



US00D934922S

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

(10) **Patent No.:** **US D934,922 S**

(45) **Date of Patent:** **** Nov. 2, 2021**

(54) **EXCAVATOR**

(71) Applicant: **Doosan Infracore Co., Ltd.**, Incheon (KR)

(72) Inventors: **Juntae Kim**, Incheon (KR); **Seula Choi**, Incheon (KR); **Hokwang Ryu**, Incheon (KR); **Yoojeung Lim**, Incheon (KR); **Eunsook Seo**, Incheon (KR); **Sunwook Kwack**, Incheon (KR); **Younsik Bae**, Incheon (KR); **Nadan Cho**, Incheon (KR)

(73) Assignee: **DOOSAN INFRACORE CO., LTD.**, Incheon (KR)

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

(21) Appl. No.: **29/733,590**

(22) Filed: **May 5, 2020**

(30) **Foreign Application Priority Data**

Mar. 26, 2020 (KR) 30-2020-0013506

(51) **LOC (13) Cl.** **12-09**

(52) **U.S. Cl.**
USPC **D15/25**

(58) **Field of Classification Search**
USPC D15/22-26
CPC B62D 51/04; B62D 51/00; B62D 55/00;
E02F 9/2004; E02F 9/02; E02F 9/0808;
E02F 9/20; E02F 9/08; E02F 3/34; E02F
3/28; E02F 3/3414
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D195,254 S * 5/1963 Keller et al. D15/25
D205,485 S * 8/1966 Juhl et al. D15/25
D294,032 S * 2/1988 Whiffin D12/15

D431,574 S * 10/2000 Porter D15/25
D438,218 S * 2/2001 McIlwraith D15/25
6,397,967 B1 * 6/2002 McIlwraith E02F 9/0866
180/308
D470,513 S * 2/2003 Miller D15/22
D479,535 S * 9/2003 Lange D15/25
D482,701 S * 11/2003 Bares D15/24
6,715,579 B1 * 4/2004 Hendron E02F 9/0841
212/302
D708,232 S * 7/2014 Furuki D15/23
D756,420 S * 5/2016 Okuyama D15/23
D758,457 S * 6/2016 Okuyama D15/23
D763,928 S * 8/2016 Okuyama D15/25
D798,340 S * 9/2017 Hagura D15/22
D808,441 S * 1/2018 Brueggen D15/24
D809,570 S * 2/2018 Brueggen D15/24

(Continued)

OTHER PUBLICATIONS

[Supportive Materials for Exception to Loss of Novelty] Presentation in "CES 2020," Las Vegas, U.S., Jan. 7-10, 2020, and related Web News ("Korea Joongang Daily"), Jan. 10, 2020, in connection with the corresponding Korean Application 30-2020-0013506.

