

US00D860282S

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

(10) **Patent No.:** **US D860,282 S**

(45) **Date of Patent:** **** Sep. 17, 2019**

(54) **COOLING FINS FOR A ROBOT SYSTEM**

(71) Applicant: **Omron Adept Technologies, Inc.**, San Ramon, CA (US)

(72) Inventors: **C. Brian Gulassa**, Berkeley, CA (US);
Daniel P. Norboe, Alameda, CA (US);
Tim Vickroy, Livermore, CA (US)

(73) Assignee: **Omron Adept Technologies, Inc.**, San Ramon, CA (US)

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

(21) Appl. No.: **29/645,845**

(22) Filed: **Apr. 30, 2018**

(51) **LOC (12) Cl.** **15-99**

(52) **U.S. Cl.**
USPC **D15/199**

(58) **Field of Classification Search**
USPC D15/122, 199; D21/578-583, 621, 622
CPC B25J 5/007; B25J 9/00; B25J 9/04; B25J
18/00; B60B 19/006; B62D 57/024; Y10S
901/01

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D282,077 S *	1/1986	Abe	.....	D15/122
D293,324 S *	12/1987	Gotou	.....	D15/122
D343,630 S *	1/1994	Tomiyama	.....	D15/199
D409,636 S *	5/1999	Genov	.....	D15/199
D443,287 S *	6/2001	Kawahara	.....	D15/199
6,439,076 B1 *	8/2002	Flemmer	.....	B25J 9/04 74/490.03
D484,154 S *	12/2003	Treadwell	.....	D15/199
D503,943 S *	4/2005	Kawaguchi	.....	D15/199
D613,781 S *	4/2010	Liu	.....	D15/199
D615,574 S *	5/2010	Liu	.....	D15/199
D616,477 S *	5/2010	Long	.....	D15/199

D616,909 S *	6/2010	Long	.....	D15/199
D625,347 S *	10/2010	Feng	.....	D15/199
D629,030 S *	12/2010	Long	.....	D15/199
D636,803 S *	4/2011	Nakagiri	.....	D15/199
D638,455 S *	5/2011	Long	.....	D15/199
D650,820 S *	12/2011	Long	.....	D15/199
D668,642 S *	10/2012	Feldman	.....	D14/248
D670,319 S *	11/2012	Liu	.....	D15/199
D681,708 S *	5/2013	Miyake	.....	D15/199
D711,061 S *	8/2014	Chen	.....	D34/29
D711,447 S *	8/2014	Kasahara	.....	D15/199
D712,447 S *	9/2014	He	.....	D15/199
D712,448 S *	9/2014	Kasahara	.....	D15/199
D713,436 S *	9/2014	Liu	.....	D15/199
D749,159 S *	2/2016	Liu	.....	D15/199

(Continued)

Primary Examiner — Patricia A Palasik

(74) *Attorney, Agent, or Firm* — Murphy, Bilak & Homiller, PLLC

(57) **CLAIM**

We claim the ornamental design for cooling fins for a robot system, as shown and described.

DESCRIPTION

FIG. 1 is a front perspective view of cooling fins for a robot system according to our novel, original, and ornamental design; and

FIG. 2 is a rear perspective view thereof;

FIG. 3 is a front view thereof;

FIG. 4 is a rear view thereof;

FIG. 5 is a left side view thereof;

FIG. 6 is a right side view thereof;

