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

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(54) **SURGICAL X-RAY APPARATUS**

(56) **References Cited**

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U.S. PATENT DOCUMENTS

D342,137	S	*	12/1993	Guentner	D24/158
5,450,466	A	*	9/1995	Kadowaki et al.	378/194
D397,440	S	*	8/1998	Baars	.....	D24/158
6,334,708	B1	*	1/2002	Kosugi	.....	378/197
D456,080	S	*	4/2002	Karlsson	.....	D24/185
7,052,421	B2	*	5/2006	Simmons	.....	378/197
D589,621	S	*	3/2009	Ogiwara	.....	D24/158
D600,348	S	*	9/2009	Dorre et al.	.....	D24/158
2008/0075233	A1	*	3/2008	Coombs	.....	378/204
2008/0123819	A1	*	5/2008	Jensen et al.	378/198
2010/0041985	A1	*	2/2010	Simon et al.	378/62

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* cited by examiner

(**) Term: **14 Years**

Primary Examiner — Anhdao Doan

(21) Appl. No.: **29/381,291**

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(22) Filed: **Dec. 17, 2010**

(57) **CLAIM**

The ornamental design for a surgical x-ray apparatus, as shown.

(30) **Foreign Application Priority Data**

DESCRIPTION

Jun. 24, 2010 (JP) 2010-15465

(51) **LOC (9) Cl.** **24-01**

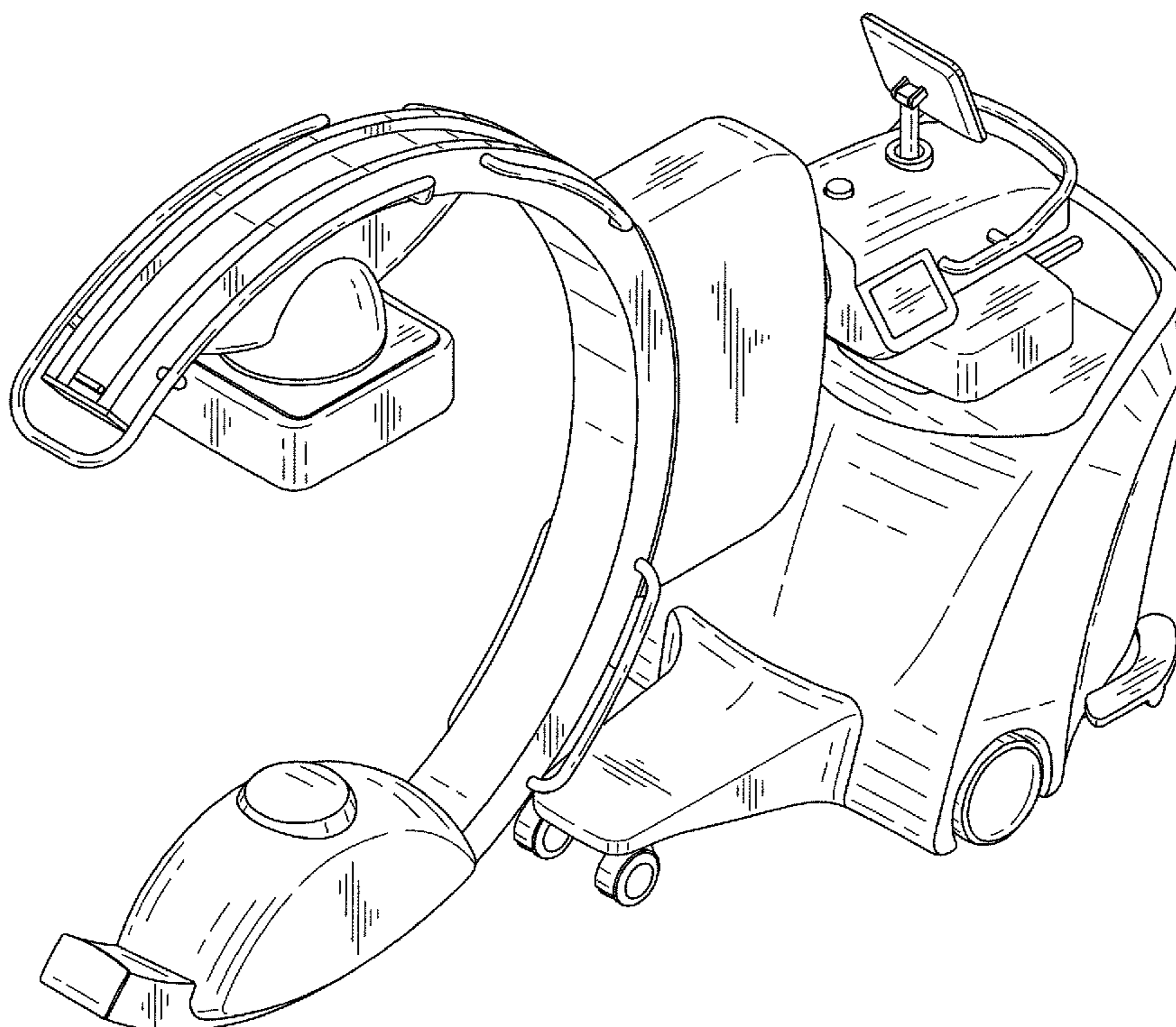
(52) **U.S. Cl.** **D24/158**

(58) **Field of Classification Search** D24/158-161,
D24/186; 378/4, 15, 17, 20, 21, 23-27, 62,
378/68, 146, 195-198

FIG. 1 is a front, top and right side perspective view of a surgical x-ray apparatus showing our new design; FIG. 2 is a front elevational view thereof; FIG. 3 is a rear side elevational view thereof; FIG. 4 is a top plan view thereof; FIG. 5 is a bottom plan view thereof; FIG. 6 is a left side elevational view thereof; and, FIG. 7 is a right side elevational view thereof.

See application file for complete search history.