Primary Examiner — Mark A Goodwin

(74) *Attorney, Agent, or Firm* — Hauptman Ham, LLP

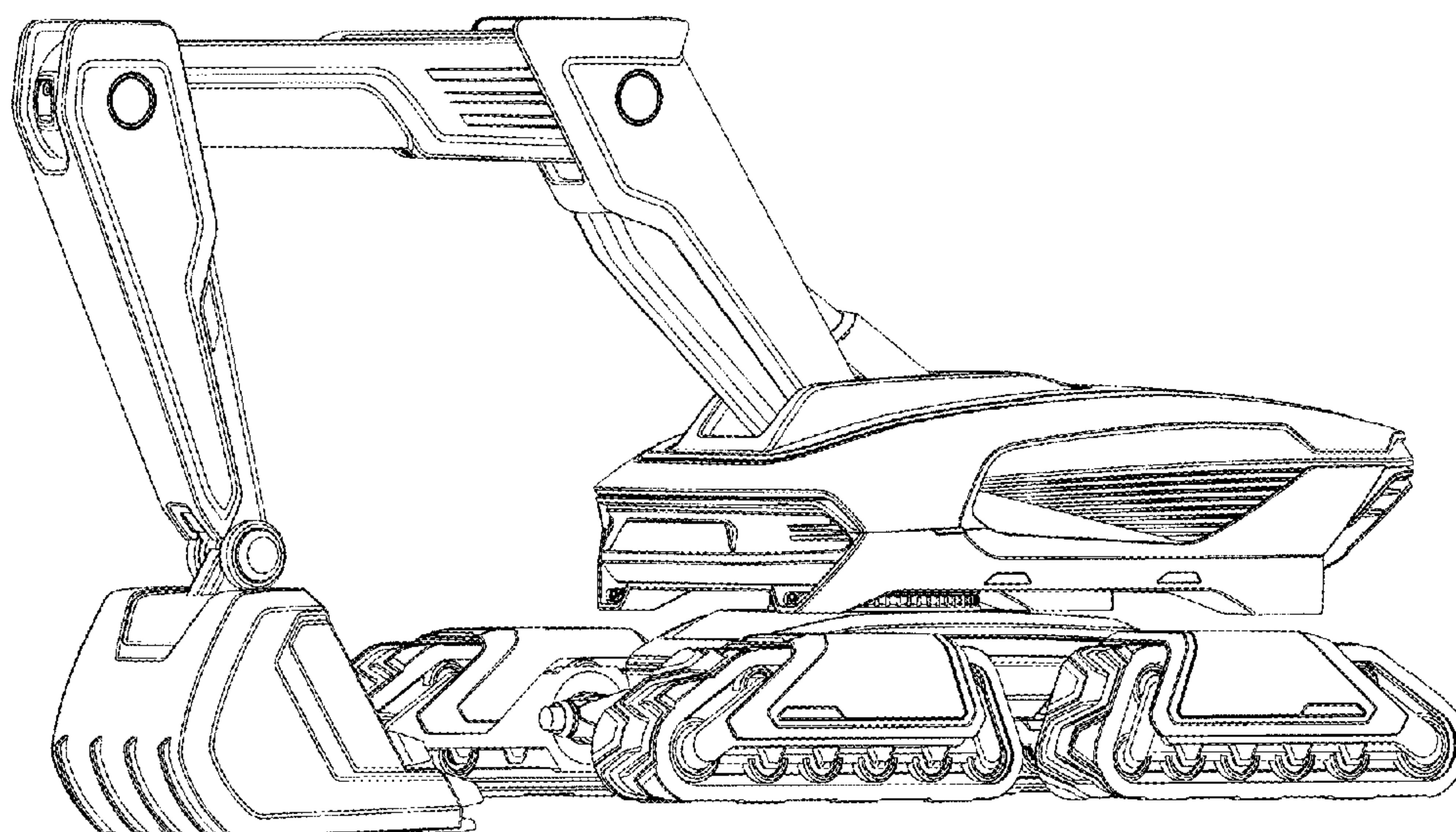
(57) **CLAIM**

The ornamental design for an excavator, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of an excavator showing our new design;
FIG. 2 is a front view thereof;
FIG. 3 is a rear view thereof;
FIG. 4 is a left side view thereof;
FIG. 5 is a right side view thereof;
FIG. 6 is a top view thereof; and,
FIG. 7 is a bottom view thereof.

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D851,134 S *	6/2019	Jilbert	D15/25
D875,143 S *	2/2020	Hagura	D15/24
D915,469 S *	4/2021	Ninomiya	D15/25
2003/0108414 A1 *	6/2003	Walto	E02F 9/2004 414/685

