



US00D798340S

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

(10) **Patent No.:** **US D798,340 S**

(45) **Date of Patent:** **** Sep. 26, 2017**

- (54) **HYDRAULIC EXCAVATOR**
- (71) Applicant: **Hitachi Construction Machinery Co., Ltd.**, Bunkyo-ku, Tokyo (JP)
- (72) Inventors: **Shigehisa Hagura**, Tokyo (JP); **Tomoyuki Miyata**, Tokyo (JP); **Kazuhiko Hiraoka**, Tokyo (JP); **Makoto Oota**, Tsuchiura (JP); **Shinya Abe**, Tsuchiura (JP)
- (73) Assignee: **Hitachi Construction Machinery Co., Ltd.**, Tokyo (JP)

| | | | | |
|--------------|---------|----------|-------|--------|
| D338,019 S * | 8/1993 | Bhambra | ..... | D15/25 |
| D409,629 S * | 5/1999 | Miyaoka | ..... | D15/25 |
| D437,602 S * | 2/2001 | Hiraoka | ..... | D15/25 |
| D460,975 S * | 7/2002 | Yanagida | ..... | D15/25 |
| D677,703 S * | 3/2013 | Hiraoka | ..... | D15/25 |
| D678,354 S * | 3/2013 | Hiraoka | ..... | D15/25 |
| D681,066 S * | 4/2013 | Saito | ..... | D15/24 |
| D681,689 S * | 5/2013 | Saito | ..... | D15/24 |
| D684,598 S * | 6/2013 | Hagura | ..... | D15/24 |
| D684,599 S * | 6/2013 | Saito | ..... | D15/24 |
| D684,600 S * | 6/2013 | Saito | ..... | D15/24 |
| D692,028 S * | 10/2013 | Hiraoka | ..... | D15/22 |
| D692,029 S * | 10/2013 | Hiraoka | ..... | D15/22 |
| D695,791 S * | 12/2013 | Hagura | ..... | D15/25 |
| D726,779 S * | 4/2015 | Higuchi | ..... | D15/28 |
| D727,977 S * | 4/2015 | Higuchi | ..... | D15/28 |
| D752,112 S * | 3/2016 | Hagura | ..... | D15/24 |

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

(21) Appl. No.: **29/549,680**

(22) Filed: **Dec. 28, 2015**

(30) **Foreign Application Priority Data**

Jun. 29, 2015 (JP) 2015-014274

(51) **LOC (10) Cl.** **12-09**

(52) **U.S. Cl.**
USPC **D15/22**

(58) **Field of Classification Search**
USPC D15/10, 22-26, 28, 30; 180/89.1, 89.12, 180/89.13, 900, 9.1, 9.2, 9.62; 37/379; 414/694, 699, 722-724, 660, 685, 698, 414/719, 743
CPC E02F 3/32; E02F 3/76; E02F 3/40; E02F 9/163
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

| | | | | | |
|---------------|--------|------------|-------|------------|----------|
| 3,807,586 A * | 4/1974 | Holopainen | ..... | B60P 3/42 | 180/14.1 |
| 4,369,989 A * | 1/1983 | Mankey | ..... | E02F 9/085 | 254/422 |

(Continued)

