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

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(54) **RIGHT ANGLE DRILL**
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4,334,809 A 6/1982 Zavislake
4,477,213 A 10/1984 Nelson et al.
4,508,221 A 4/1985 Olson
4,558,495 A 12/1985 Olsen
4,579,356 A 4/1986 Welborn
4,615,653 A 10/1986 Watson
4,652,001 A 3/1987 Rathbun et al.
4,747,733 A 5/1988 Akazawa
4,790,696 A 12/1988 Williams
4,797,040 A 1/1989 Hibbard
4,954,026 A 9/1990 Zurwelle

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(Continued)

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

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(52) **U.S. Cl.**
USPC **D8/61**

(58) **Field of Classification Search**
CPC B25F 5/02; B25F 3/00; Y10T 29/49876;
Y10T 403/69; Y10T 403/68
USPC D8/61, 62, 67, 69; 81/57, 57.11, 57.14,
81/57.26, 429, 464, 469; 173/2, 170, 176,
173/181

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,529,567 A 11/1950 Neck
3,141,359 A 7/1964 Bennett et al.
3,174,365 A 3/1965 Lucarelli
3,348,432 A 10/1967 Kieffer, III
3,947,924 A 4/1976 Fox et al.
4,032,160 A 6/1977 Karasa et al.
4,068,978 A 1/1978 Brock
4,093,396 A 6/1978 Widigs

OTHER PUBLICATIONS

Milwaukee Tools, "M28 Cordless Lithium-Ion Right Angle Drill"
<<http://www.milwaukeetool.com/power-tools/cordless/0721-20>>
webpage available as early as Jun. 23, 2013.

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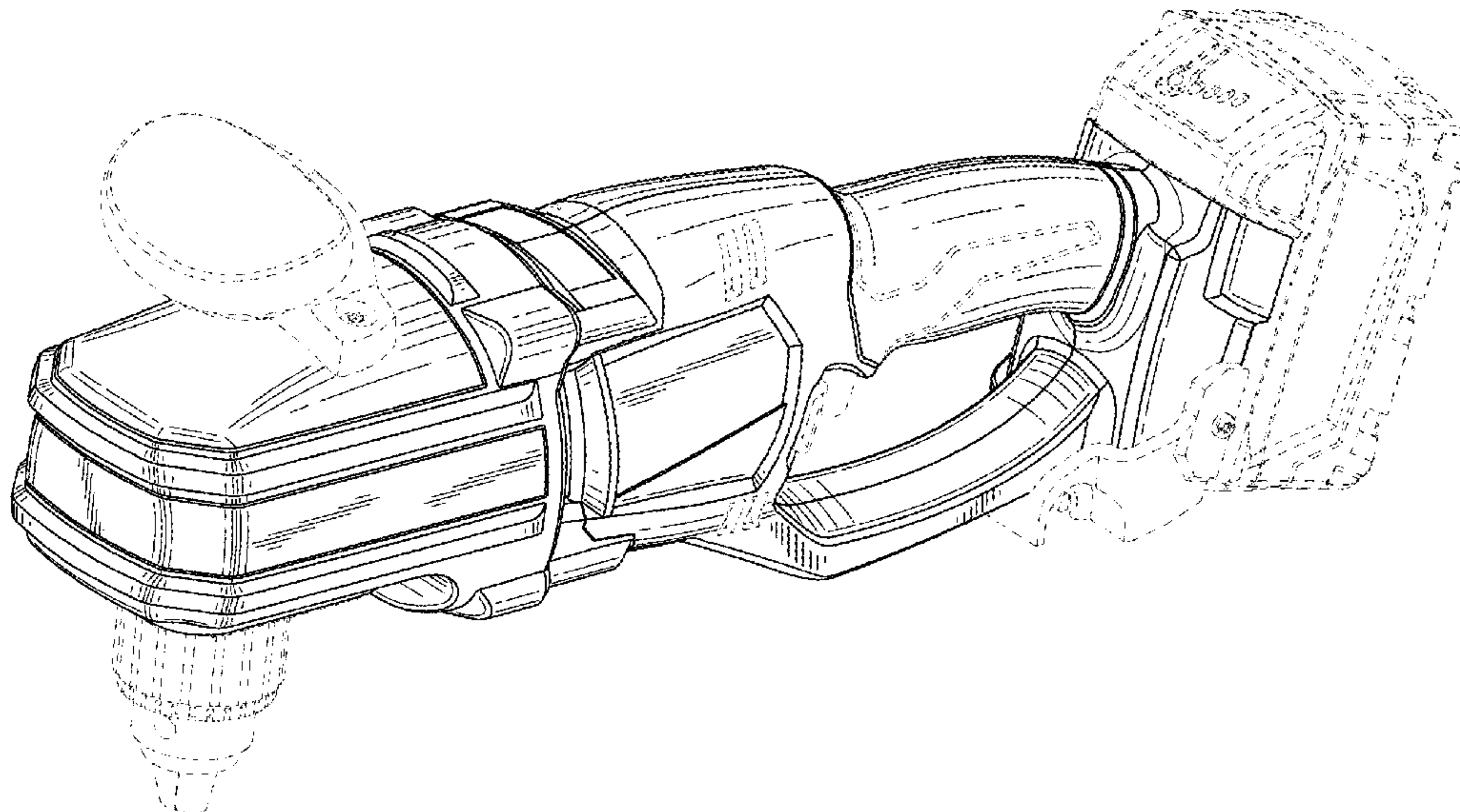
(57) **CLAIM**