* cited by examiner

FIG. 1

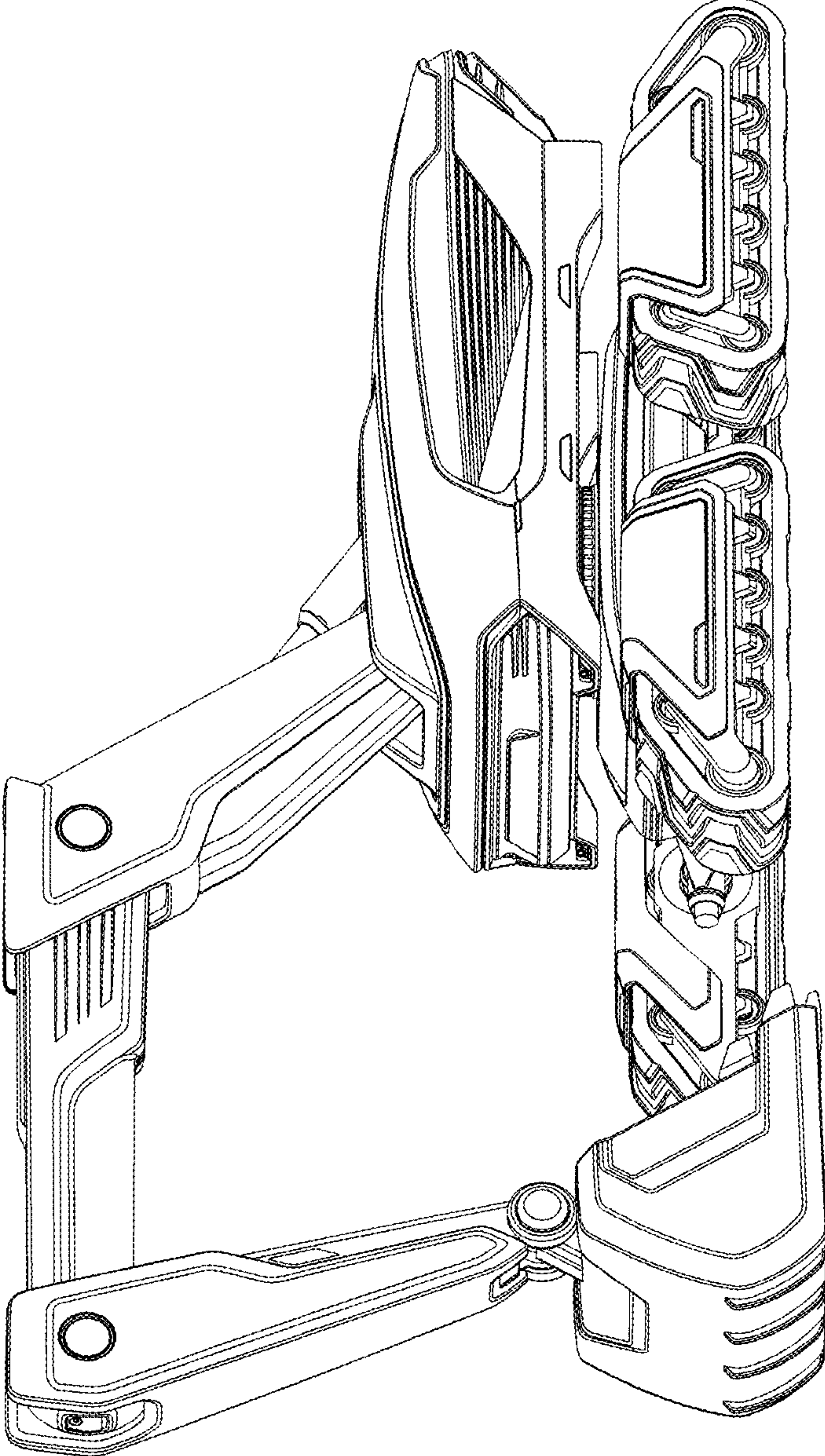