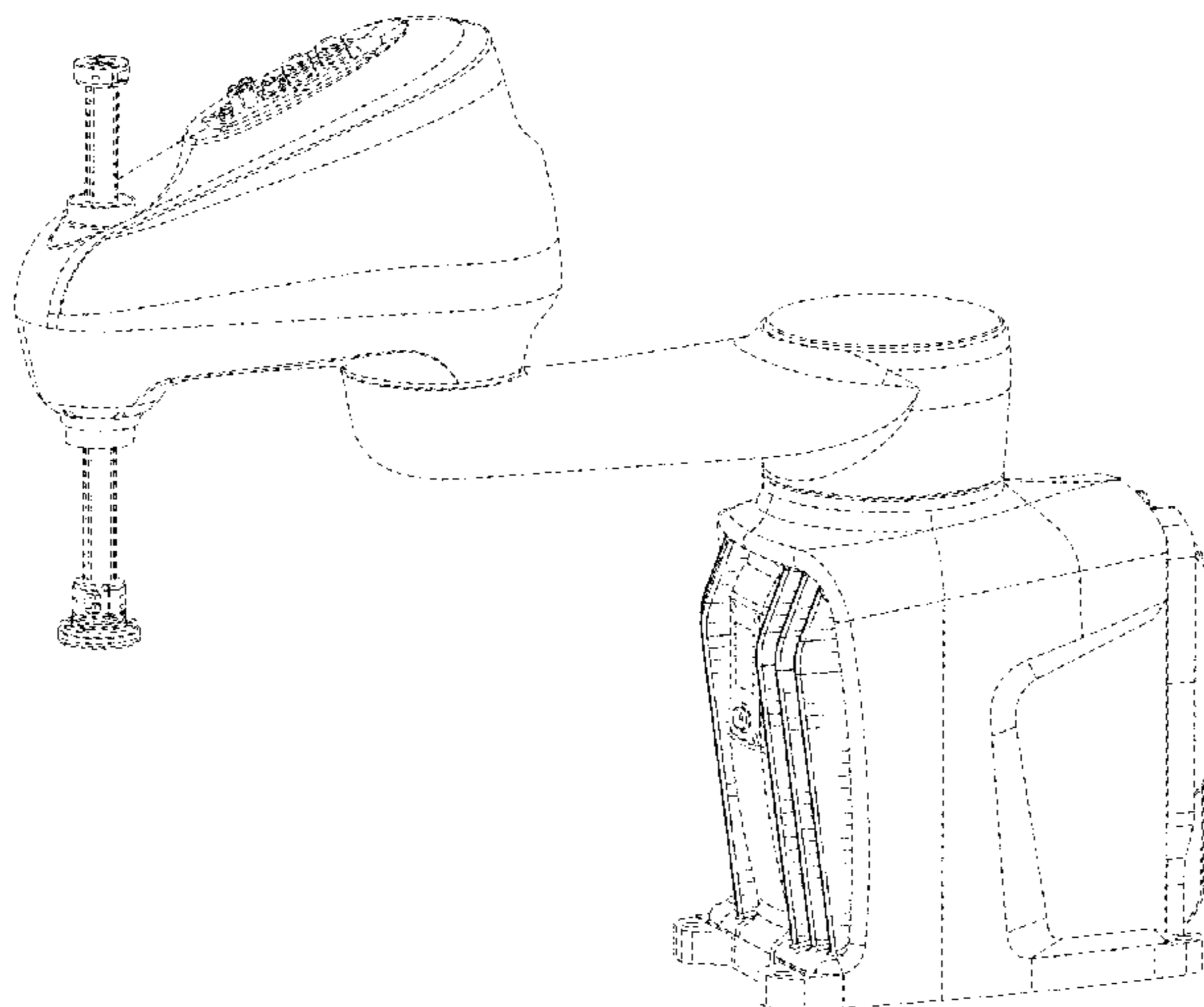
FIG. 7 is a top view thereof; and,

FIG. 8 is a bottom view thereof.

The shade lines in the Figures show contour and not surface ornamentation.

The broken lines in the drawings depict portions of the robot system which form no part of the claimed design.

1 Claim, 6 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D766,348	S	*	9/2016	Long	.....	D15/199
D769,343	S	*	10/2016	Bordegnoni	.....	D15/199
D782,553	S	*	3/2017	Goto	.....	D15/199
D790,618	S	*	6/2017	Ke	.....	D15/199
D792,917	S	*	7/2017	Fischer	.....	D15/199
D800,199	S	*	10/2017	Yang	.....	D15/199
D800,813	S	*	10/2017	Zhu	.....	D15/199
D818,511	S	*	5/2018	Li	.....	D15/199
D831,087	S	*	10/2018	Morimoto	.....	D15/199
D833,499	S	*	11/2018	Wang	.....	D15/199
D834,082	S	*	11/2018	Bordegnoni	.....	D15/199
D839,941	S	*	2/2019	Gao	.....	D15/199
D839,942	S	*	2/2019	Feng	.....	D15/199
D840,450	S	*	2/2019	Tsujimoto	.....	D15/199
D841,707	S	*	2/2019	Yamamoto	.....	D15/199
2016/0107317	A1	*	4/2016	Hashimoto	.....	B25J 9/042 414/744.2
2019/0099889	A1	*	4/2019	Kondo	.....	B25J 9/1692