We claim the ornamental design for a right angle drill, as
shown and described.

DESCRIPTION

FIG. 1 is a front perspective view of a right angle drill in
accordance with an embodiment of the invention.
FIG. 2 is a left side view of the right angle drill of FIG. 1.
FIG. 3 is a right side view of the right angle drill of FIG. 1.
FIG. 4 is a top view of the right angle drill of FIG. 1.
FIG. 5 is a bottom view of the right angle drill of FIG. 1.
FIG. 6 is a front view of the right angle drill of FIG. 1; and,
FIG. 7 is a rear view of the right angle drill of FIG. 1.
The portions of the right angle drill shown in broken lines are
included for the purpose of illustrating environment and form
no part of the claimed design.

1 Claim, 5 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

4,986,554	A	1/1991	Rathbun	7,591,616	B1	9/2009	Kerner	
5,056,661	A	10/1991	Balzano	7,665,541	B2	2/2010	Sakai et al.	
5,071,296	A	12/1991	Dietzen et al.	8,066,268	B2	11/2011	Brauer	
5,188,242	A	2/1993	Smith	D658,464	S *	5/2012	Kawase et al.	D8/61
5,332,240	A	7/1994	Bedoian	D661,563	S *	6/2012	Wilke	D8/61
5,800,102	A	9/1998	Taber	D674,676	S *	1/2013	Wang	D8/61
5,810,525	A	9/1998	Ector, Sr.	8,408,391	B2	4/2013	Drouin	
6,702,530	B2	3/2004	Bennage et al.	D689,754	S *	9/2013	Hayakawa et al.	D8/61
6,902,356	B2	6/2005	Breitenmoser	D701,440	S *	3/2014	Naksen	D8/61
D588,891	S *	3/2009	Hayakawa et al.	D701,441	S *	3/2014	Yaschur	D8/61
7,547,167	B2	6/2009	Baber et al.	D702,522	S *	4/2014	Steinfels et al.	D8/70
				D712,224	S *	9/2014	Zhang	D8/61
				D718,108	S *	11/2014	Beukema	D8/61