FIG. 2

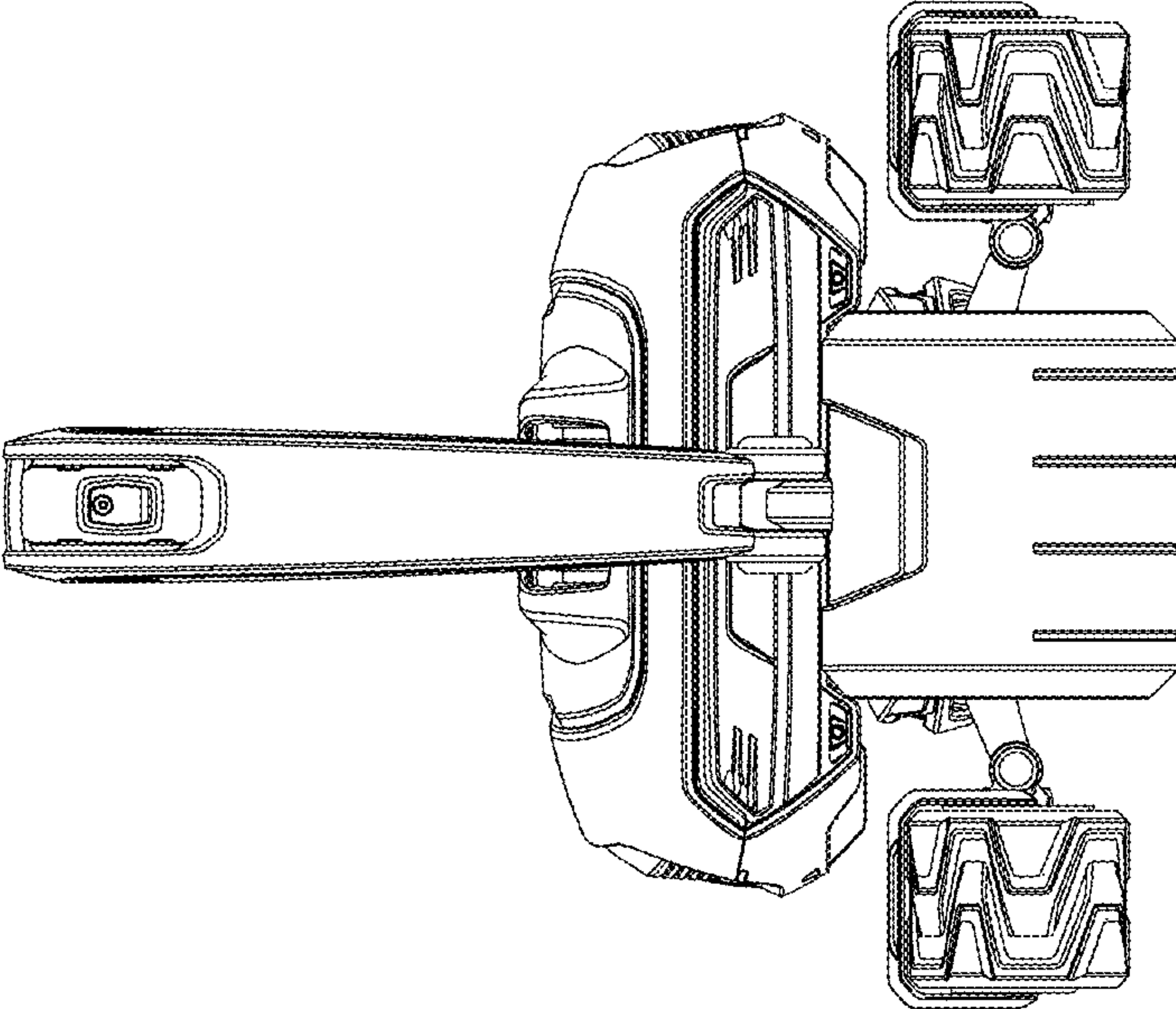


FIG. 3

