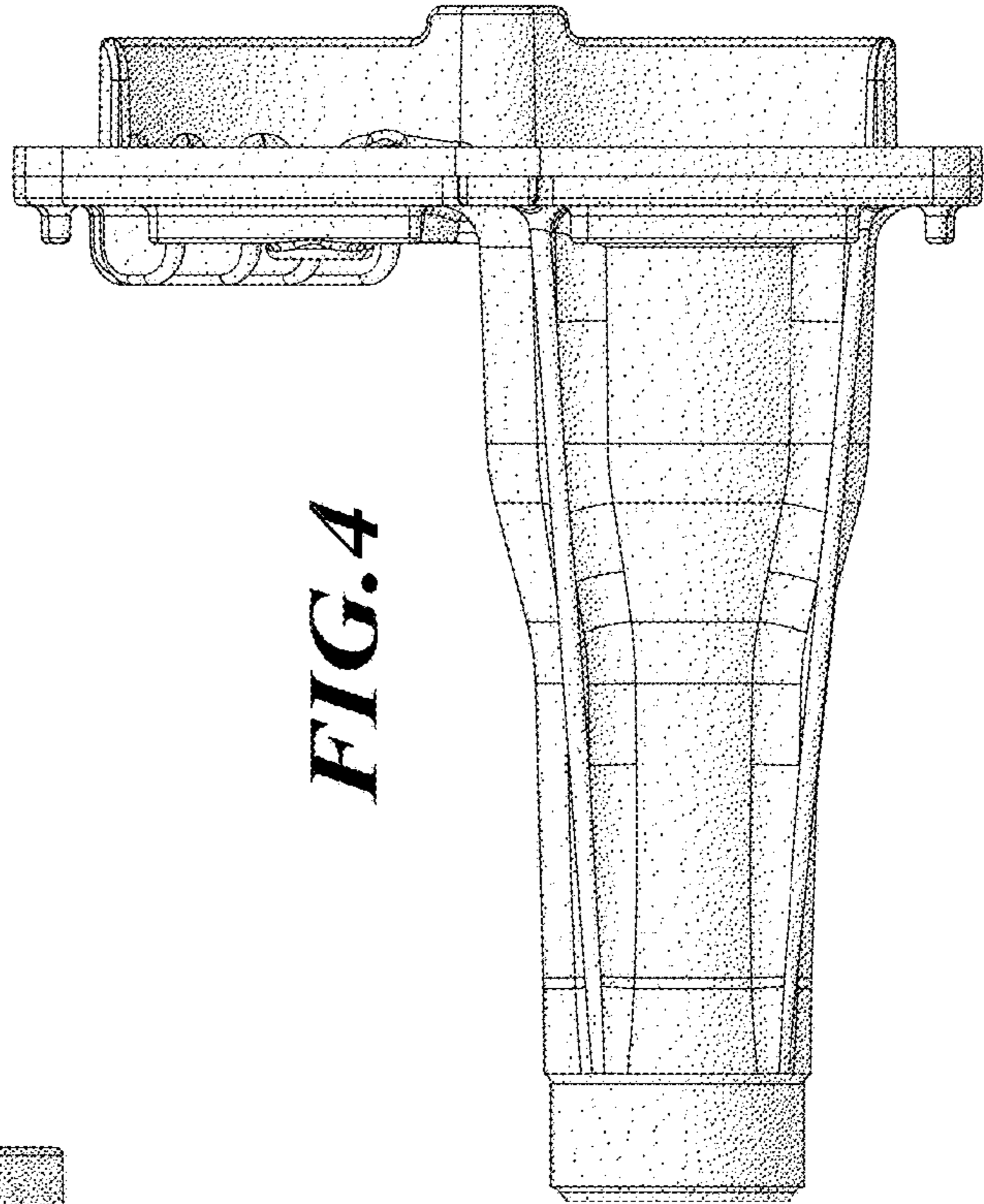


FIG. 4