1 Claim, 5 Drawing Sheets



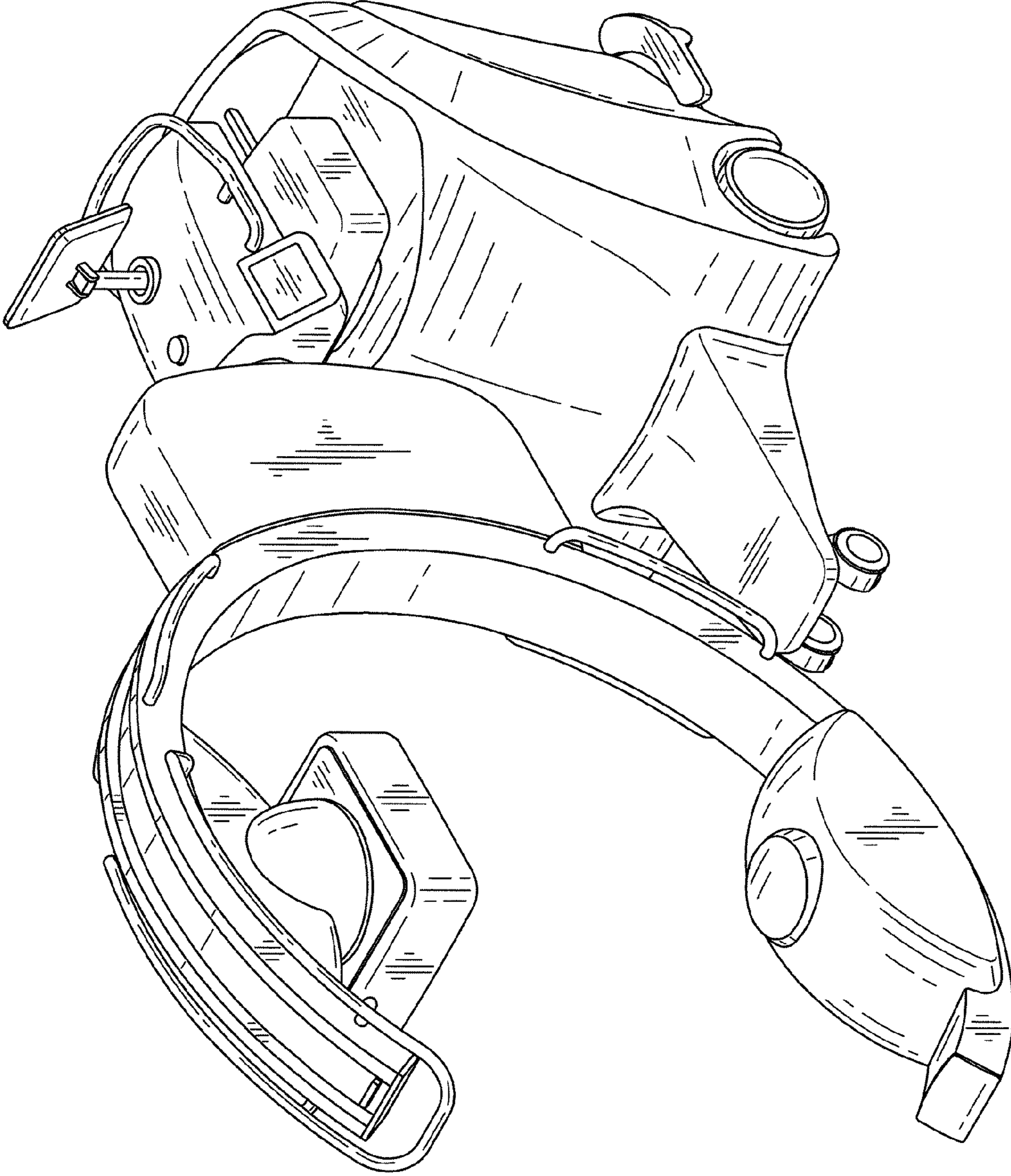