Primary Examiner — Mark Goodwin

(74) *Attorney, Agent, or Firm* — Crowell & Moring LLP

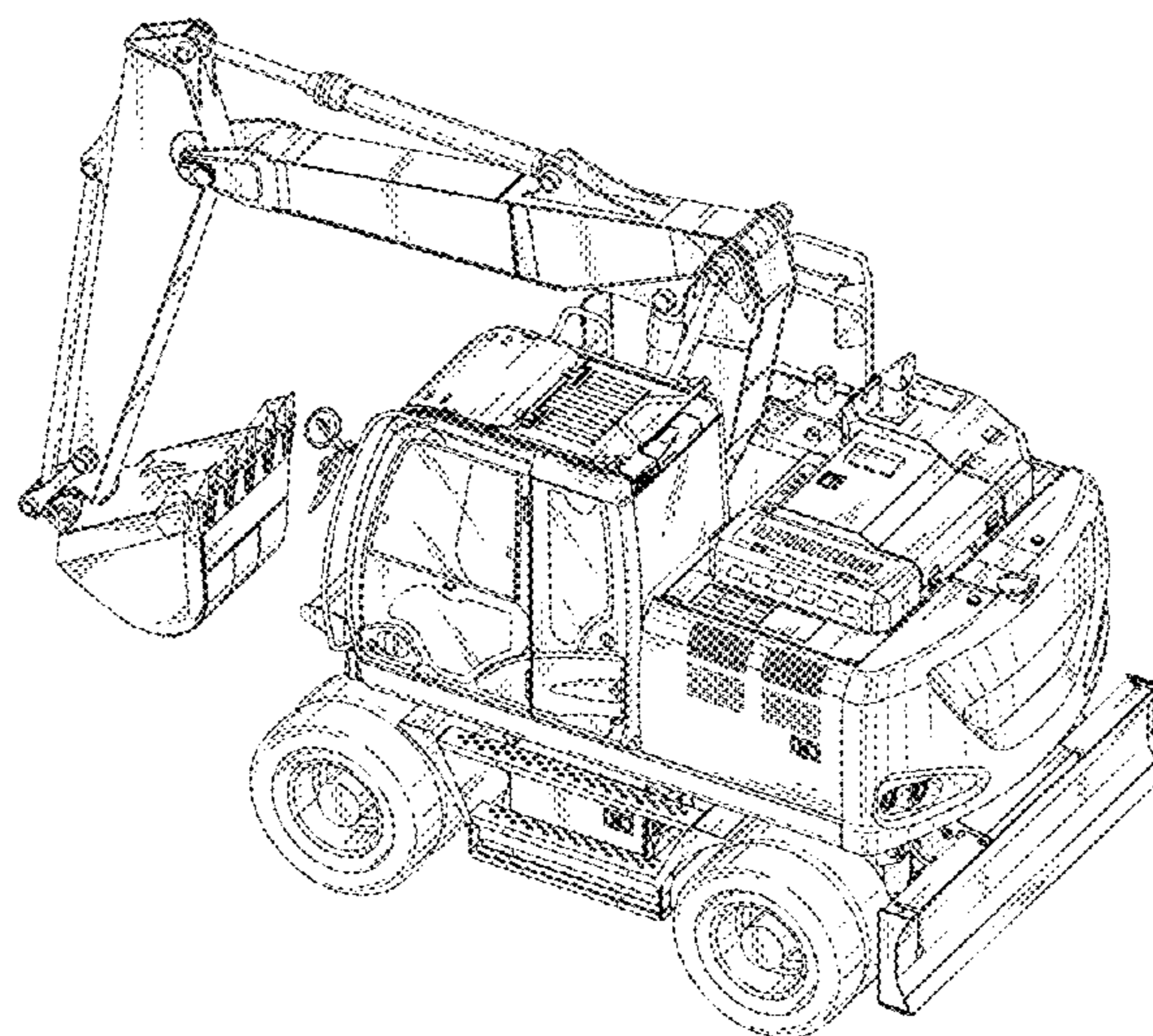
(57) **CLAIM**

The ornamental design for a hydraulic excavator, as shown and described.

DESCRIPTION

FIG. 1 is a front, top and right side perspective view of a hydraulic excavator according to the design;
FIG. 2 is a rear, top and left side perspective view thereof;
FIG. 3 is a front elevational view thereof;
FIG. 4 is a rear elevational view thereof;
FIG. 5 is a left side elevational view thereof;
FIG. 6 is a right side elevational view thereof;
FIG. 7 is a top plan view thereof;
FIG. 8 is a bottom plan view thereof;
FIG. 9 is a partially enlarged view taken along the line A-A in FIG. 6; and,
FIG. 10 is a partially enlarged perspective view taken along the line A-A and B-B in FIGS. 6 and 3.

1 Claim, 8 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D752,113 S * 3/2016 Hagura D15/24
D752,651 S * 3/2016 Hagura D15/24
D759,127 S * 6/2016 Higuchi D15/24