* cited by examiner

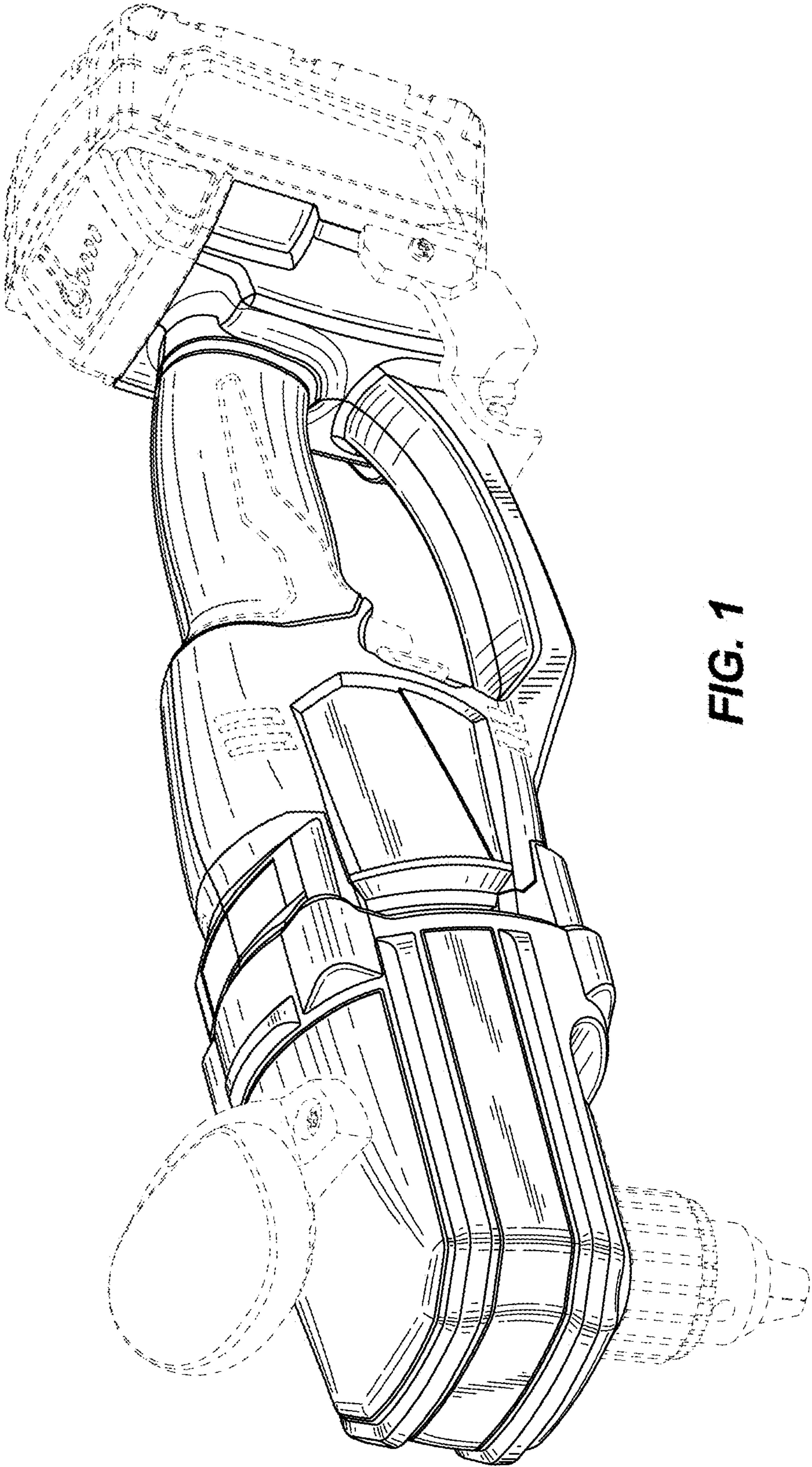


FIG. 1

