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(12) **United States Design Patent**
Fukuyama

(10) **Patent No.:** **US D868,695 S**

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(54) **TERMINAL METAL FITTING FOR ELECTRICAL CONNECTOR**

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

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(30) **Foreign Application Priority Data**

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(51) **LOC (12) Cl.** **13-03**

(52) **U.S. Cl.**
USPC **D13/133**

(58) **Field of Classification Search**
USPC D13/118-123, 133, 146, 147, 149,
D13/151-156, 173, 184, 199
(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,461,531 A 7/1984 Davis et al.
4,596,440 A 6/1986 Quam

(Continued)

FOREIGN PATENT DOCUMENTS

JP D1195974 S 2/2004
JP D1434279 S 2/2012

(Continued)

OTHER PUBLICATIONS

Design HMI Terminals, dated Apr. 14, 2017, [online], [site visited Jul. 29, 2019]. Available from Internet, URL:<http://www.designhmi.com/2017/04/14/press-fit-terminals/> (Year: 2017).

(Continued)

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(57) **CLAIM**

The ornamental design for a terminal metal fitting for electrical connector, as shown and described.

DESCRIPTION

FIG. 1 is a front, top and right side perspective view of a terminal metal fitting for electrical connector showing my new design;

FIG. 2 is a rear, bottom, and left side perspective view thereof;

FIG. 3 is a front view thereof, the rear view being a mirror image of FIG. 3;

FIG. 4 is a top plan view thereof;

FIG. 5 is a bottom plan view thereof;

FIG. 6 is a right side view thereof;

FIG. 7 is a left side view thereof;

FIG. 8 is a cross-sectional view taken along line 8-8 in FIG. 3;

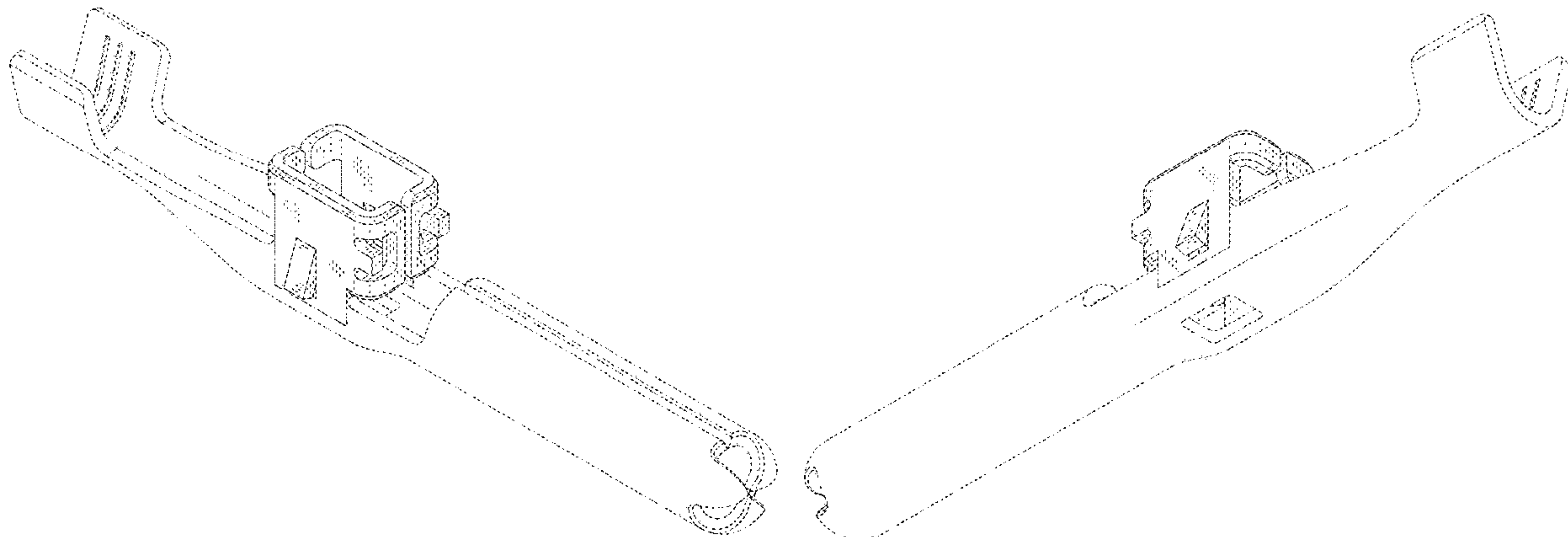
FIG. 9 is a cross-sectional view taken along line 9-9 in FIG. 3;