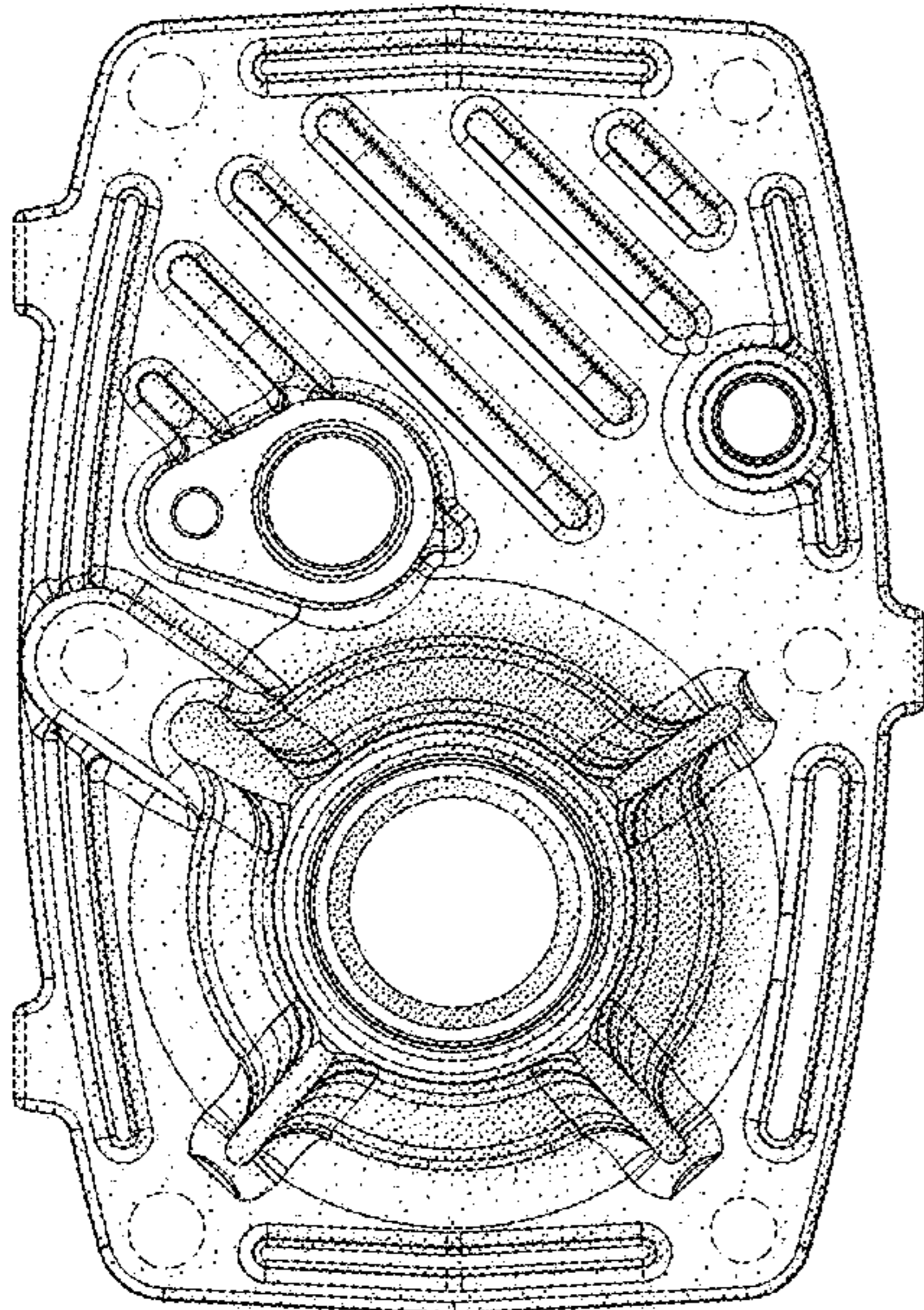


FIG. 7