* cited by examiner

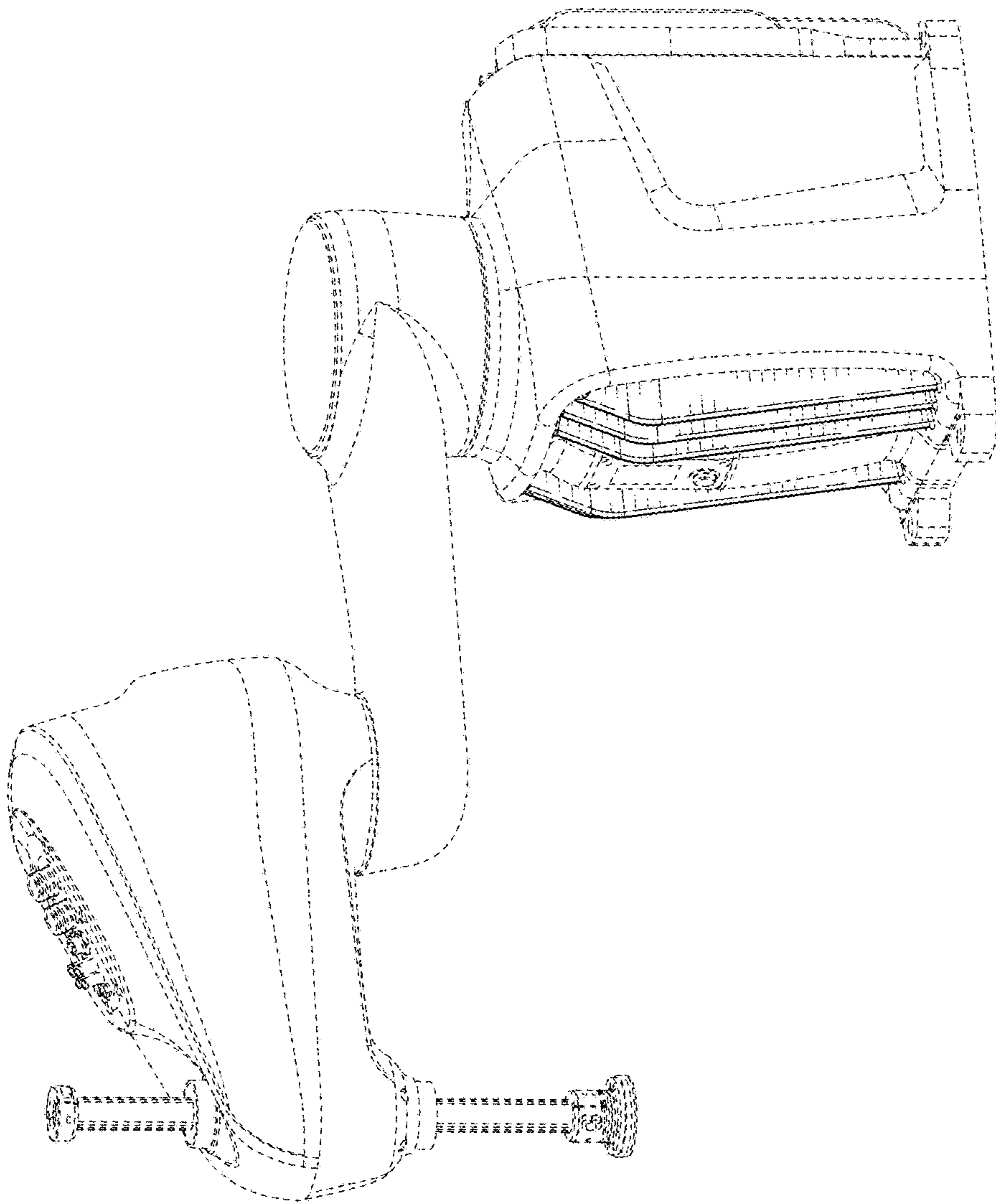


FIG. 1

