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(12) **United States Design Patent** (10) **Patent No.:** **US D818,019 S**
Huang et al. (45) **Date of Patent:** **** May 15, 2018**

(54) **ROBOT ARM**

D650,404 S * 12/2011 Kobayashi D15/199
D652,851 S * 1/2012 Kobayashi D15/199
D671,175 S * 11/2012 Koshiishi D15/199

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(Continued)

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FOREIGN PATENT DOCUMENTS

WO WO 9426475 A1 * 11/1994 B25J 9/1005

(73) Assignee: **Hiwin Technologies Corp.**, Taichung (TW)

OTHER PUBLICATIONS

Six-Axis Articulated Robots, posted on hiwin.com, no posted date given, no production date given, [online], [site visited Sep. 7, 2017], Available from Internet, <URL: <http://www.hiwin.com/articulated-robots.html>>.*

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

(Continued)

(21) Appl. No.: **29/584,302**

(22) Filed: **Nov. 14, 2016**

Primary Examiner — Melanie H Tung
Assistant Examiner — Fitzgerald L Butac

(30) **Foreign Application Priority Data**

(74) *Attorney, Agent, or Firm* — Trop Pruner & Hu, P.C.

Aug. 31, 2016 (TW) 105305071

(51) **LOC (11) Cl.** **15-99**

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

(57) **CLAIM**

The ornamental design for a robot arm, as shown and described.

(58) **Field of Classification Search**

DESCRIPTION

USPC D8/34, 104, 499; D15/10, 17, 28, 76,
D15/122, 123, 126, 128, 130, 140, 142;
D26/44, 60-66, 113, 120, 122, 138,
D26/140-142, 152, 155
CPC B25J 15/00; B25J 15/0004; B25J 15/02;
B25J 15/06; B25J 15/0616; B25J 9/00;
B25J 9/10; B25J 9/4005; B25J 9/1015
See application file for complete search history.

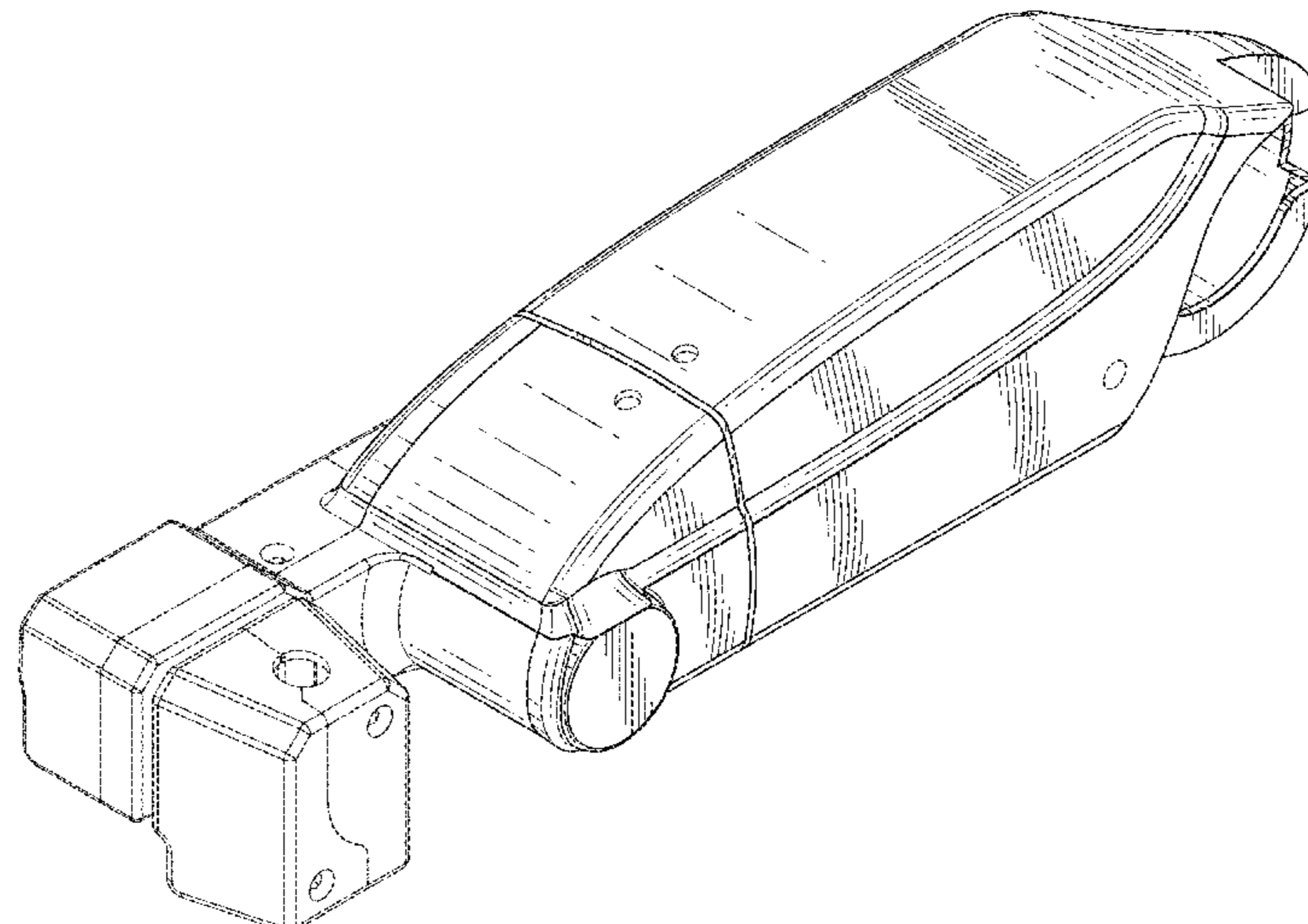
FIG. 1 is a perspective view of a robot arm showing our new design;
FIG. 2 is a front elevational view thereof;
FIG. 3 is a rear elevational view thereof;
FIG. 4 is a left side elevational view thereof;
FIG. 5 is a right side elevational view thereof;
FIG. 6 is a top plan view thereof;
FIG. 7 is a bottom plan view thereof;
FIG. 8 is another perspective view thereof; and,
FIG. 9 is a perspective view of the design in state of use.
The dotted broken lines depict portions of a robot arm in which the design is embodied that form no part of the claimed design.
The dash-dot broken lines define the bounds of the claimed design and form no part thereof.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D409,636 S * 5/1999 Genov D15/199
D443,287 S * 6/2001 Kawahara D15/199
D444,488 S * 7/2001 Selic D15/199
D449,057 S * 10/2001 Selic D15/199
D600,348 S * 9/2009 Dorre D24/158
D604,752 S * 11/2009 Haag D15/199