* cited by examiner

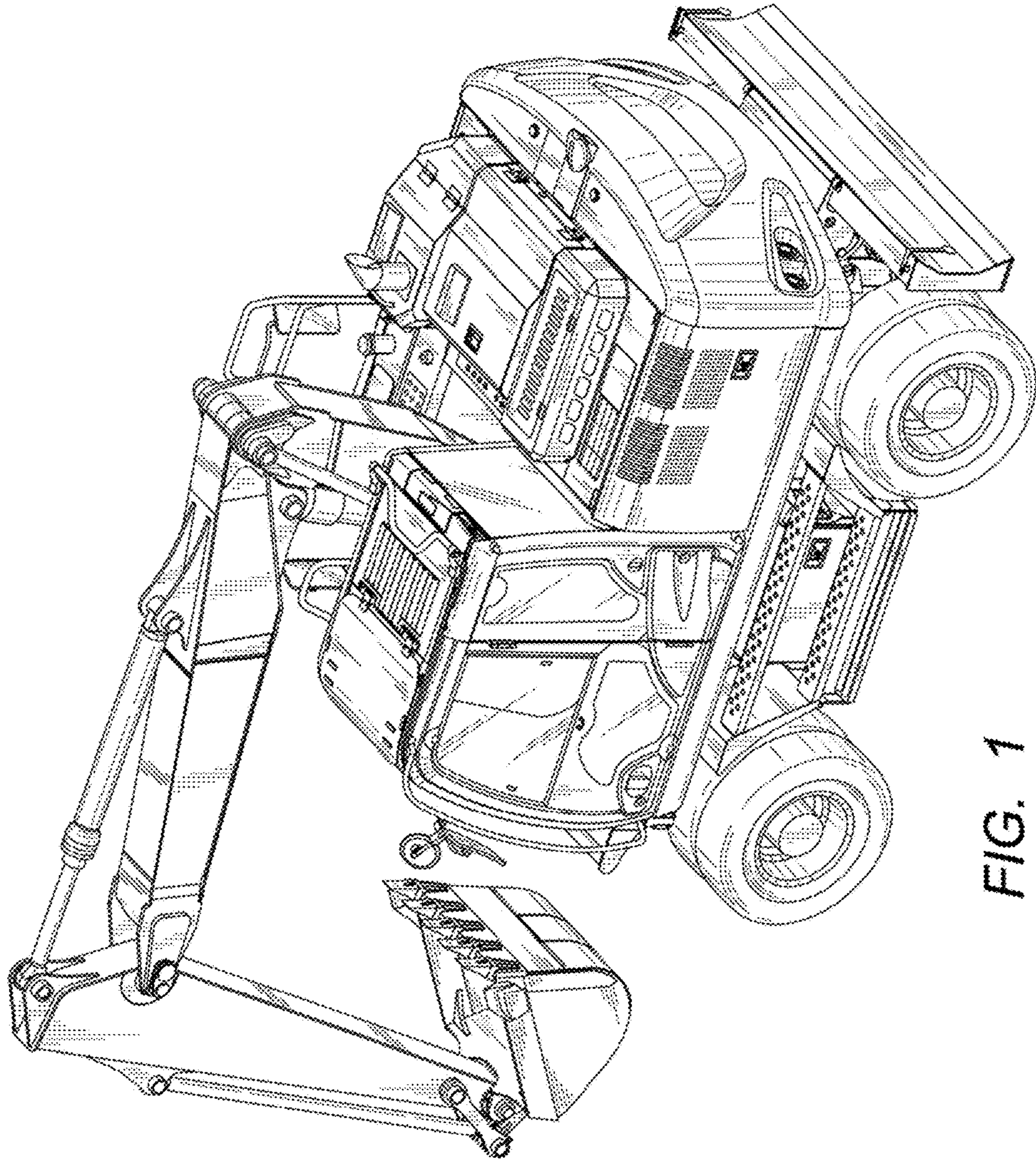


FIG. 1