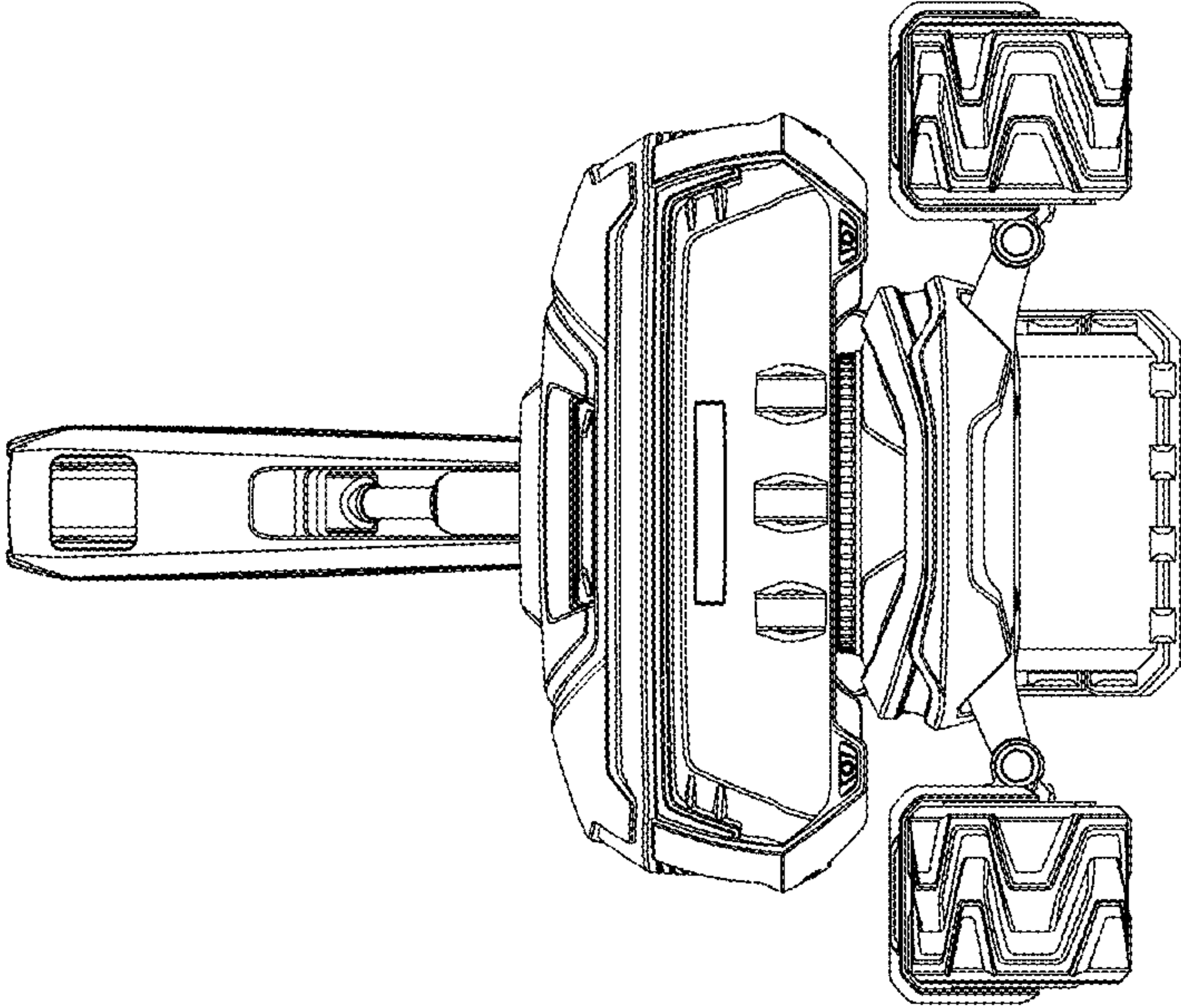


FIG. 4