1 Claim, 8 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D709,502 S	*	7/2014	Shen	D14/423
D762,300 S	*	7/2016	Breitweiser	D24/128
D774,579 S	*	12/2016	Oda	D15/199
D776,178 S	*	1/2017	Ries	D15/199
D781,943 S	*	3/2017	Ries	D15/148
D783,448 S	*	4/2017	Siegel	D11/160
D785,688 S	*	5/2017	Matsuda	D15/199
D790,618 S	*	6/2017	Ke	D15/199

OTHER PUBLICATIONS

Bench-Top 750mm 5 or 6 axis articulated robot arm, posted on strobotics.com, no posted date given, no production date given, [online], [site visited Sep. 7, 2017], available from internet, <URL: <https://www.strobotics.com/articulated-robot-arm.htm>>.*

Articulated robot, 6-axis, handling, for heavy loads, posted on directindustry.com, no posted date given, no production date given, [online], [site visited Sep. 7, 2017], Available from Internet, <URL: <http://www.directindustry.com/prod/fanuc-europe-corporation/product-32007-1807487.html>>.*

* cited by examiner

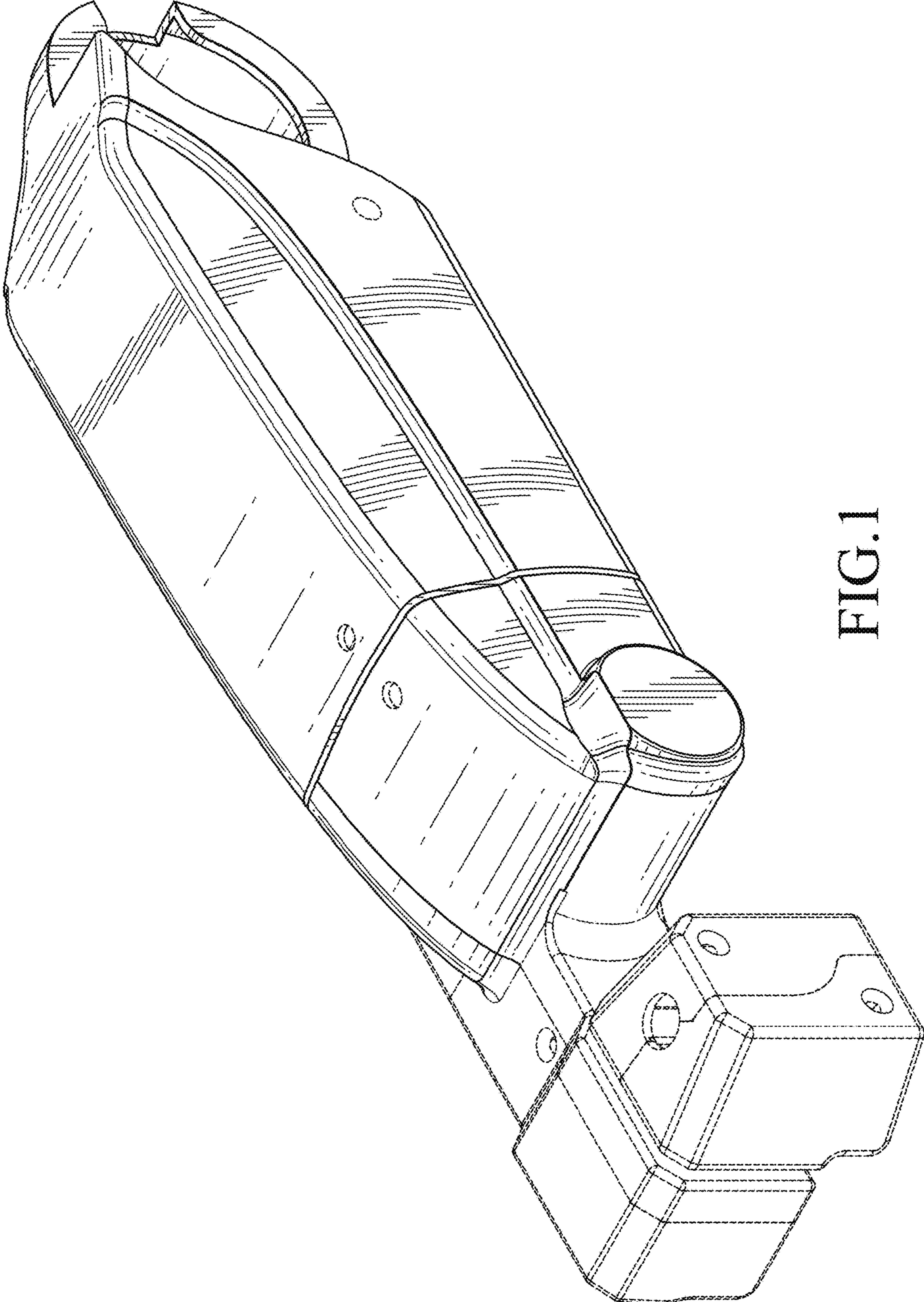


FIG. 1