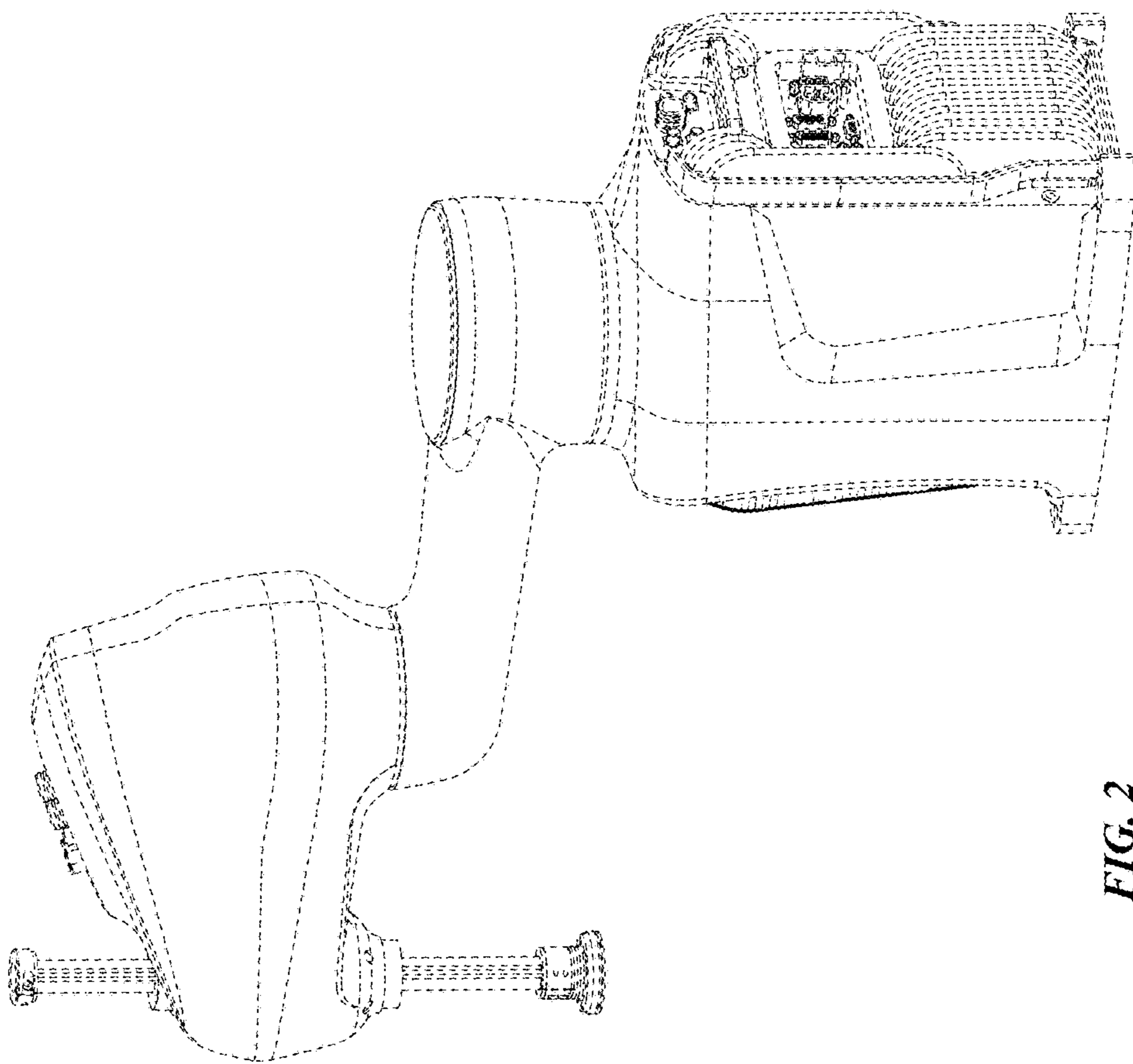


FIG. 2