FIG. 1

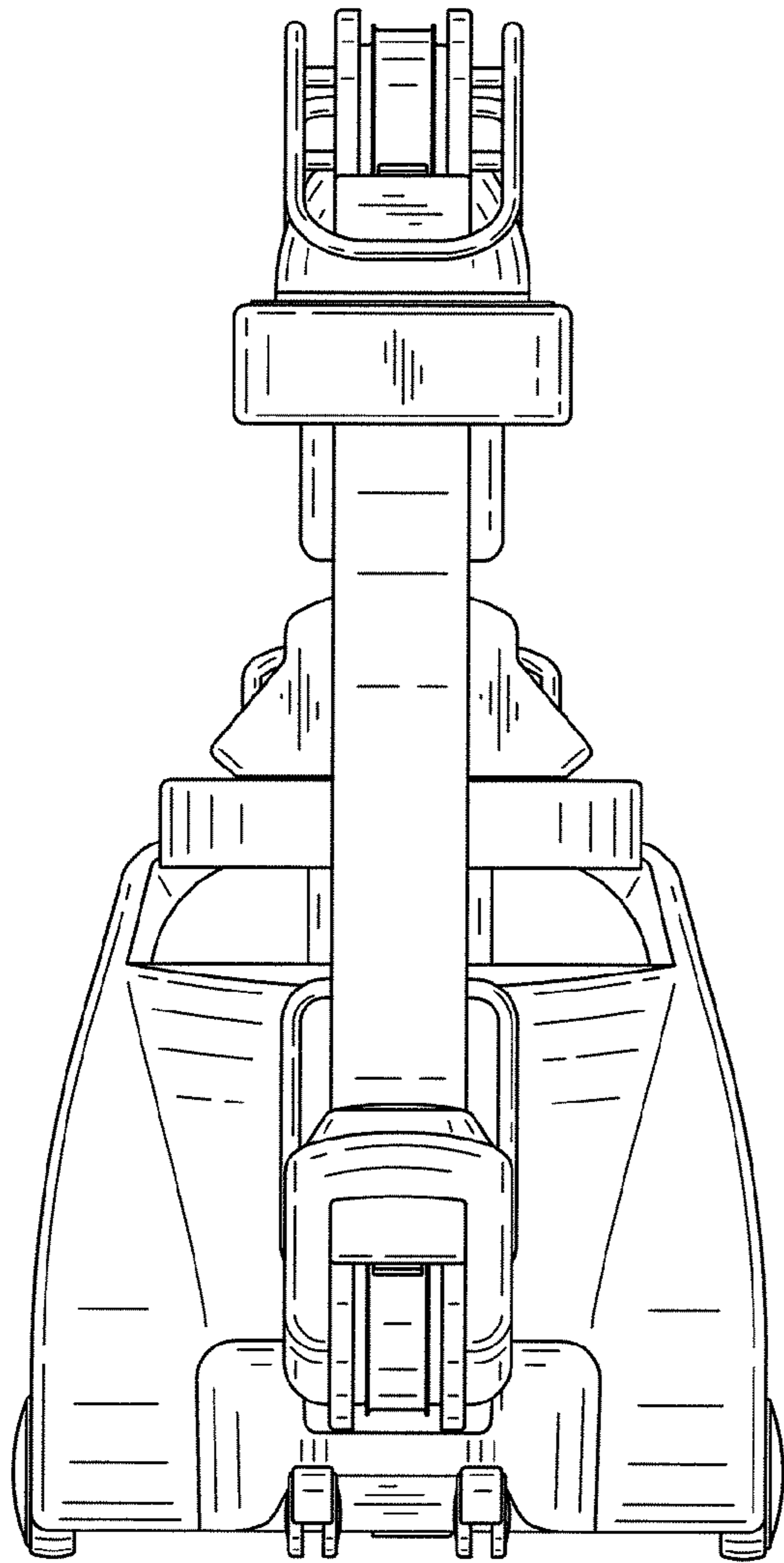