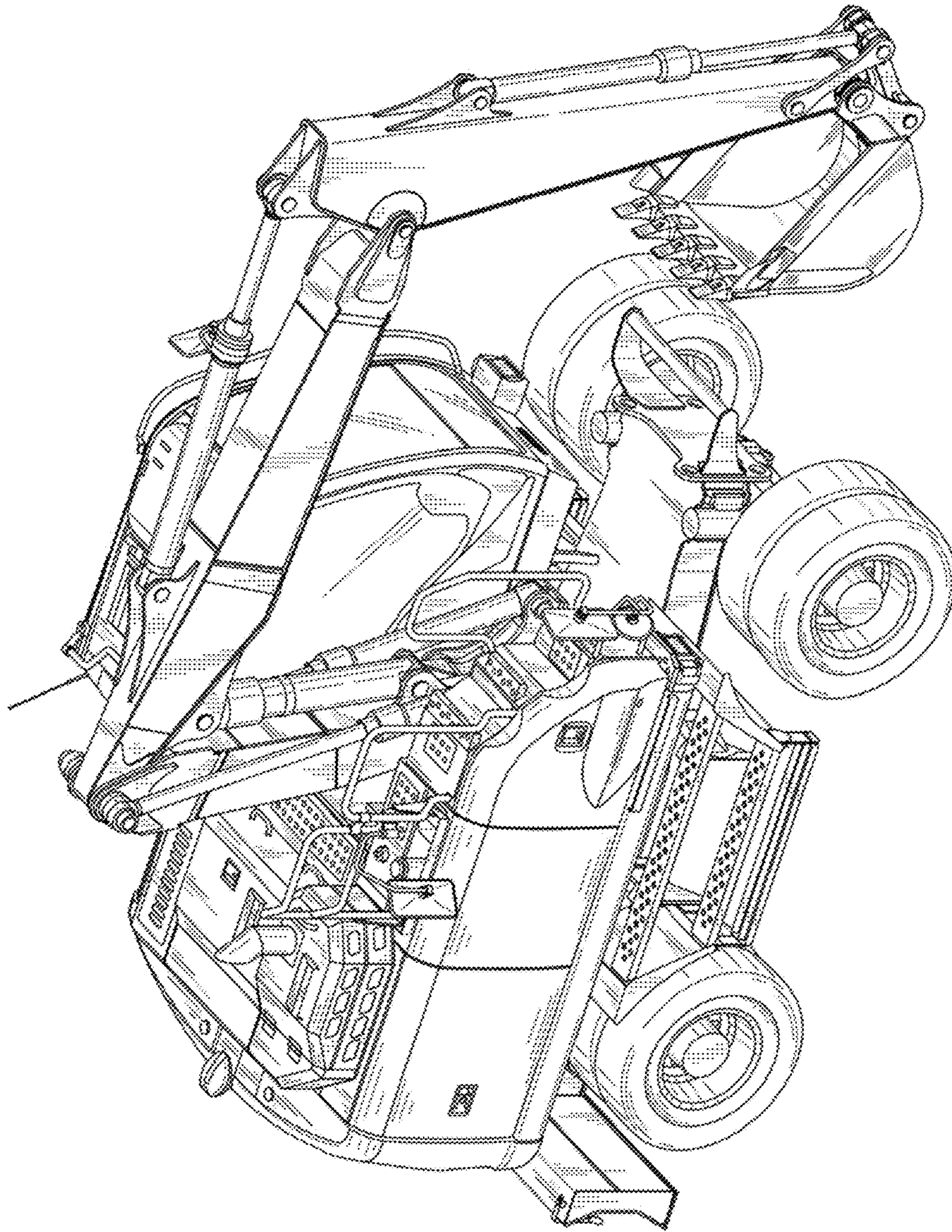


FIG. 2

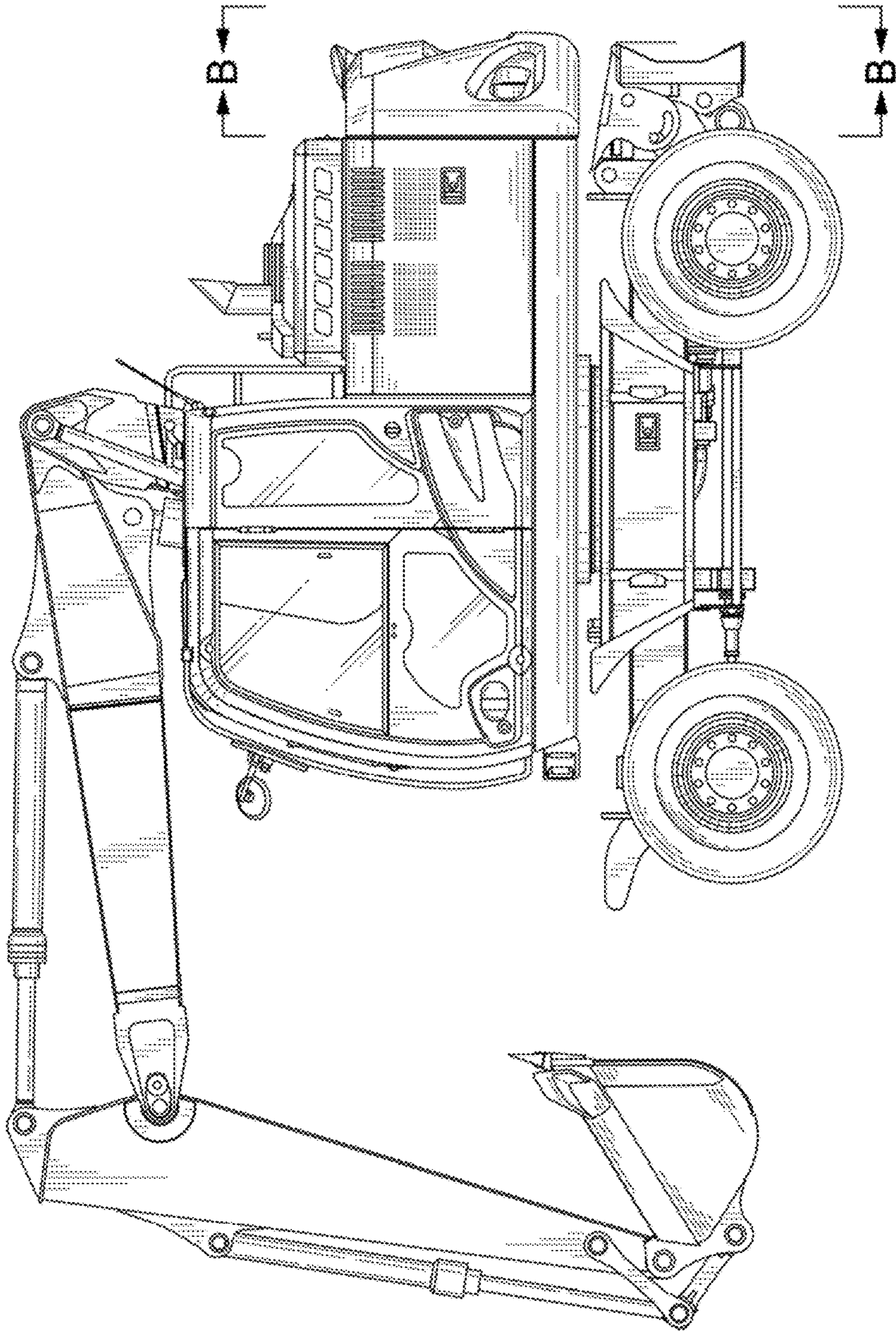


FIG. 3