FIG. 10 is a cross-sectional view taken along line 10-10 in FIG. 6; and,

FIG. 11 is a cross-sectional view taken along line 11-11 in FIG. 6.

The broken lines illustrate portions of the terminal metal fitting for electrical connector, and form no part of the claimed design. The dash-dotted lines denote the boundary of the claim and form no part of the claimed design.

1 Claim, 7 Drawing Sheets



(58) **Field of Classification Search**

CPC ... H01R 4/18; H01R 4/48; H01R 9/05; H01R 9/24; H01R 13/00; H01R 13/03; H01R 13/04; H01R 13/11; H01R 13/115; H01R 13/422; H01R 13/428; H01R 13/642; H01R 43/16

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,913,678 A 4/1990 Avellino et al.
 4,973,261 A * 11/1990 Hatagishi H01R 4/2466
 29/874
 5,112,244 A * 5/1992 Kuzuno H01R 4/2454
 439/395
 5,135,418 A 8/1992 Hatagishi et al.
 5,266,056 A 11/1993 Baderschneider et al.
 6,165,003 A 12/2000 Bigotto
 6,325,652 B1 * 12/2001 Grant H01R 13/6315
 439/248
 D462,326 S * 9/2002 Okamoto D13/147
 D475,022 S * 5/2003 Kihira D13/133
 D503,385 S 3/2005 Hosokawa
 D568,245 S 5/2008 Kudo
 D592,150 S 5/2009 Ogata et al.
 7,927,127 B1 * 4/2011 Glick H01R 4/245
 439/397
 D770,978 S * 11/2016 Reese D13/133

D781,239 S * 3/2017 Ikeda D13/154
 2008/0146090 A1 6/2008 Shimizu
 2009/0036002 A1 * 2/2009 Arai H01R 13/432
 439/825
 2009/0047815 A1 2/2009 Nicholson
 2013/0052883 A1 * 2/2013 Iihoshi H01R 13/434
 439/748
 2013/0065459 A1 3/2013 Hirabayashi et al.
 2014/0087607 A1 * 3/2014 Kojima H01R 13/04
 439/891
 2015/0380863 A1 12/2015 Uchida
 2016/0020528 A1 1/2016 Miyakawa
 2017/0033486 A1 2/2017 Saka et al.
 2017/0170593 A1 * 6/2017 Uezono H01R 13/4223
 2017/0324180 A1 11/2017 Natsume et al.
 2019/0173224 A1 * 6/2019 Inoue H01R 13/5219
 2019/0199008 A1 6/2019 Kanemura et al.