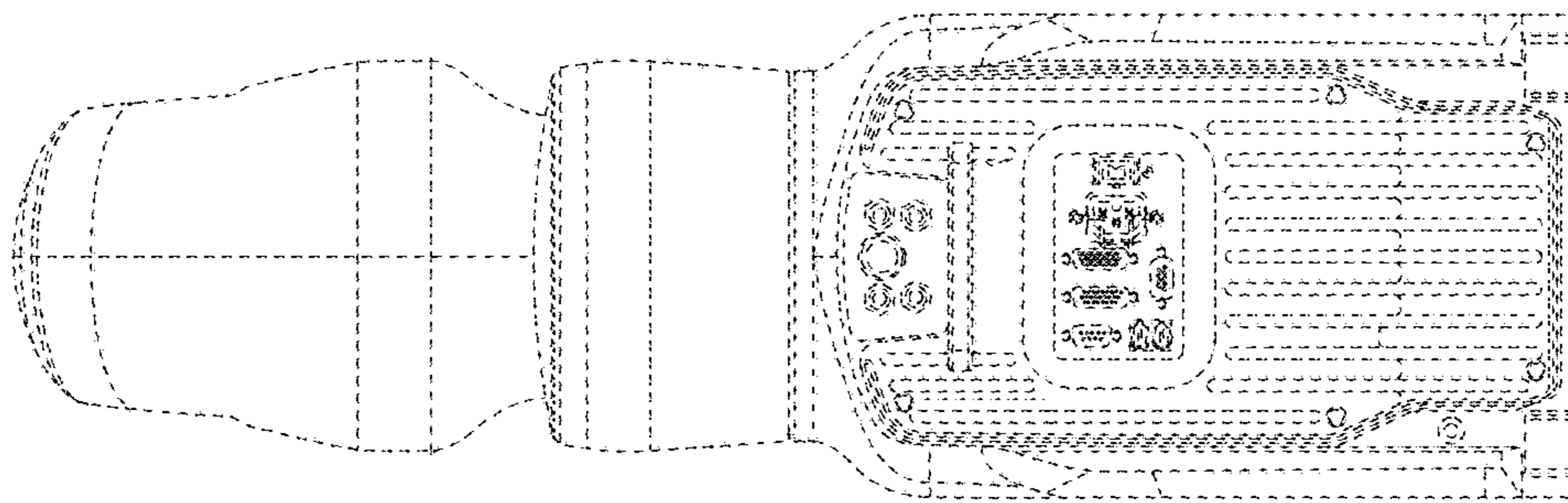


FIG. 4

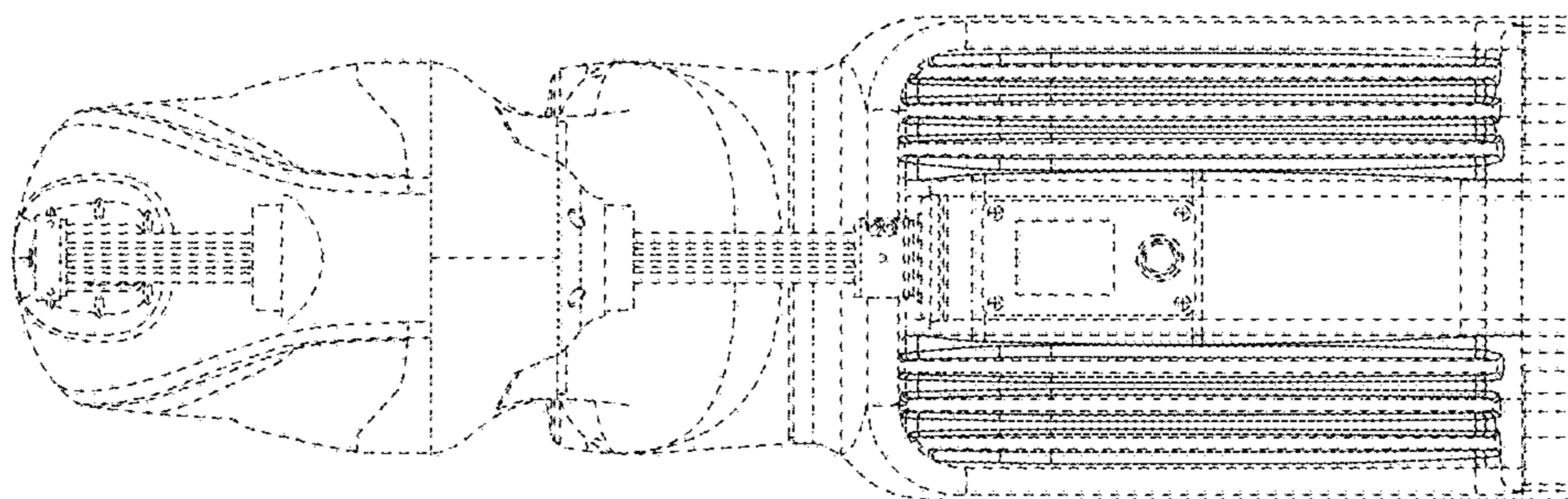