FIG. 2

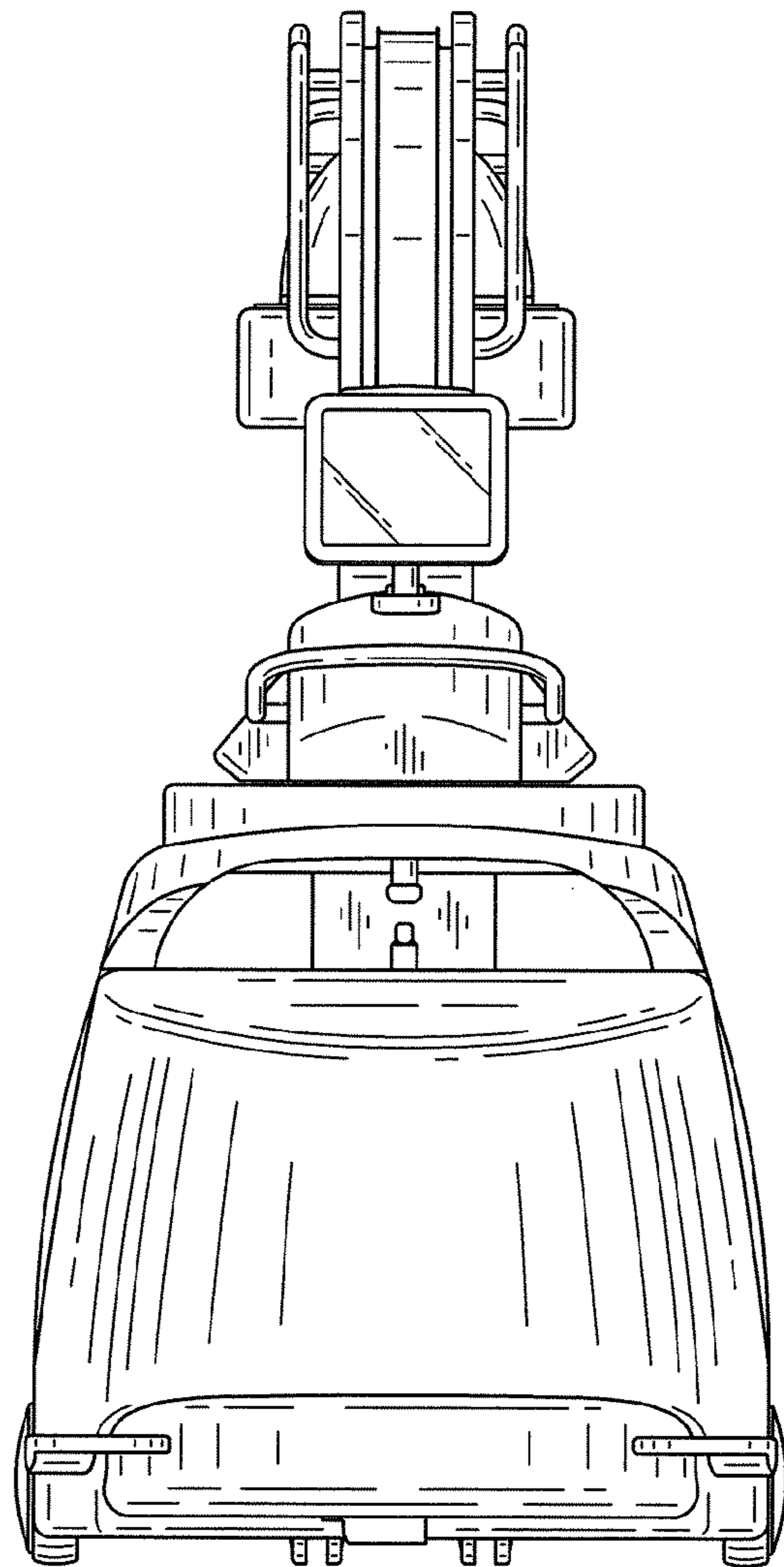