FOREIGN PATENT DOCUMENTS

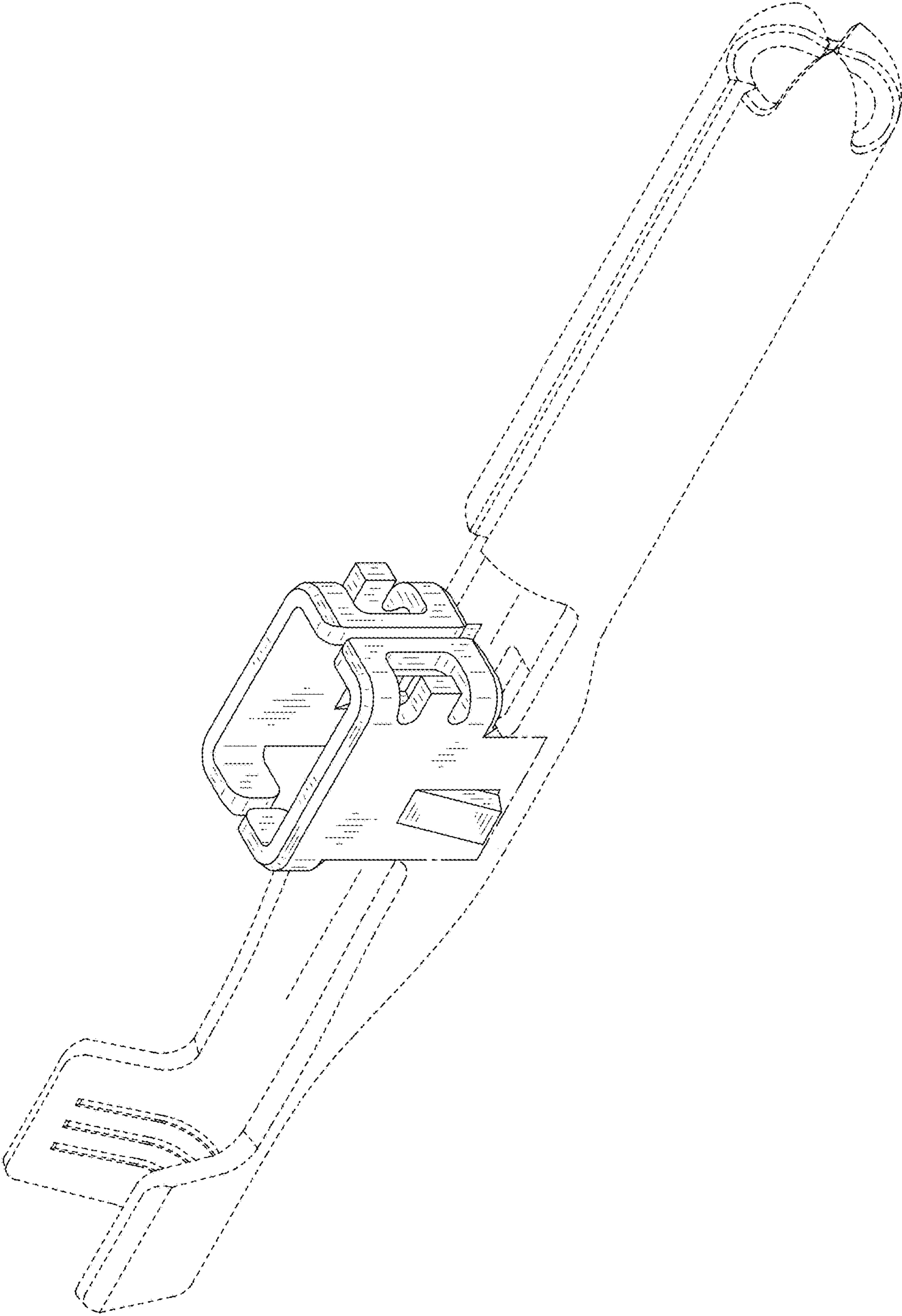
JP D1434411 S 2/2012
 JP D1434413 S 2/2012
 JP D1504116 S 8/2014

OTHER PUBLICATIONS

Notice of Allowance and Fee(s) Due issued in U.S. Appl. No. 29/666,834 dated Aug. 8, 2019; 15 pages.