FIG. 3

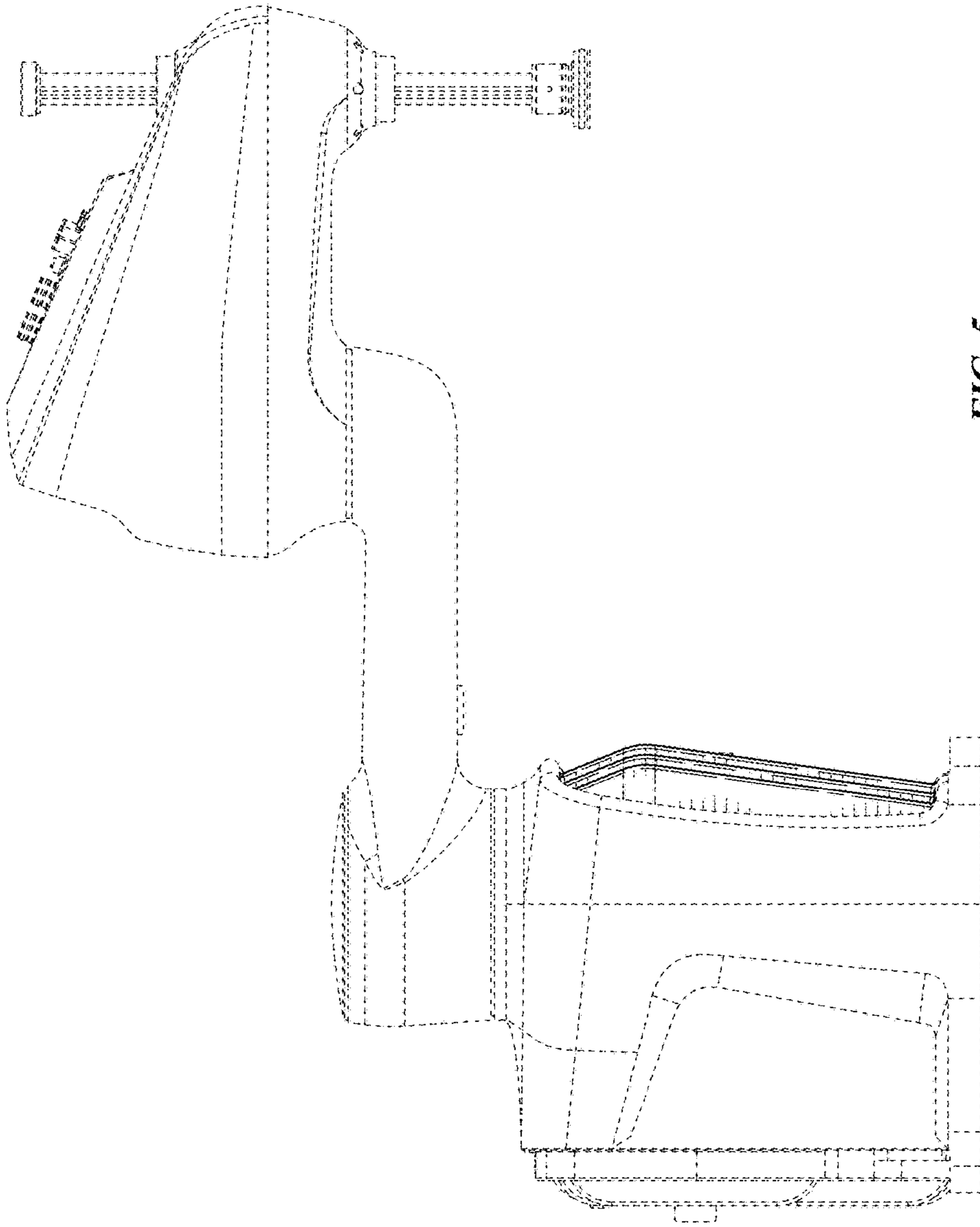


FIG. 5