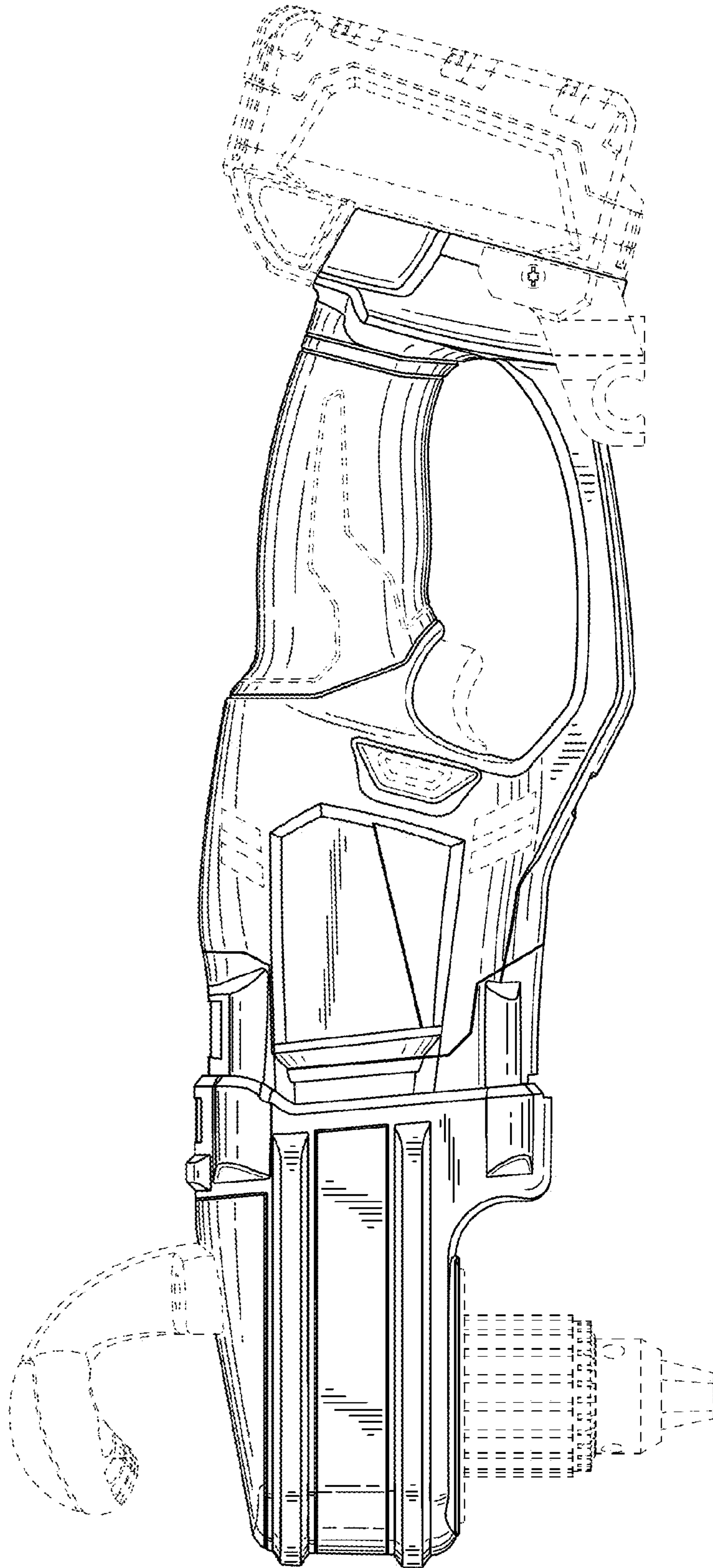


FIG. 2

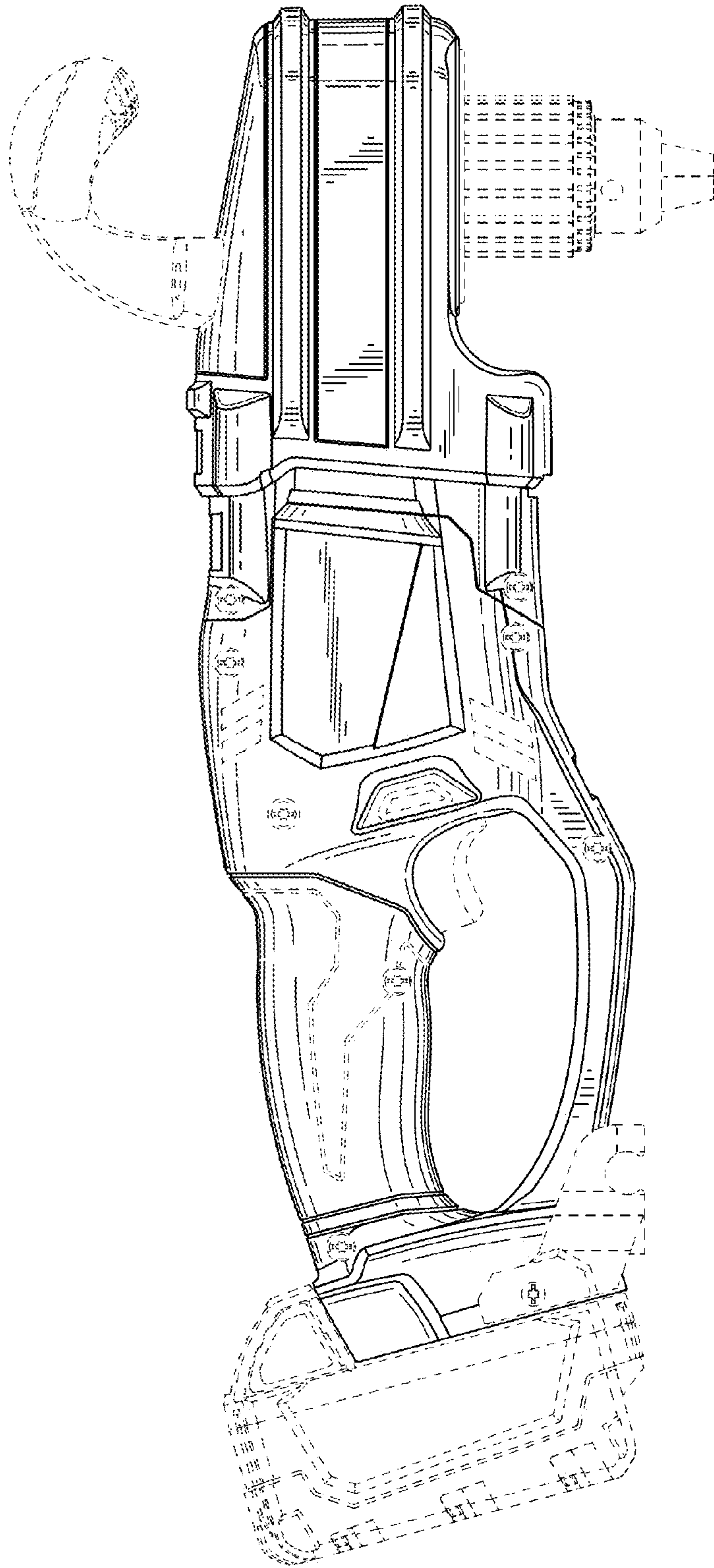