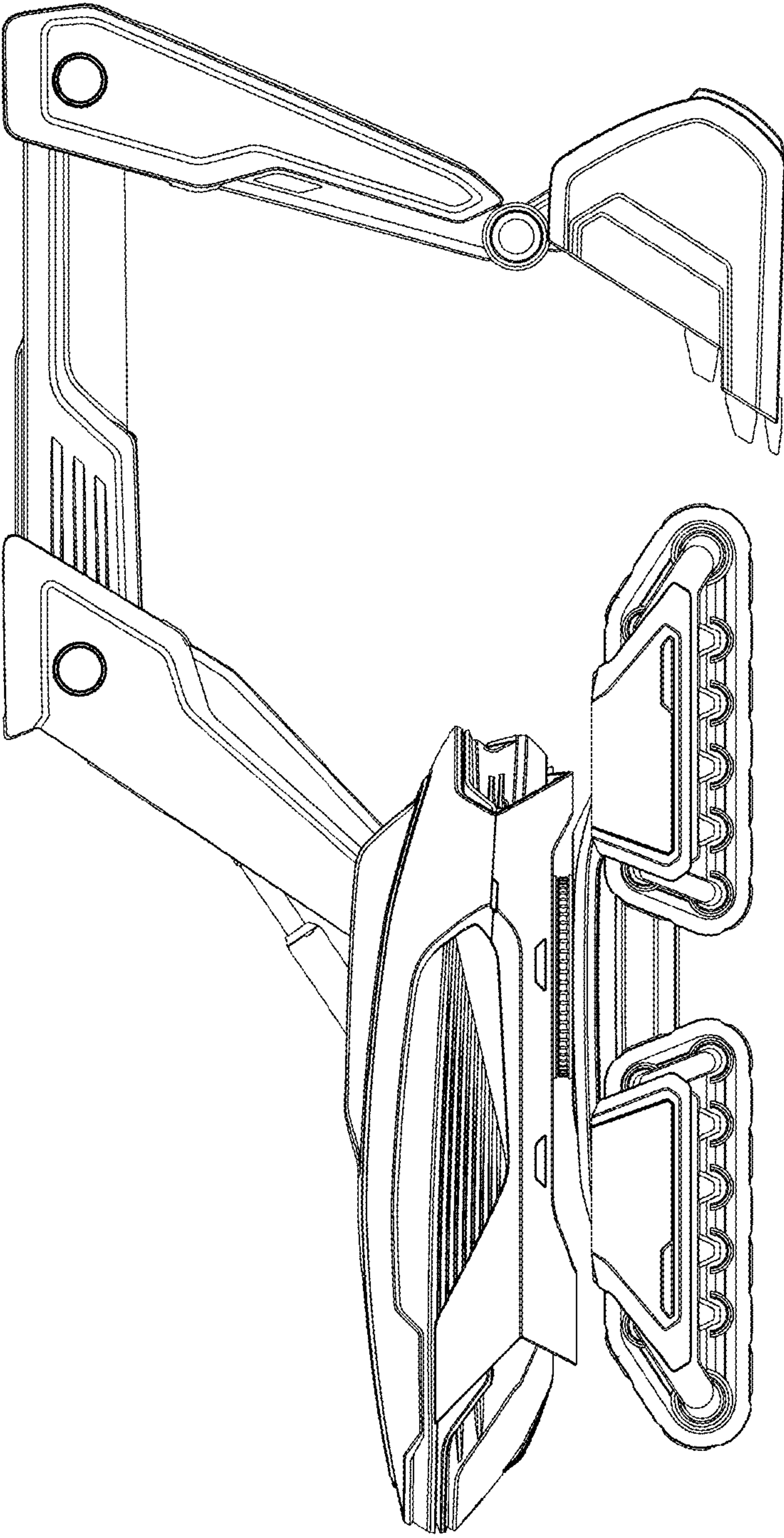


FIG. 5

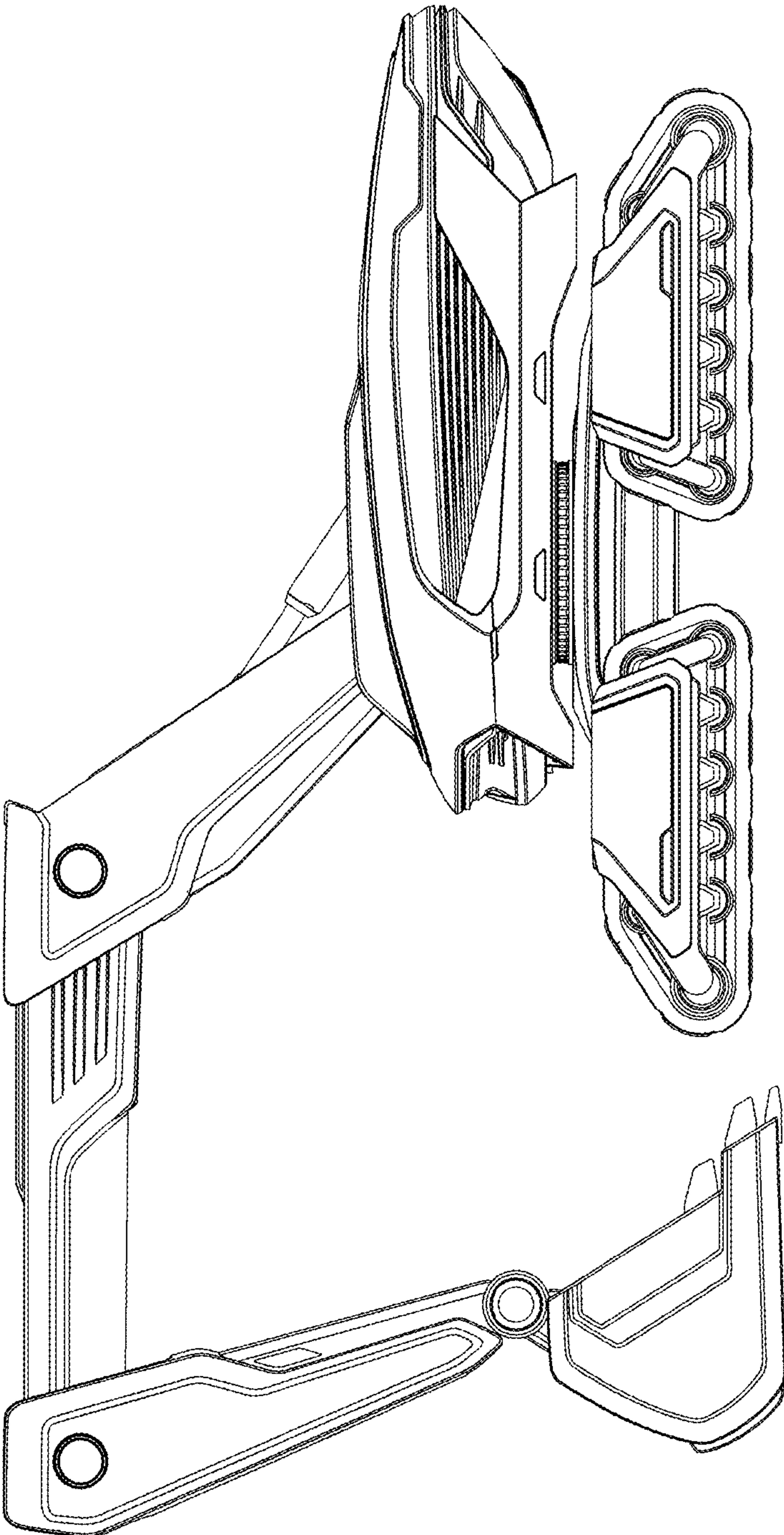