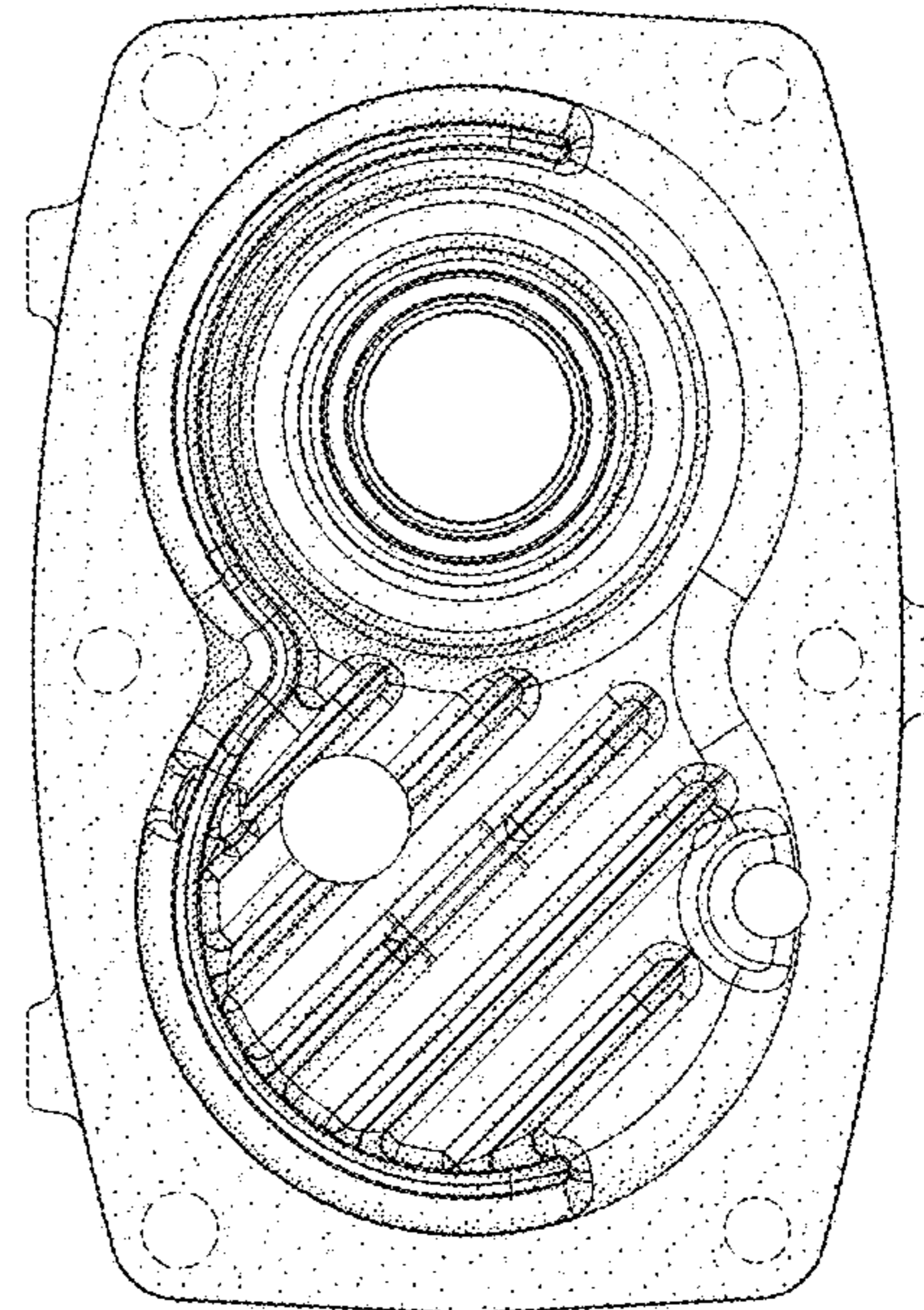


FIG. 8