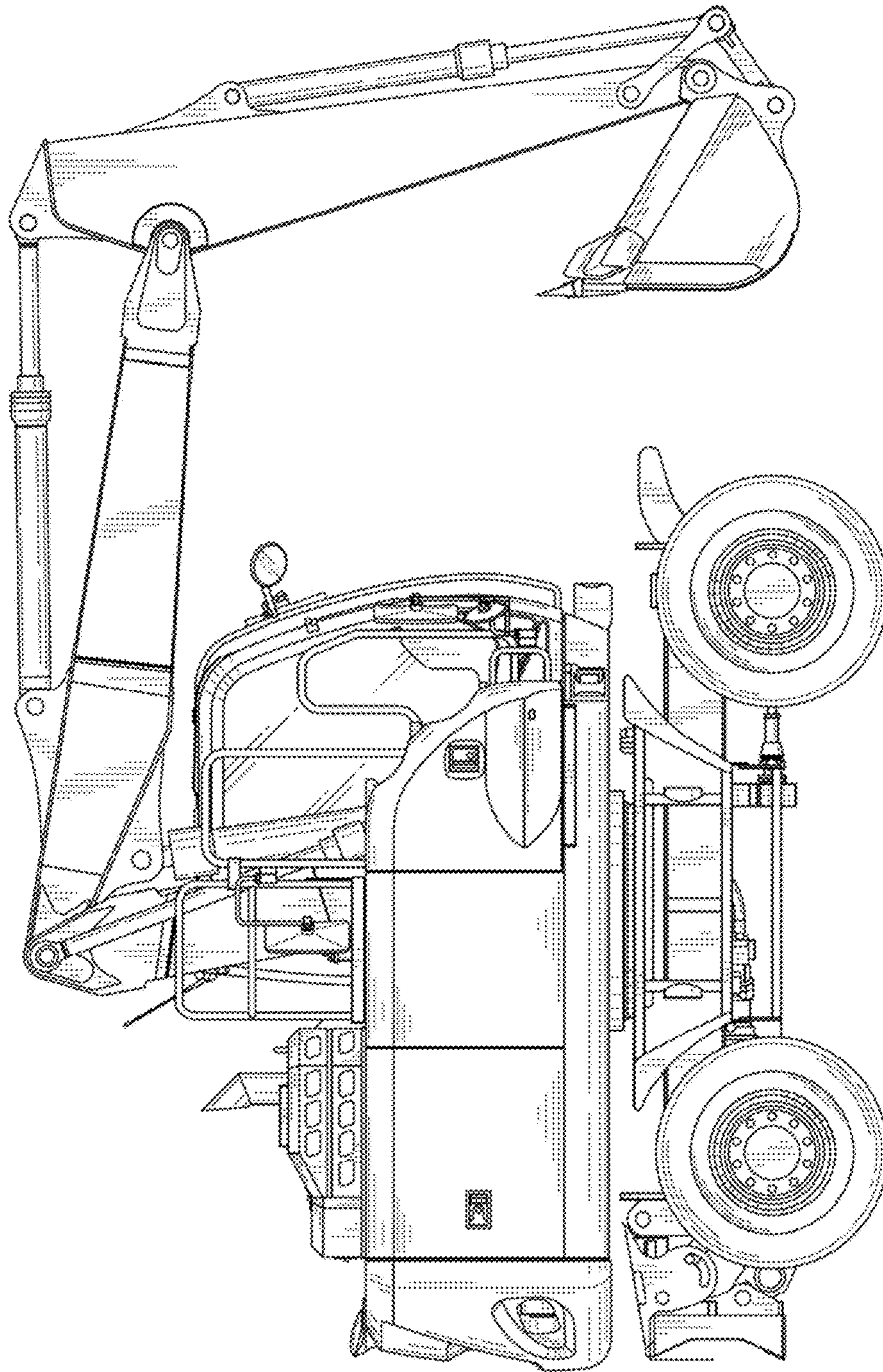


FIG. 4

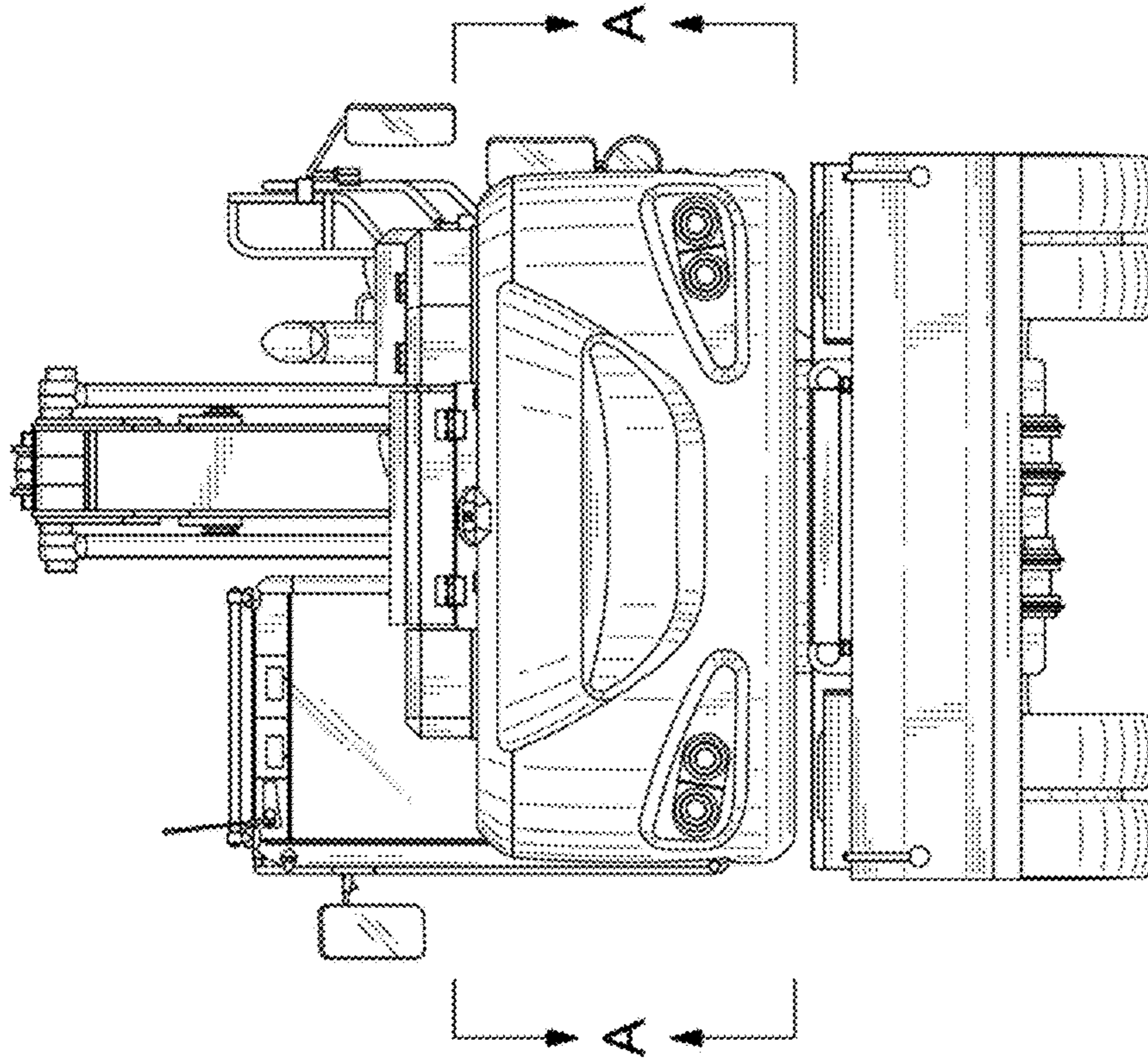