FIG. 3

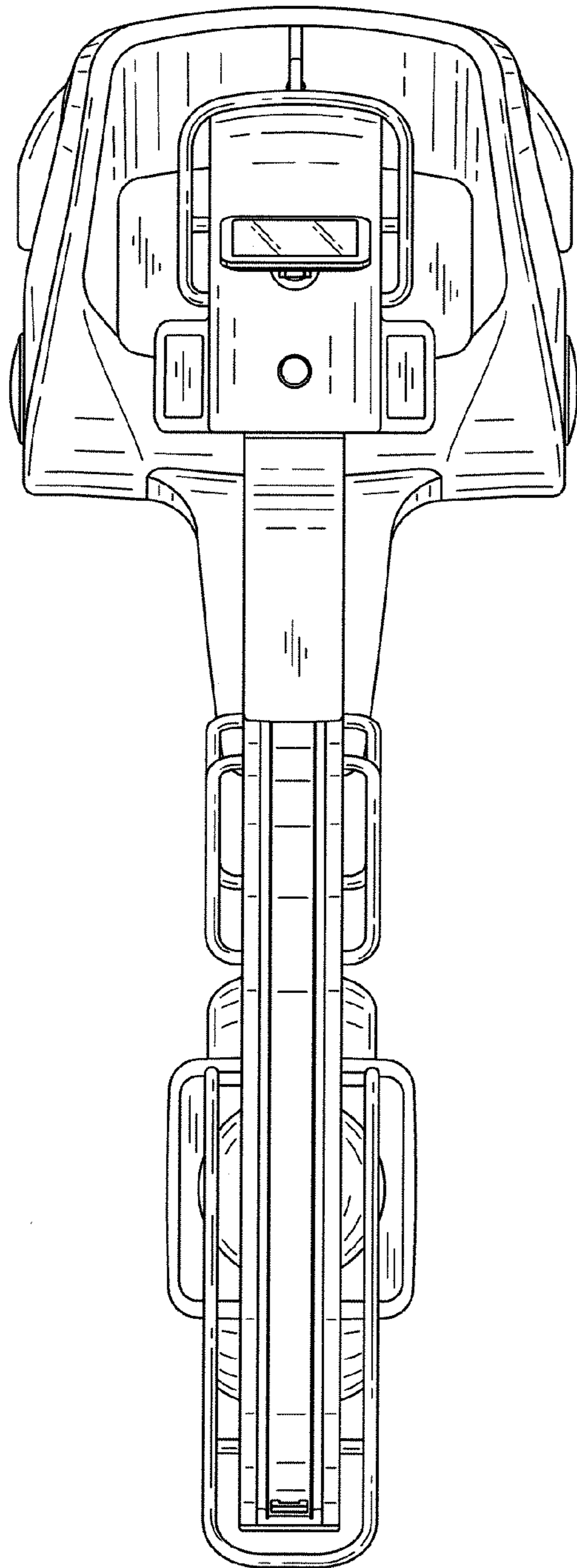