FIG. 6

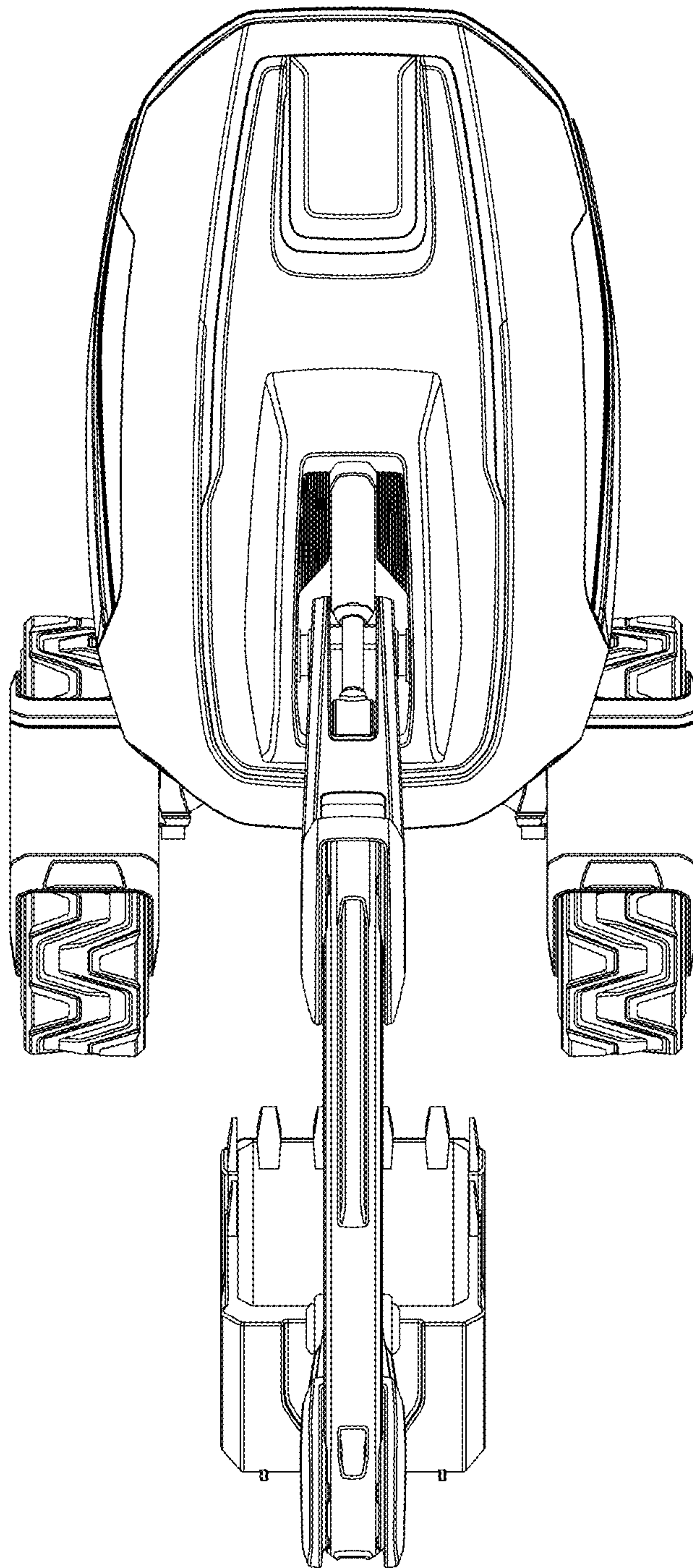


FIG. 7