FIG. 6

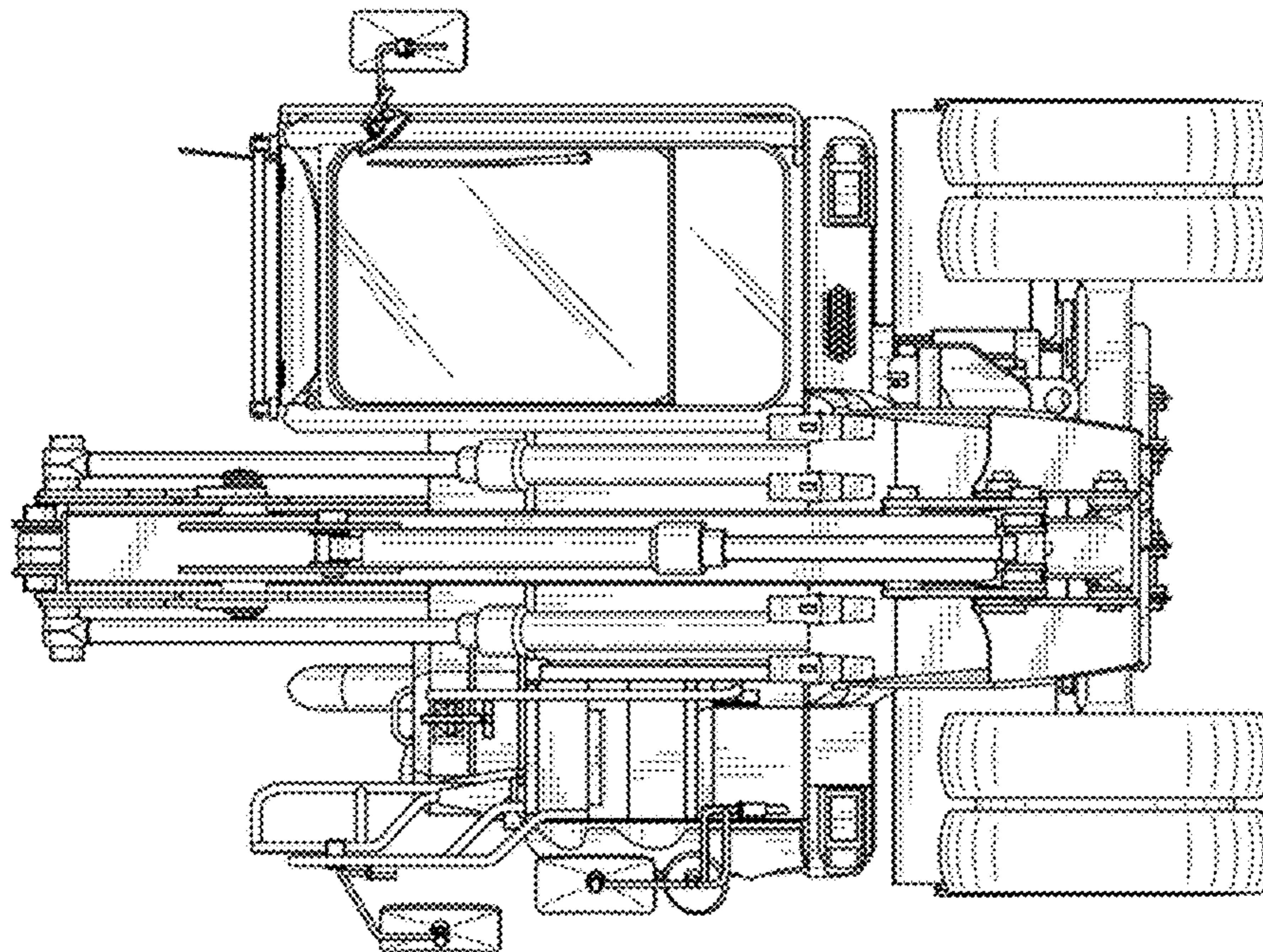


FIG. 5

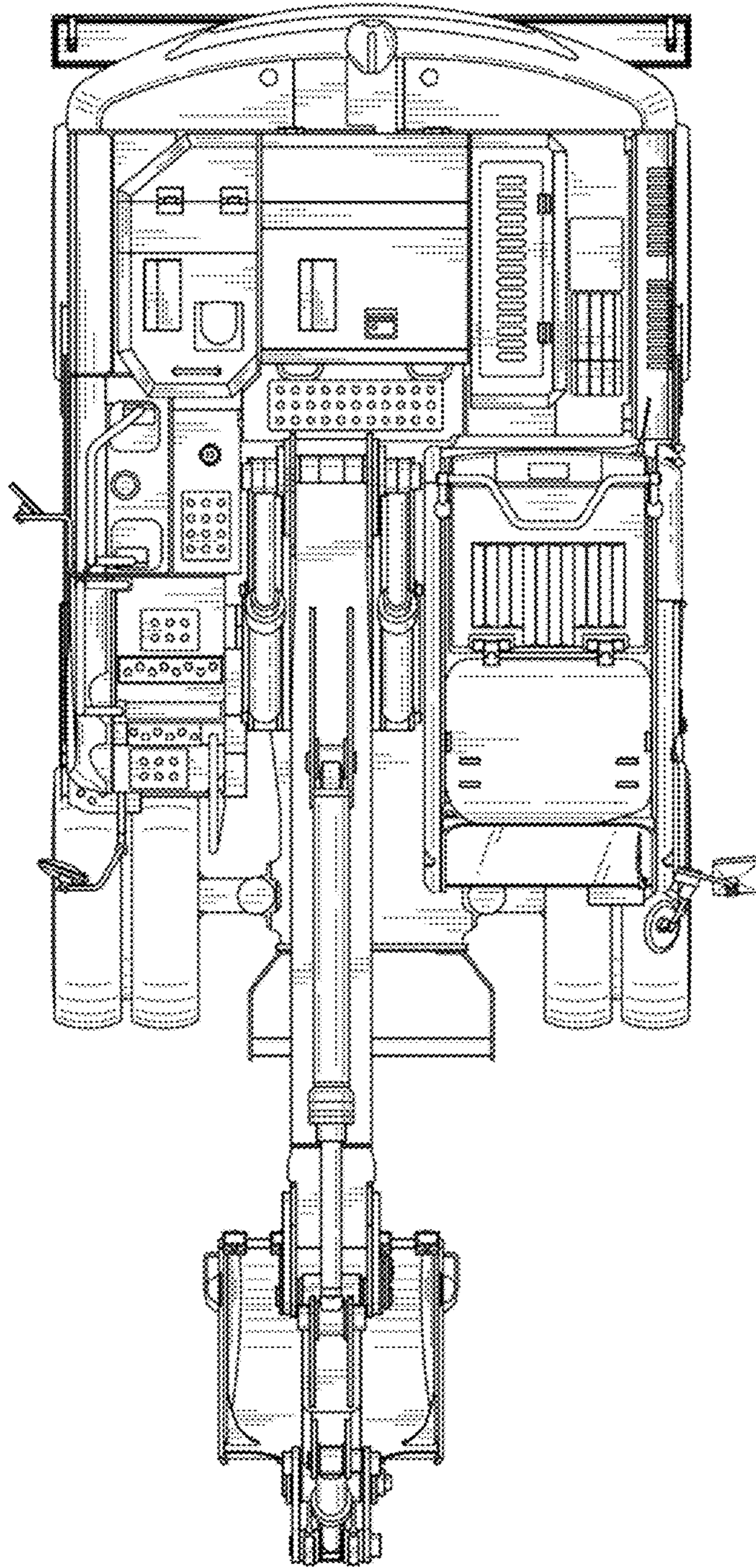