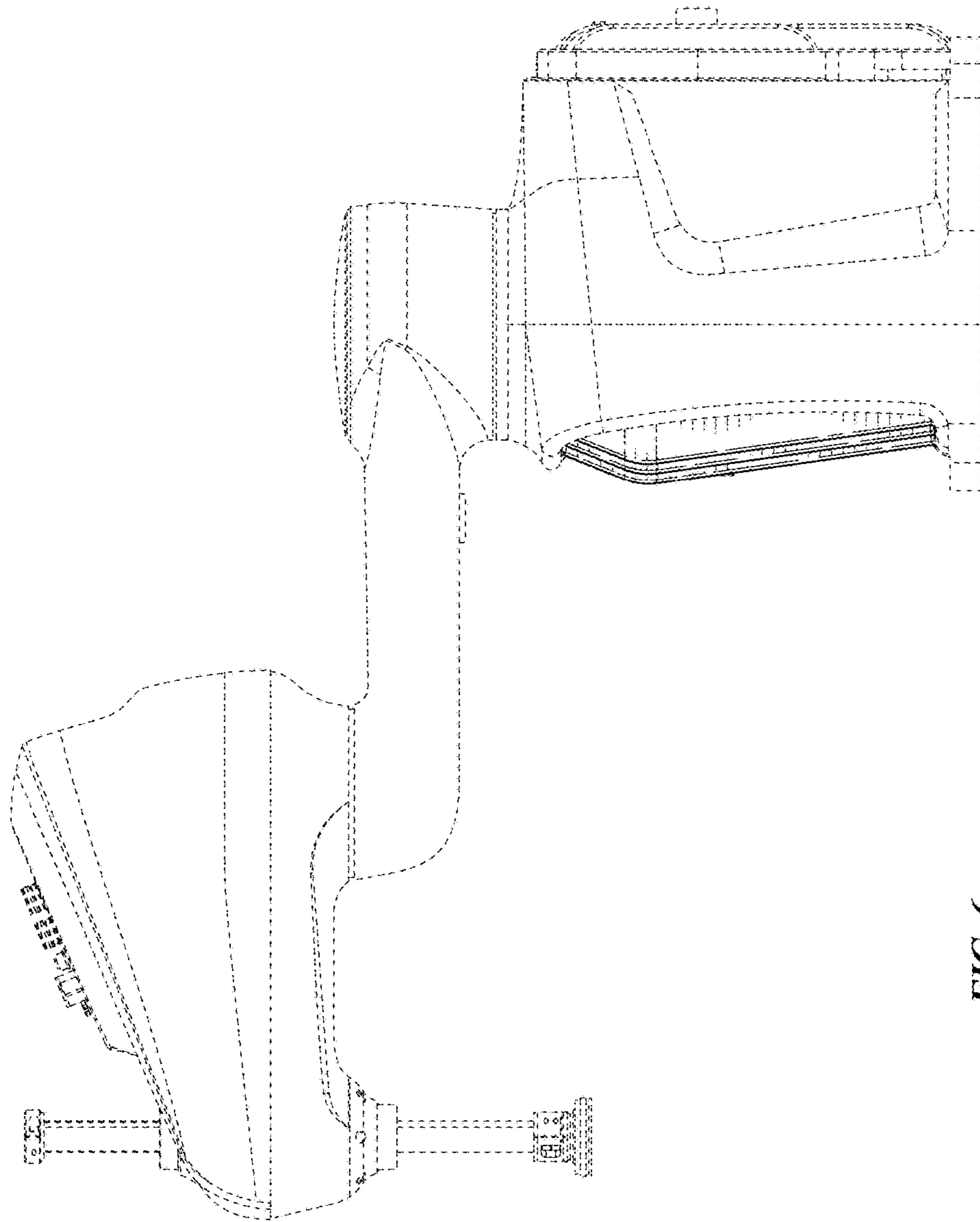


FIG. 6

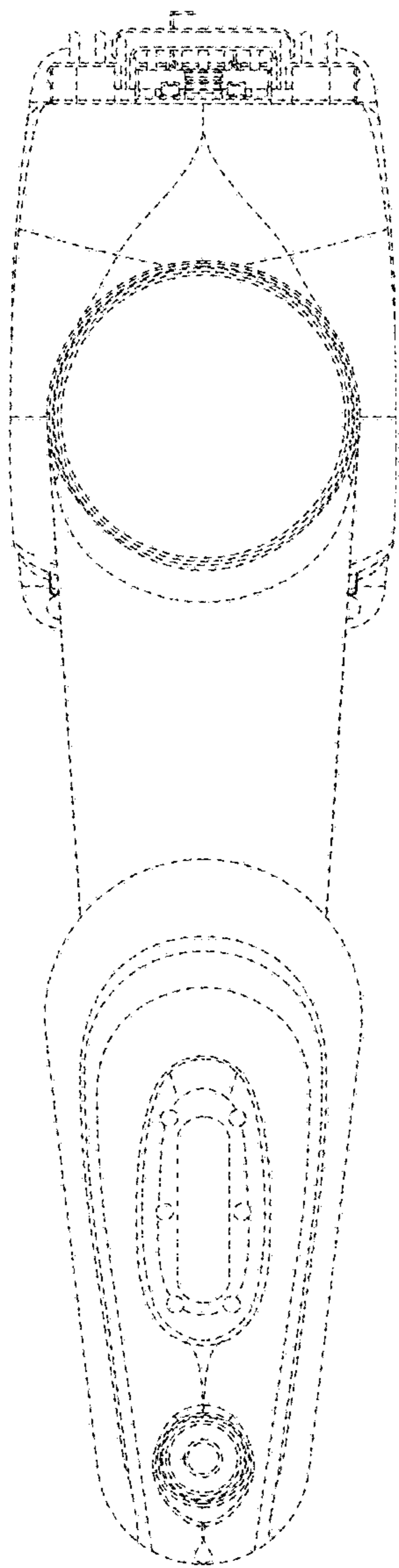