FIG. 3

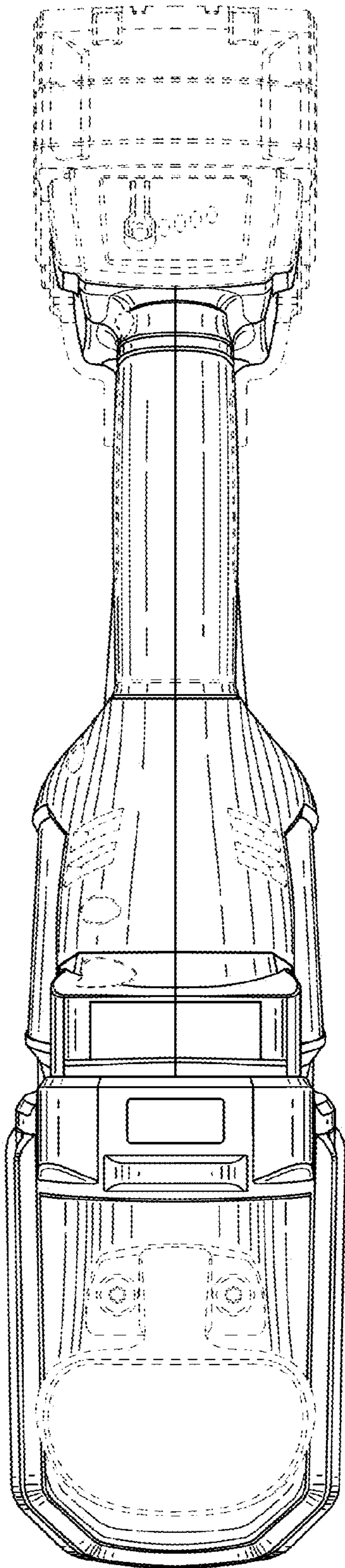


FIG. 4