FIG. 4

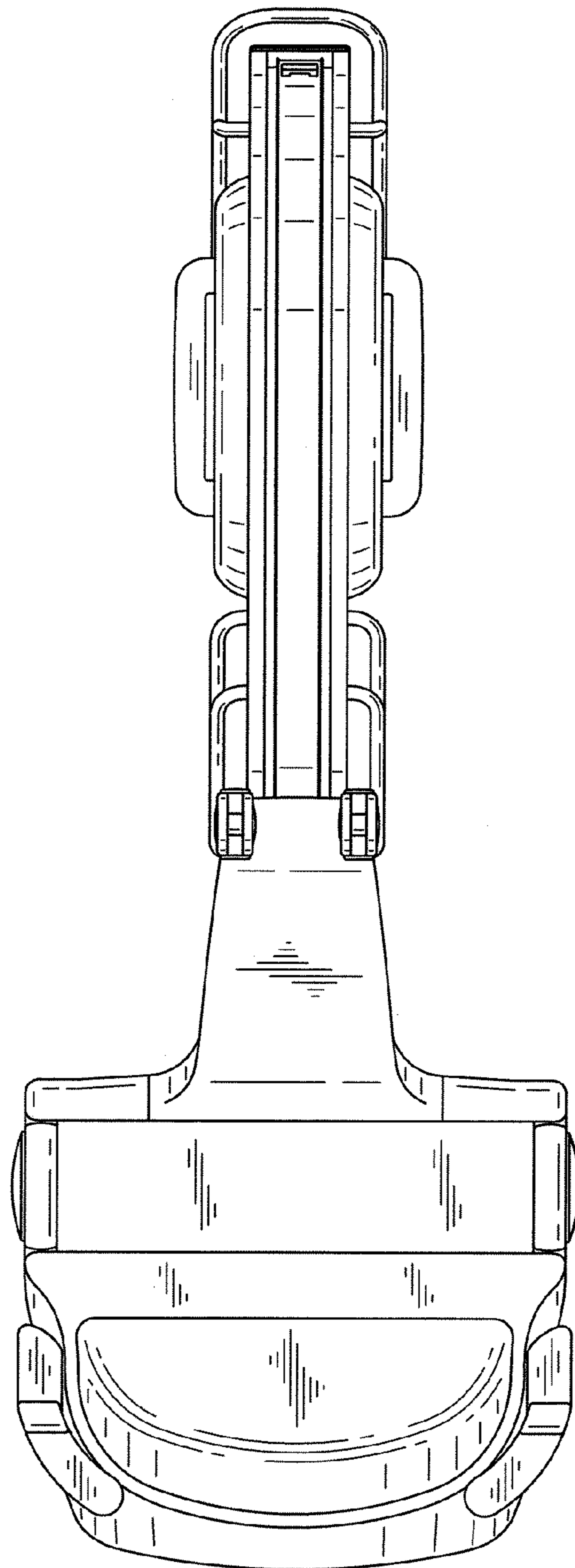