FIG. 7

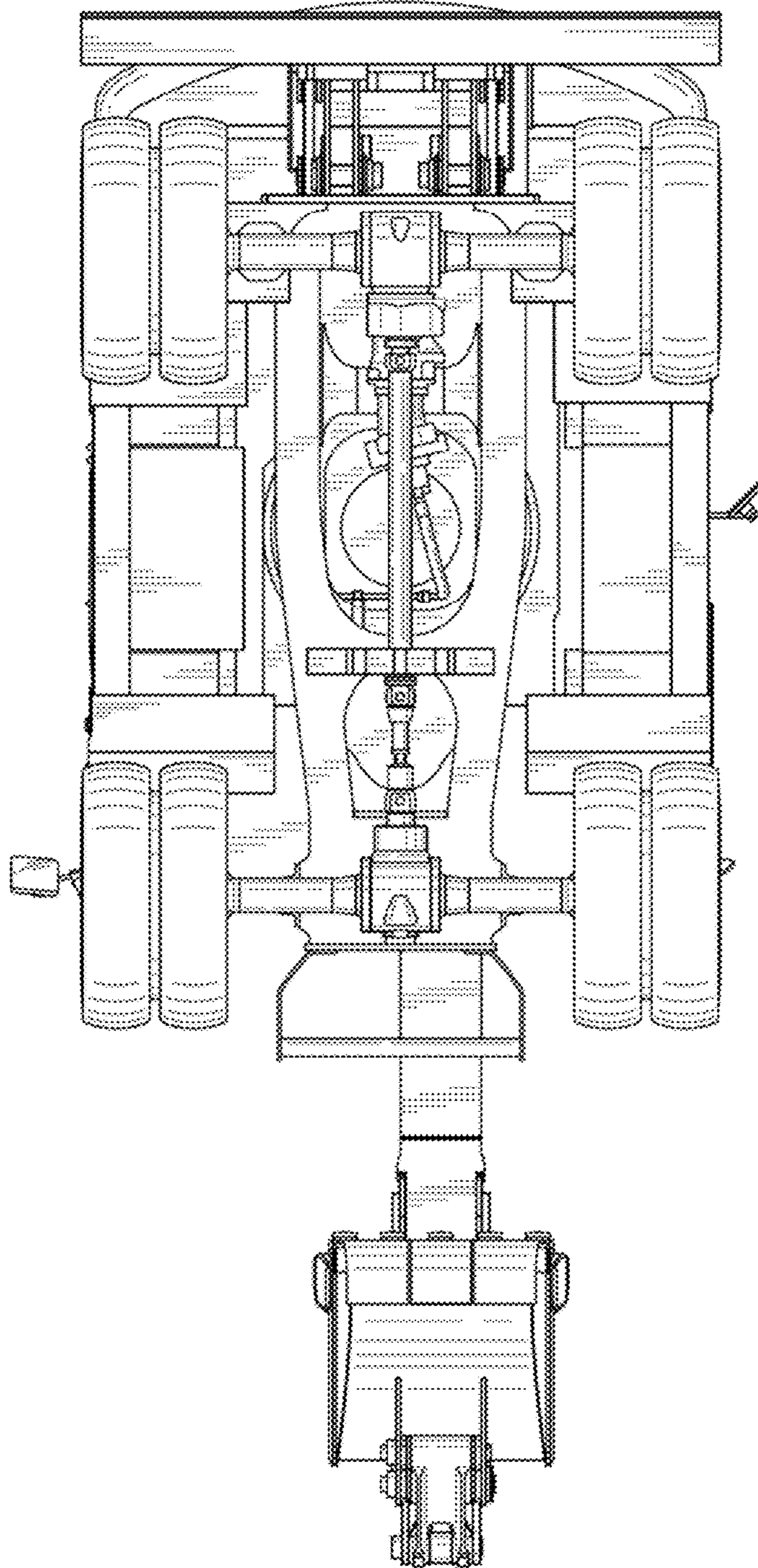


FIG. 8