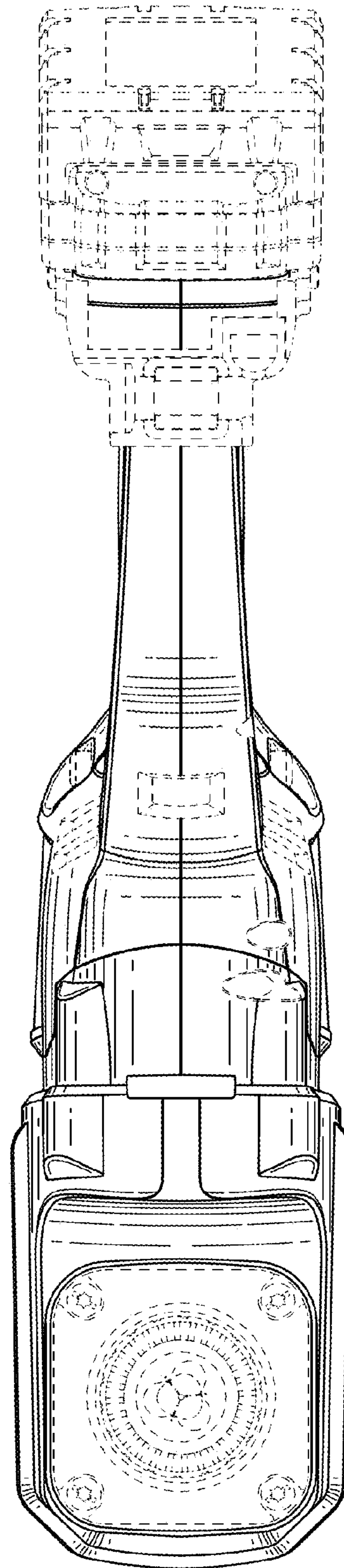


FIG. 5

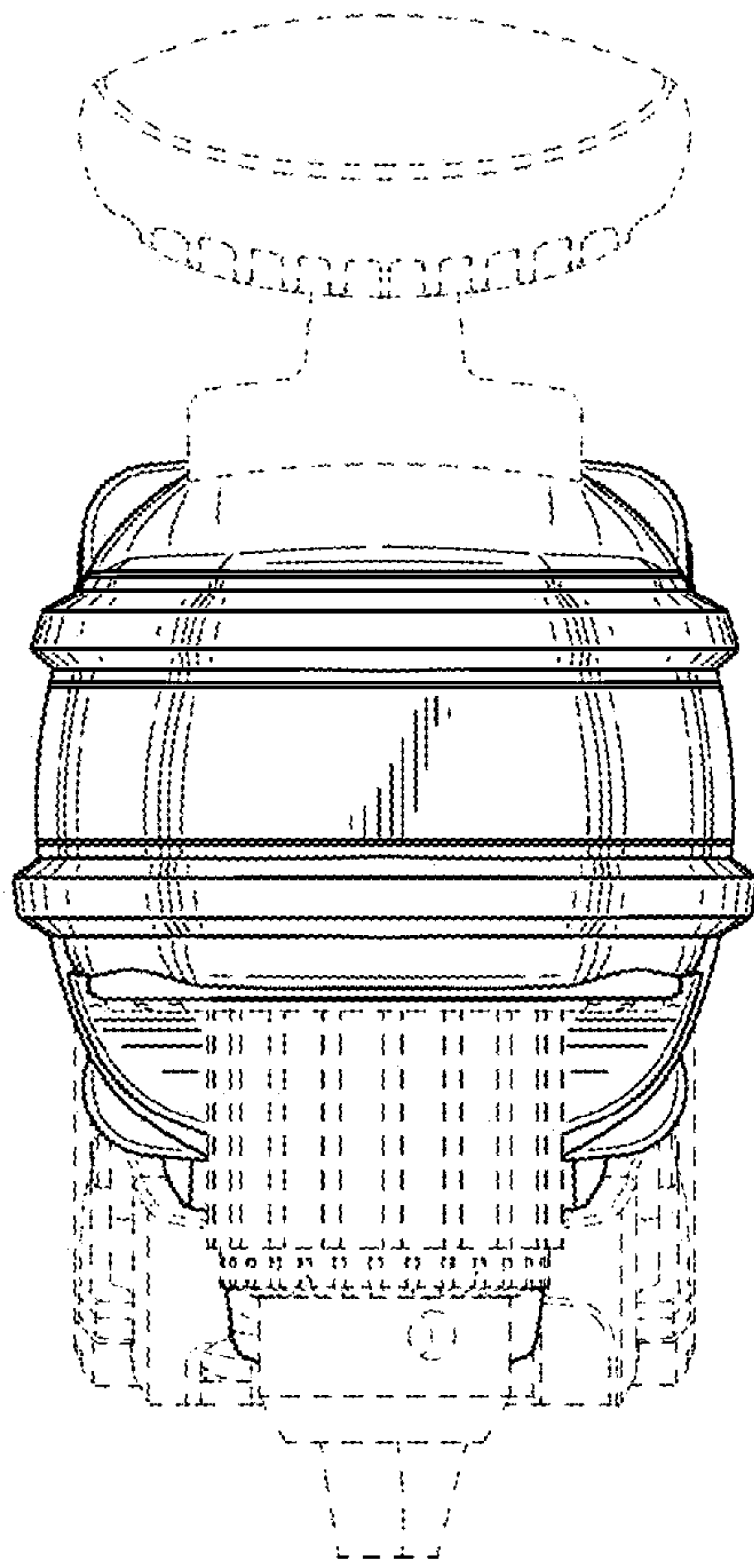