* cited by examiner

FIG.1



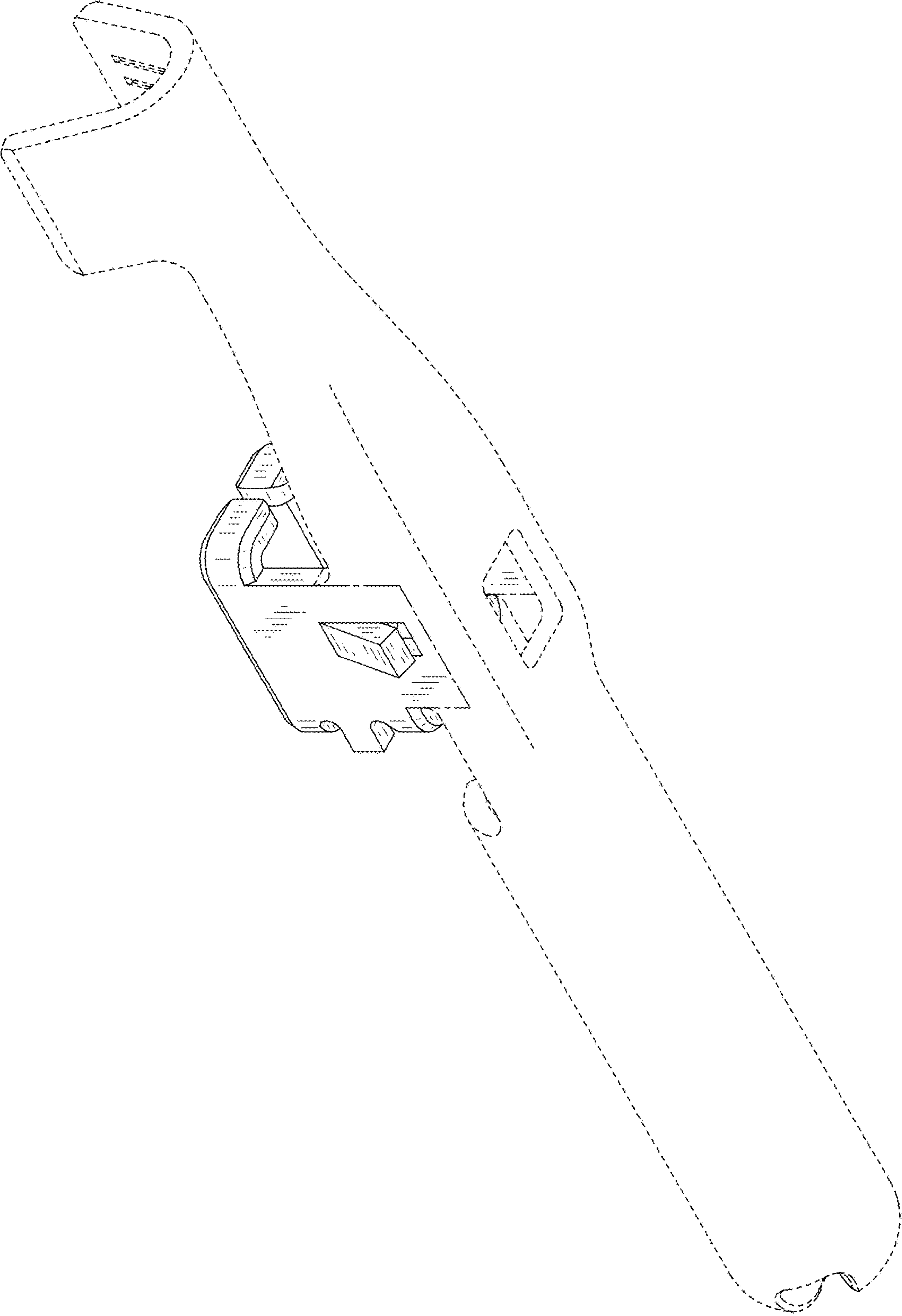


Fig.2

Fig. 3

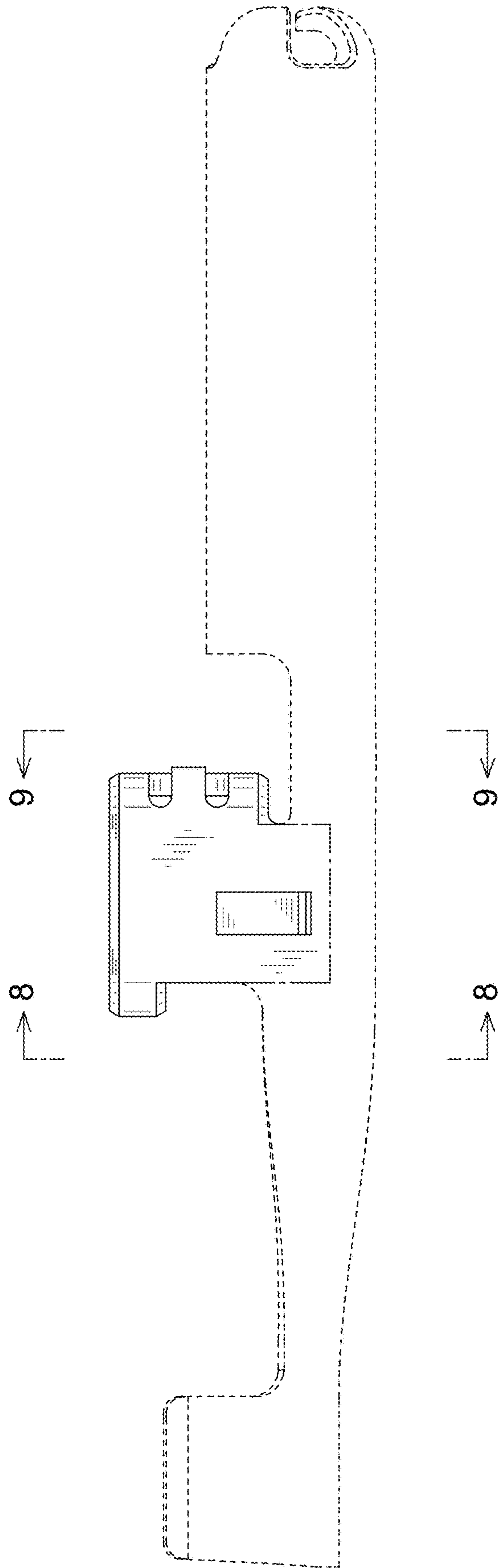