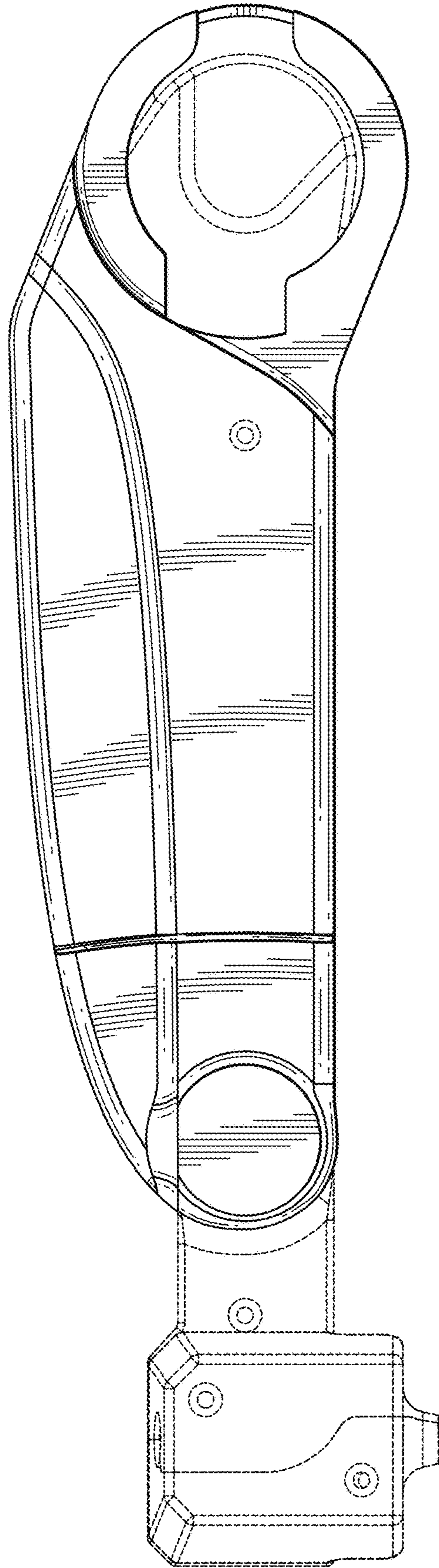


FIG. 2

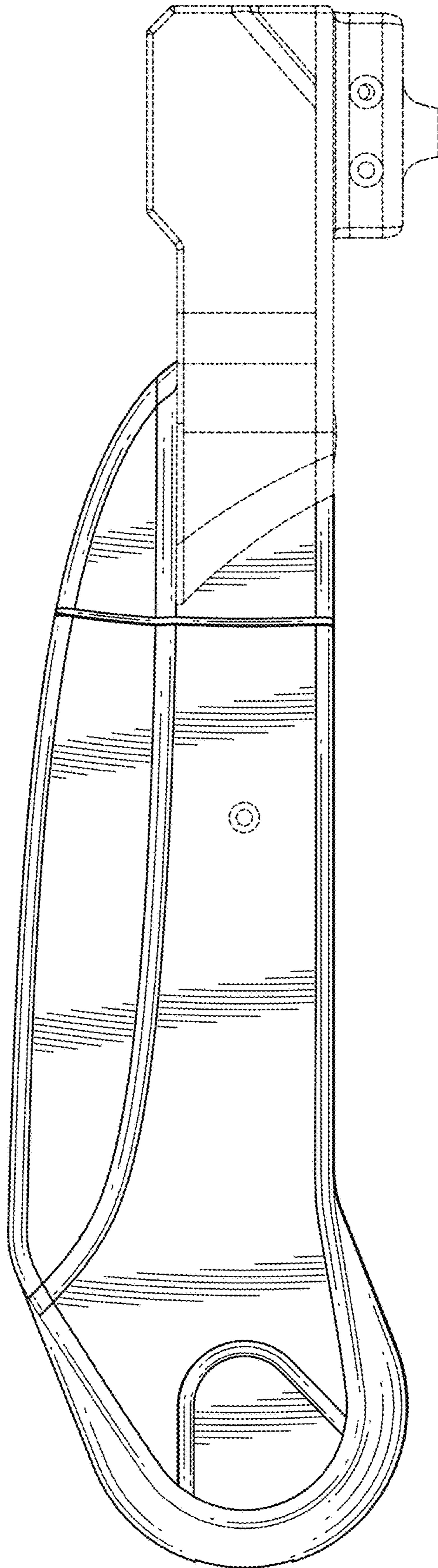


FIG. 3

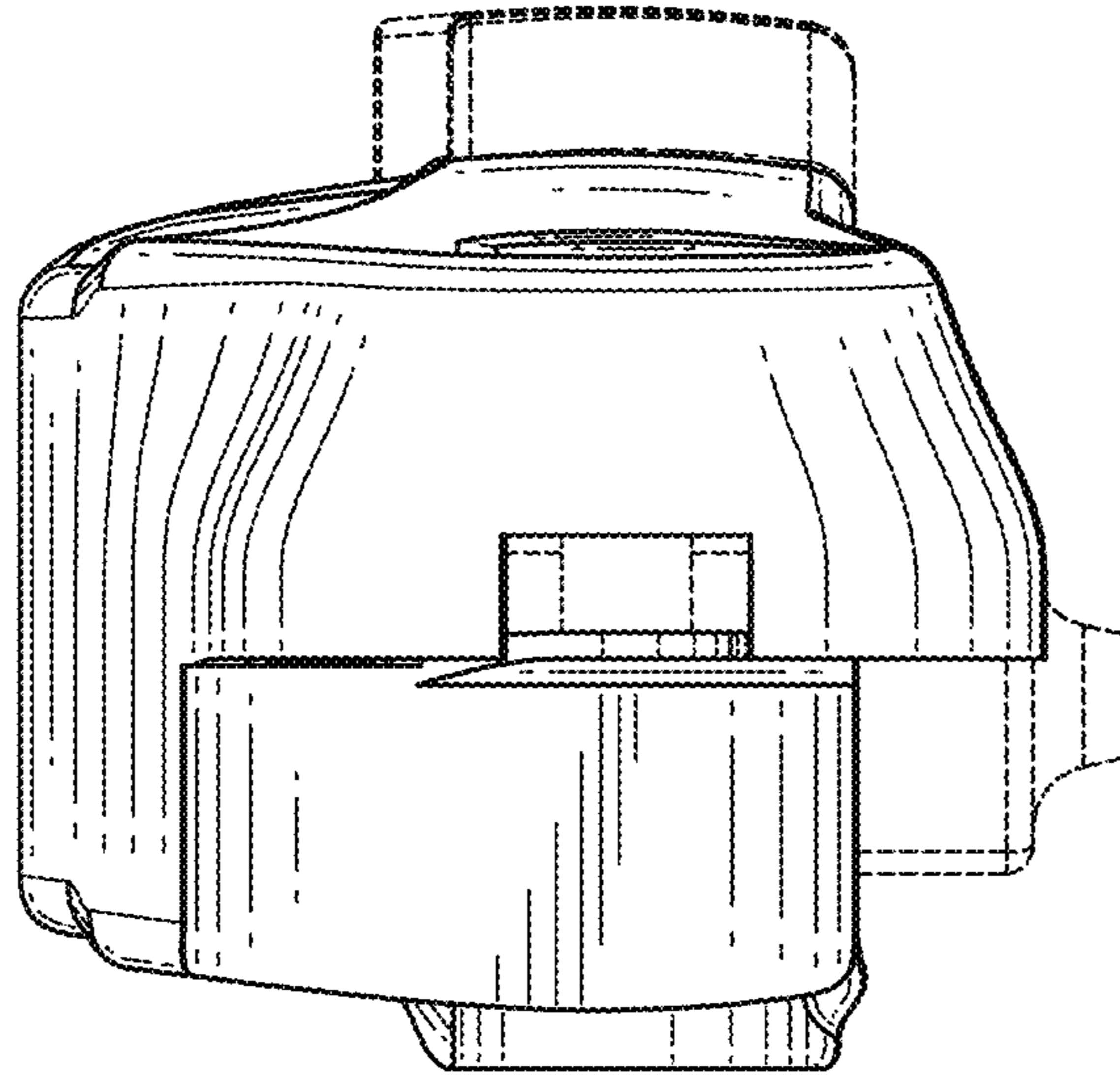


FIG.5

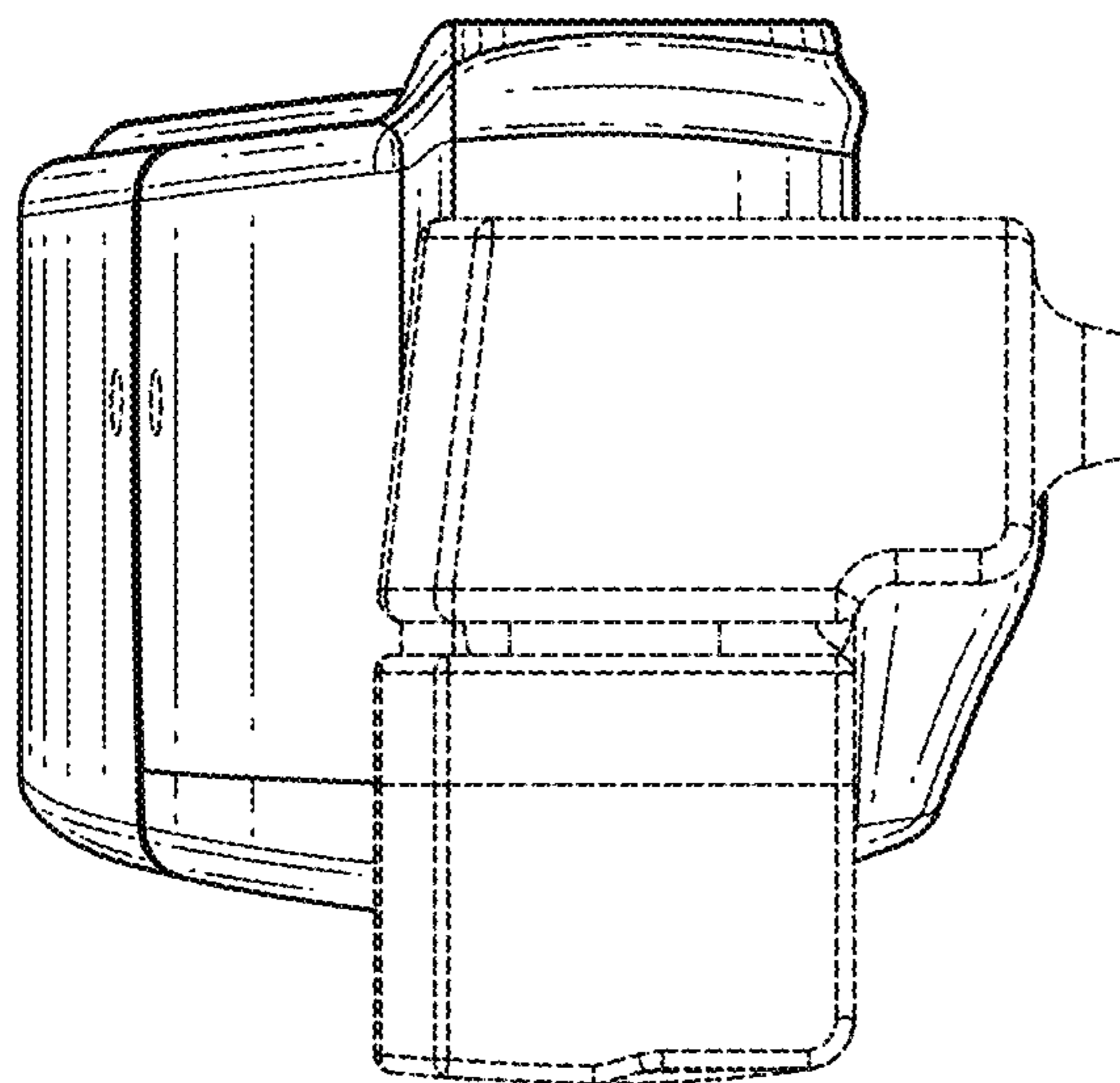


FIG.4