FIG. 6

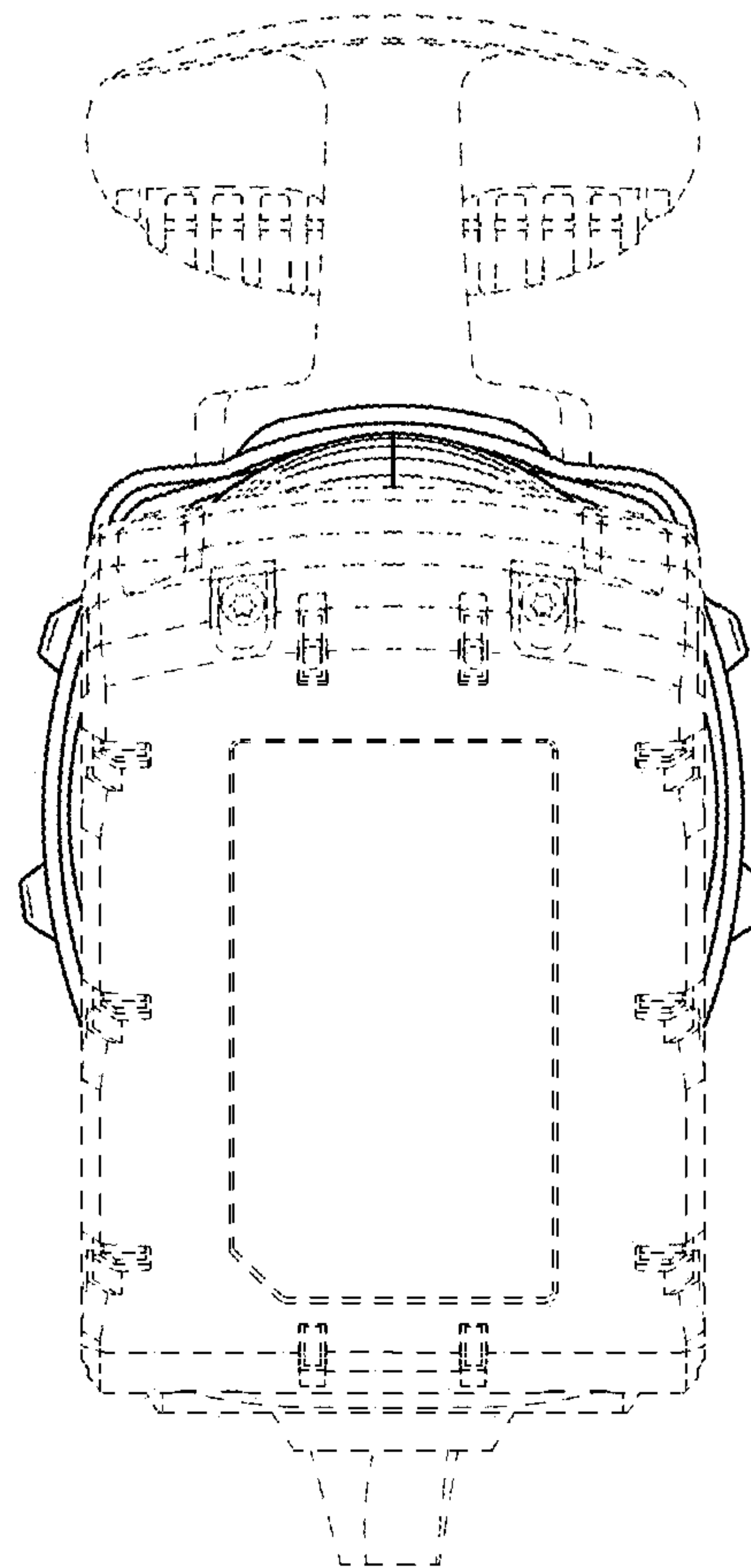


FIG. 7