FIG. 7

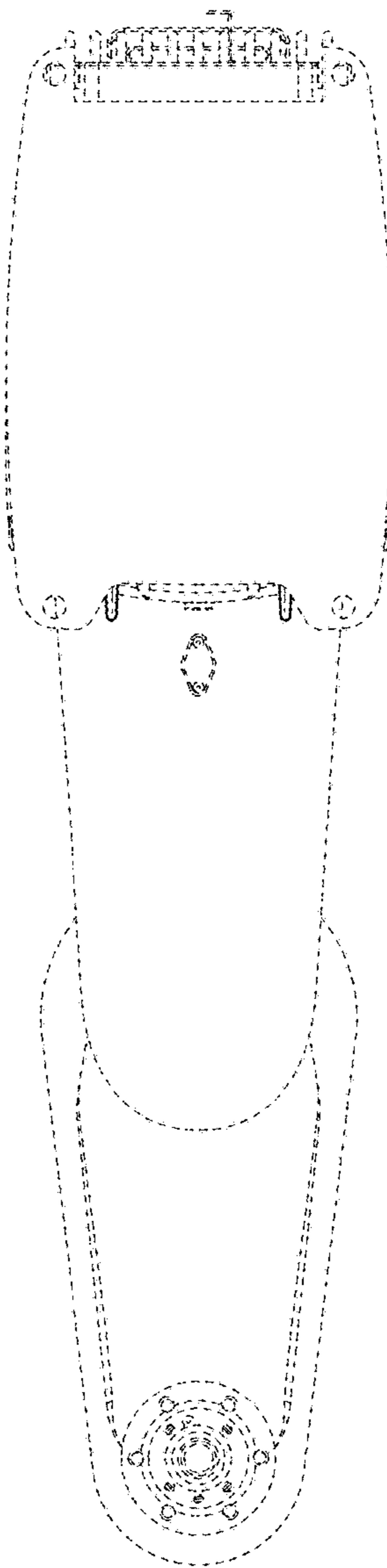


FIG. 8