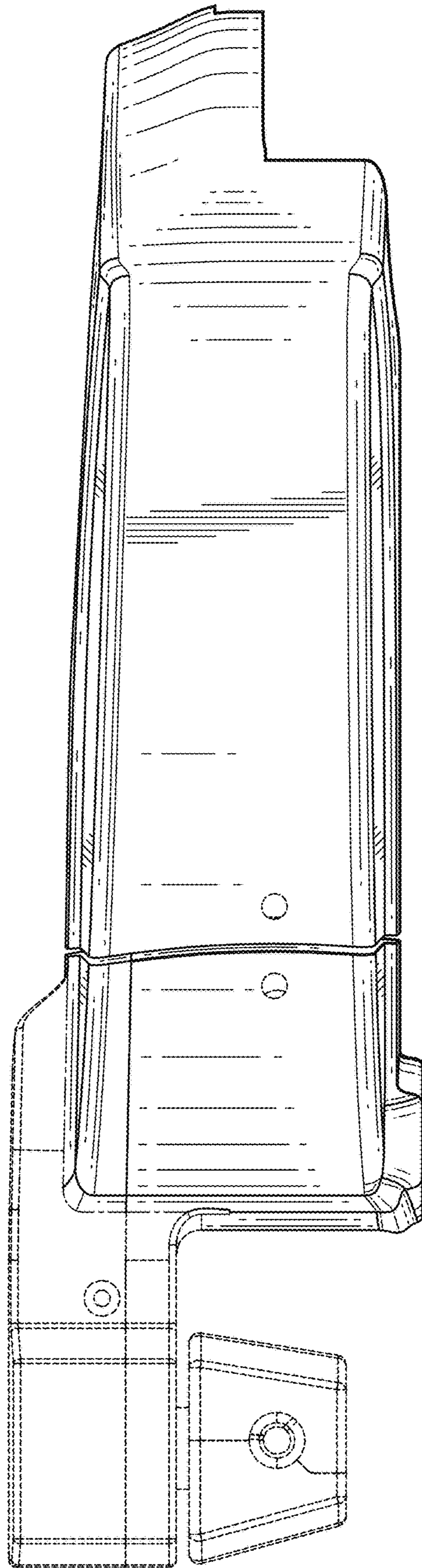


FIG.6

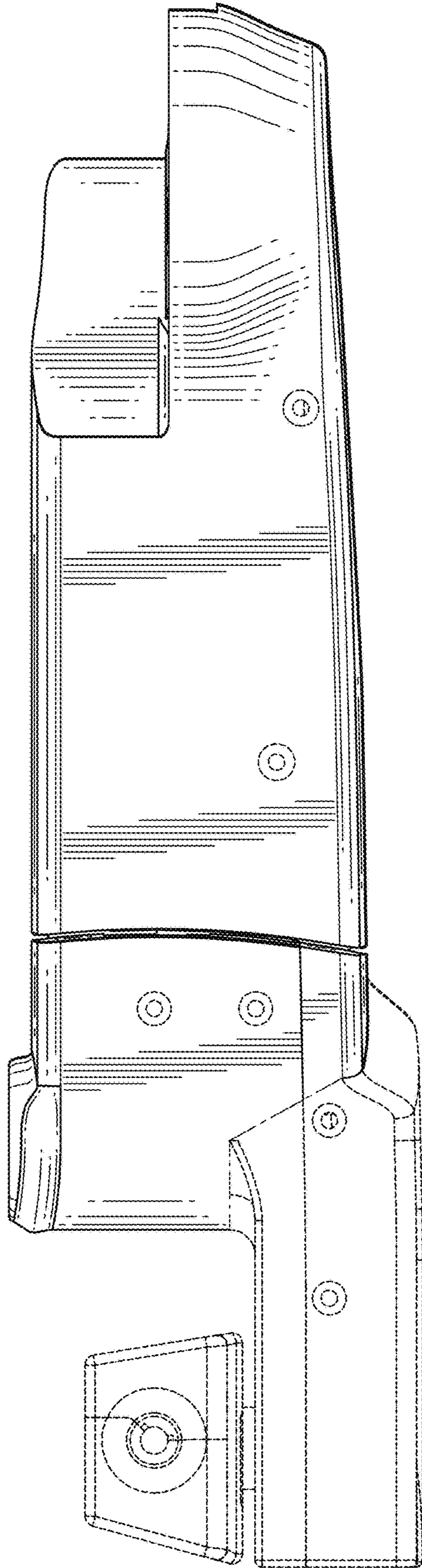


FIG.7

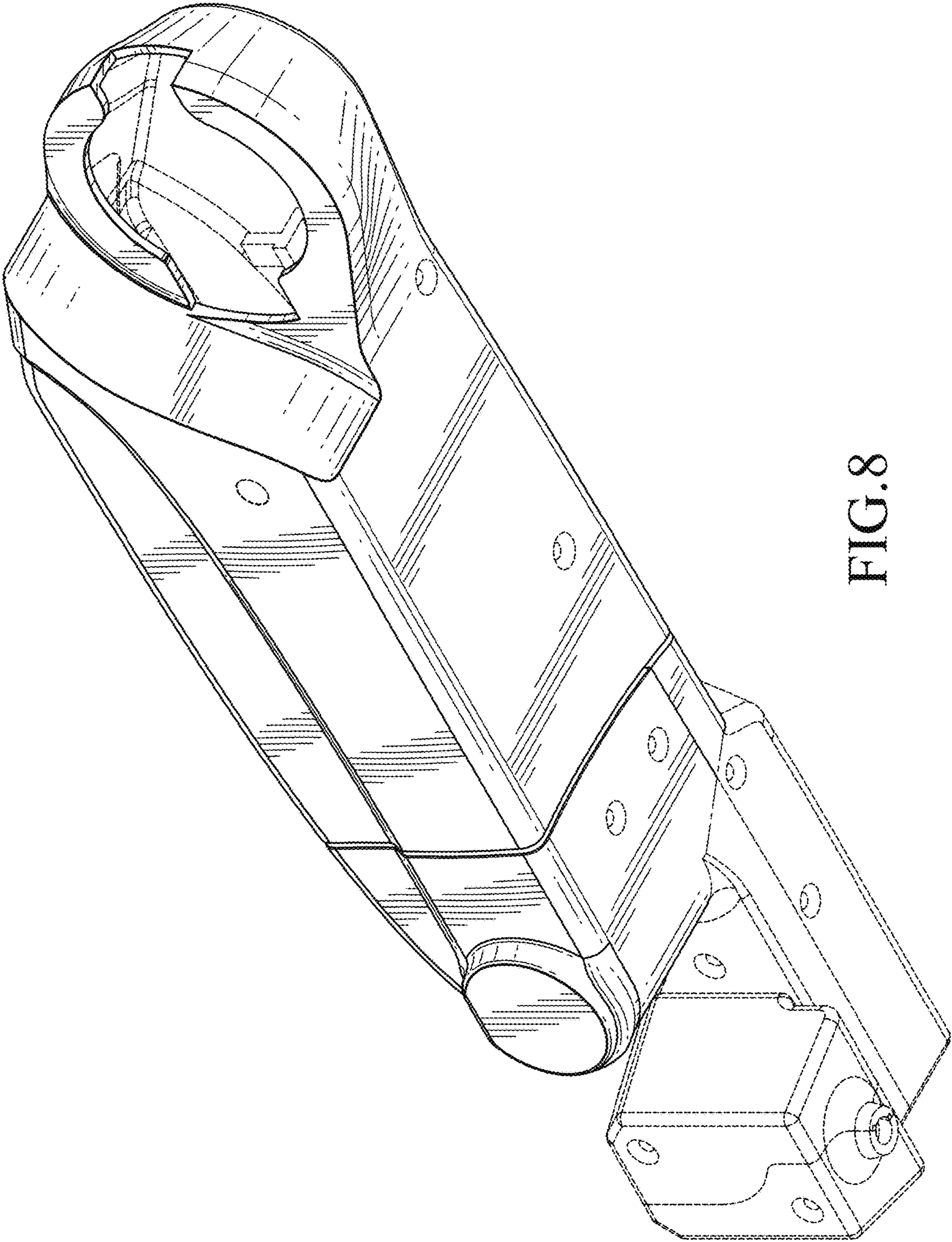


FIG. 8

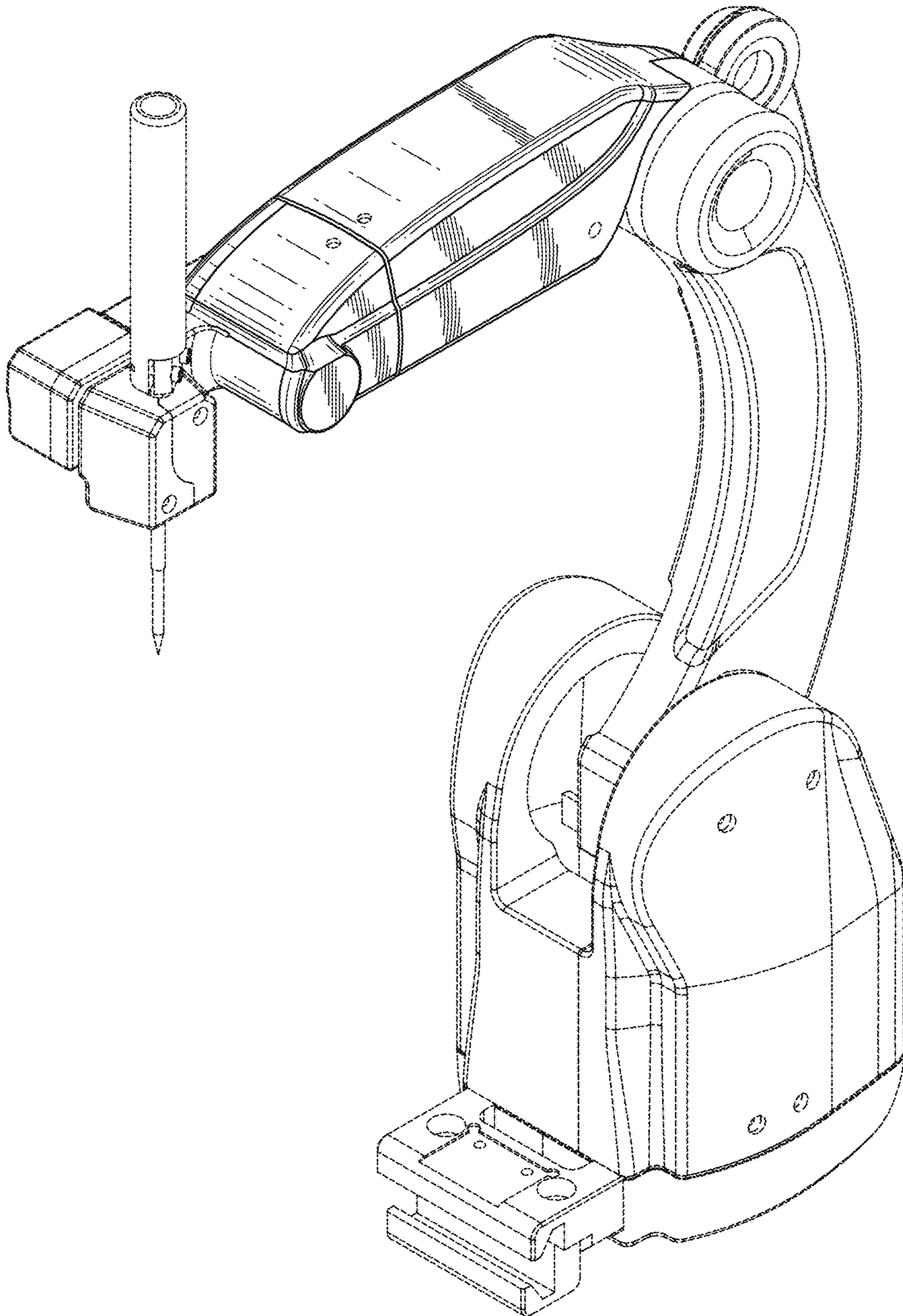


FIG.9