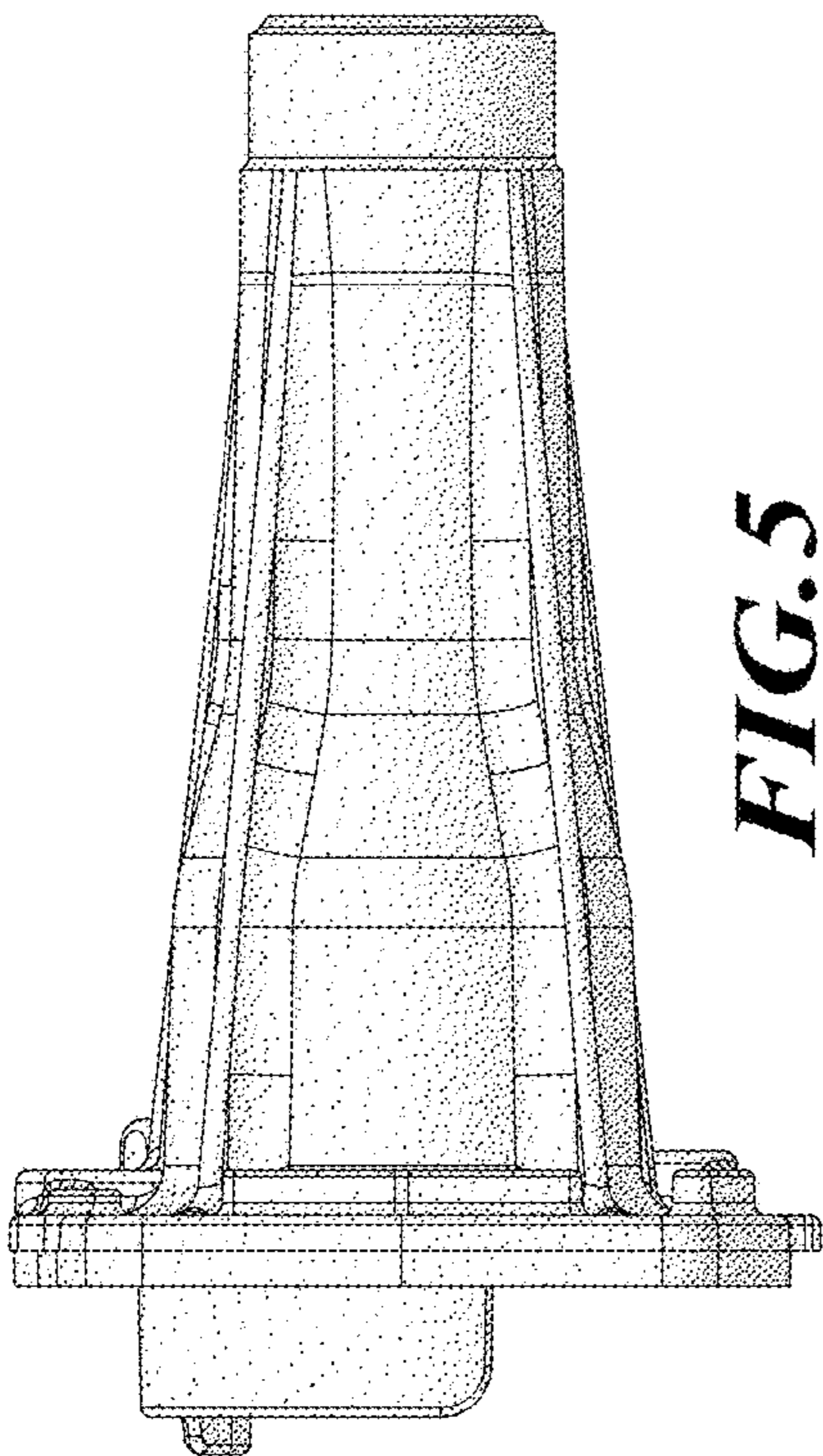


FIG. 5