FIG. 5

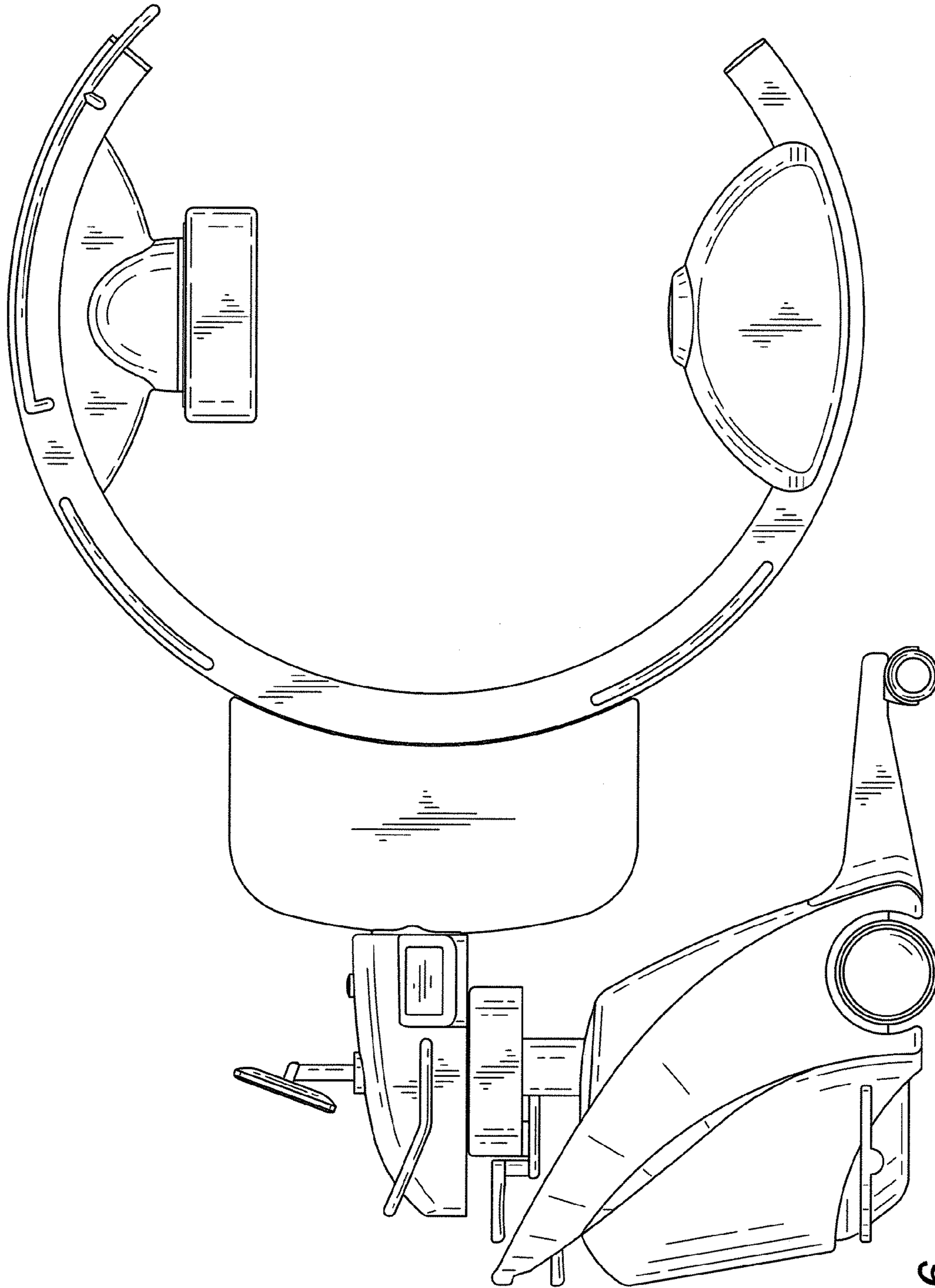