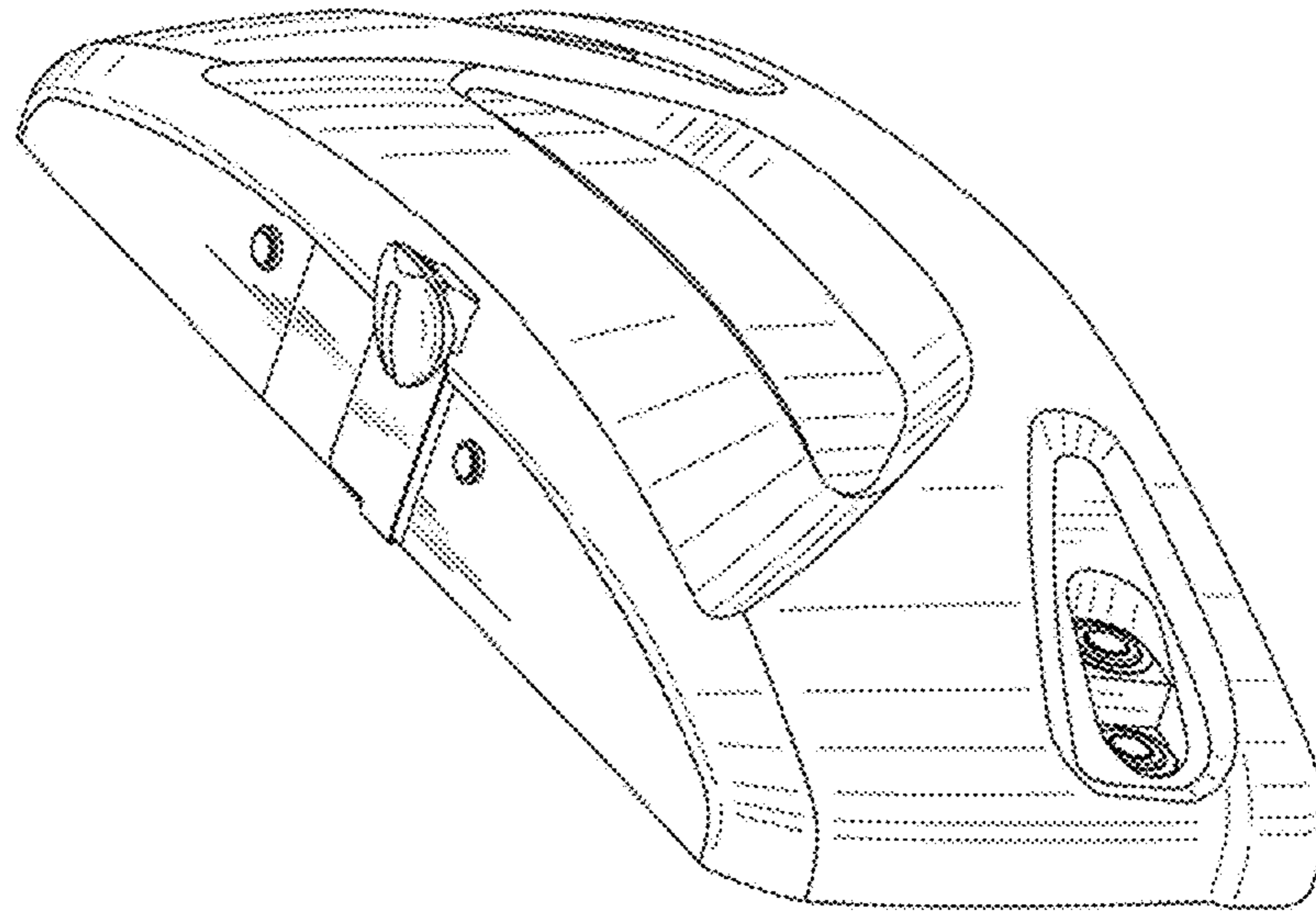


FIG. 10

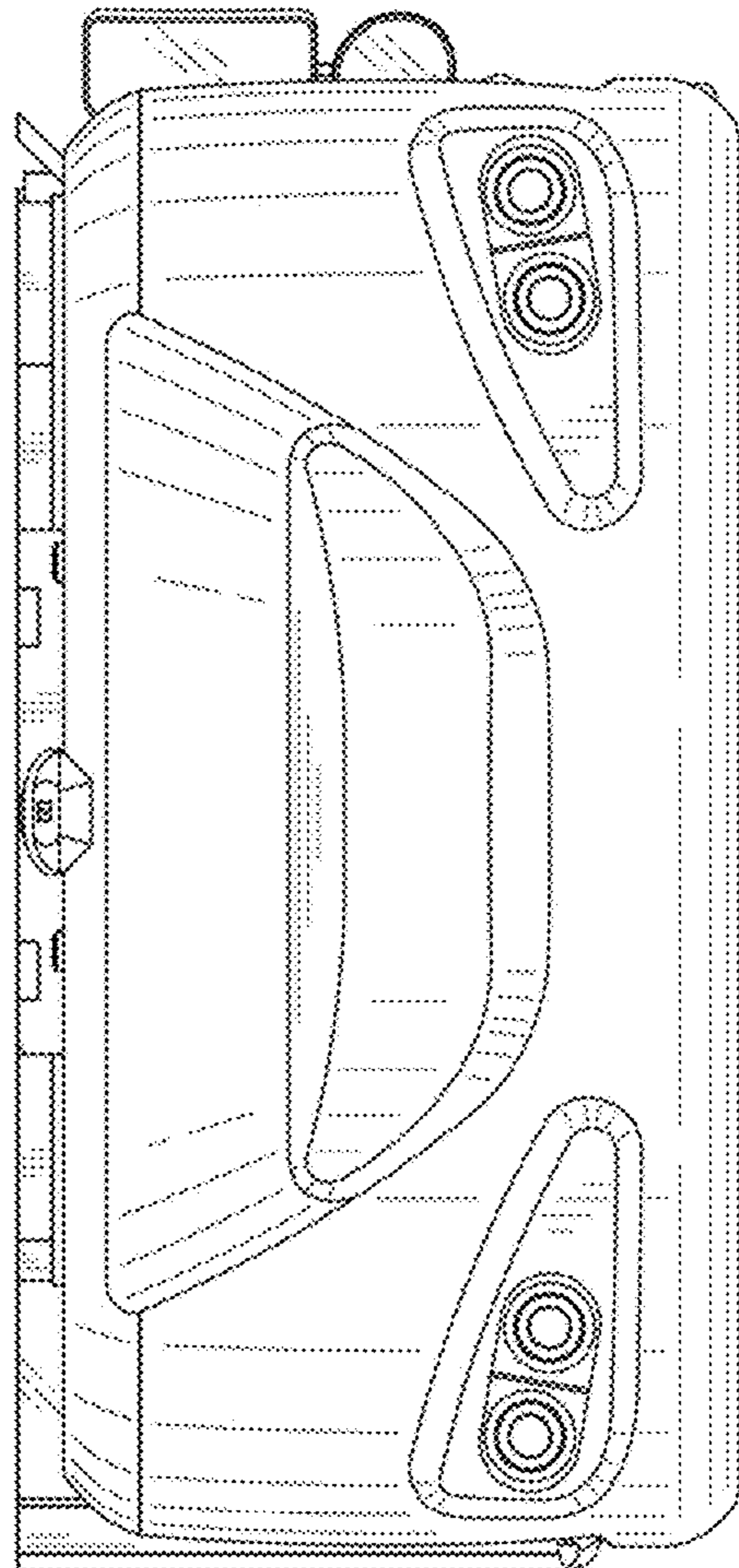


FIG. 9