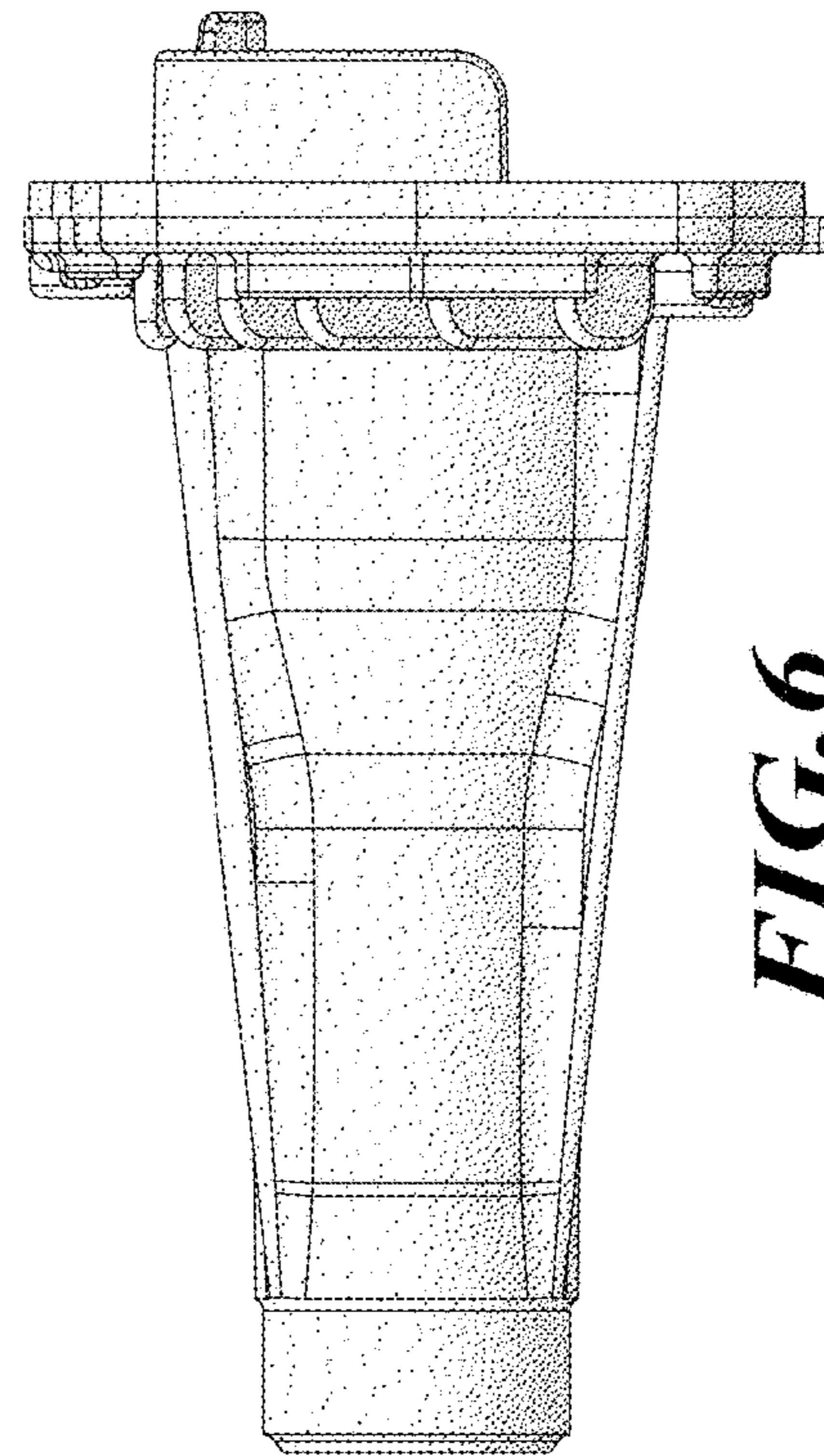


FIG. 6