FIG. 6

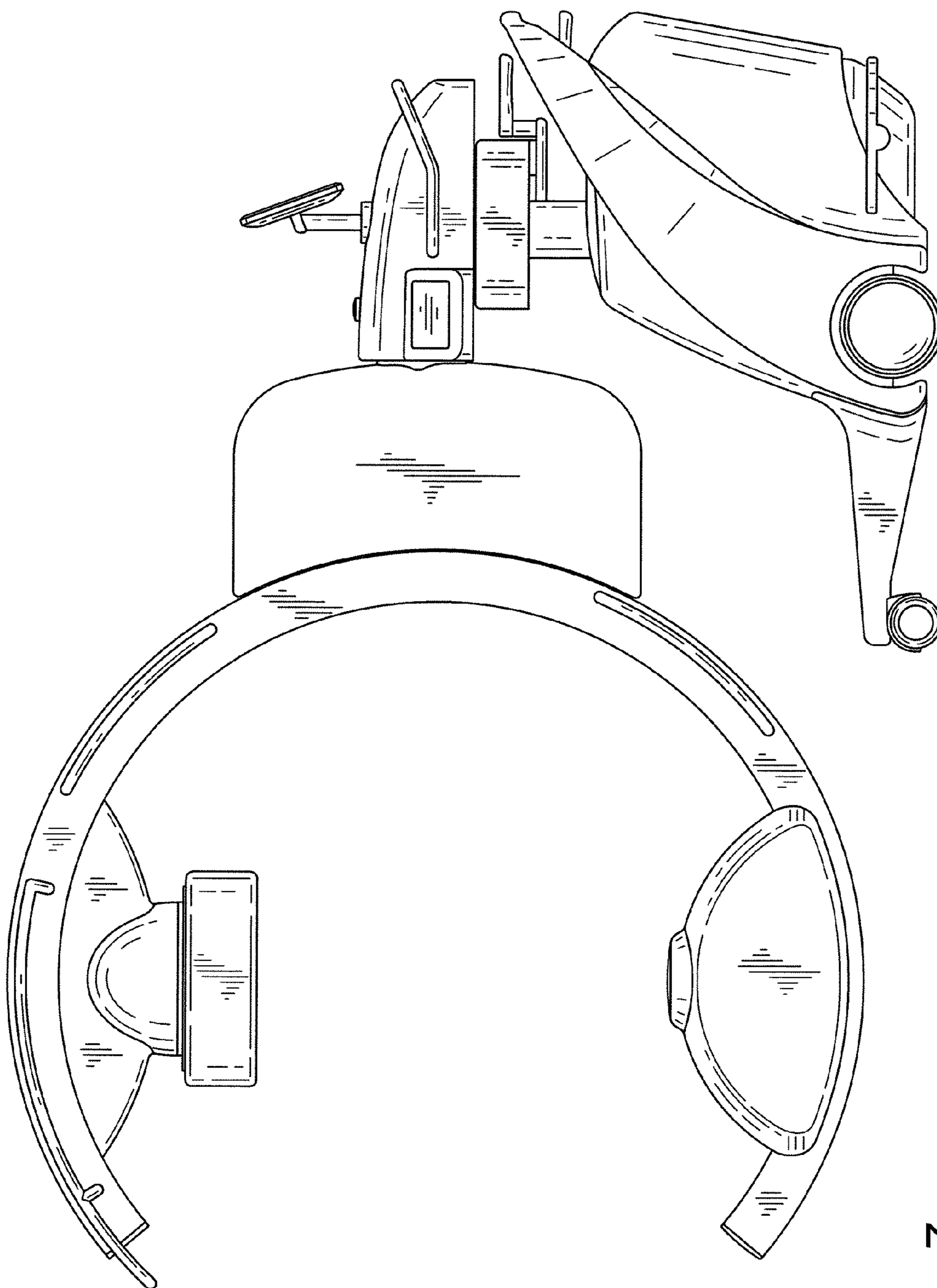


FIG. 7