Fig.4

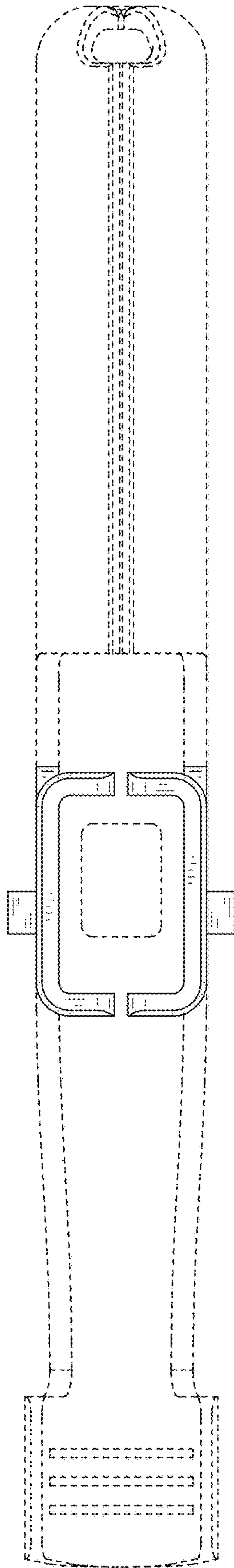


Fig.5

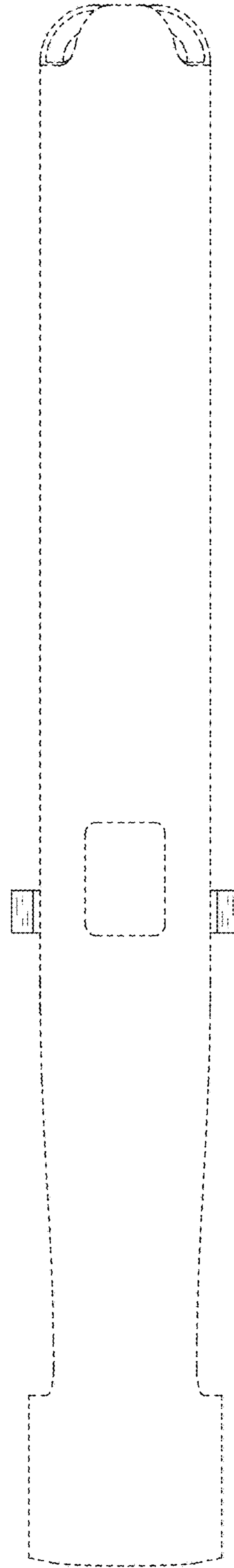


Fig.7

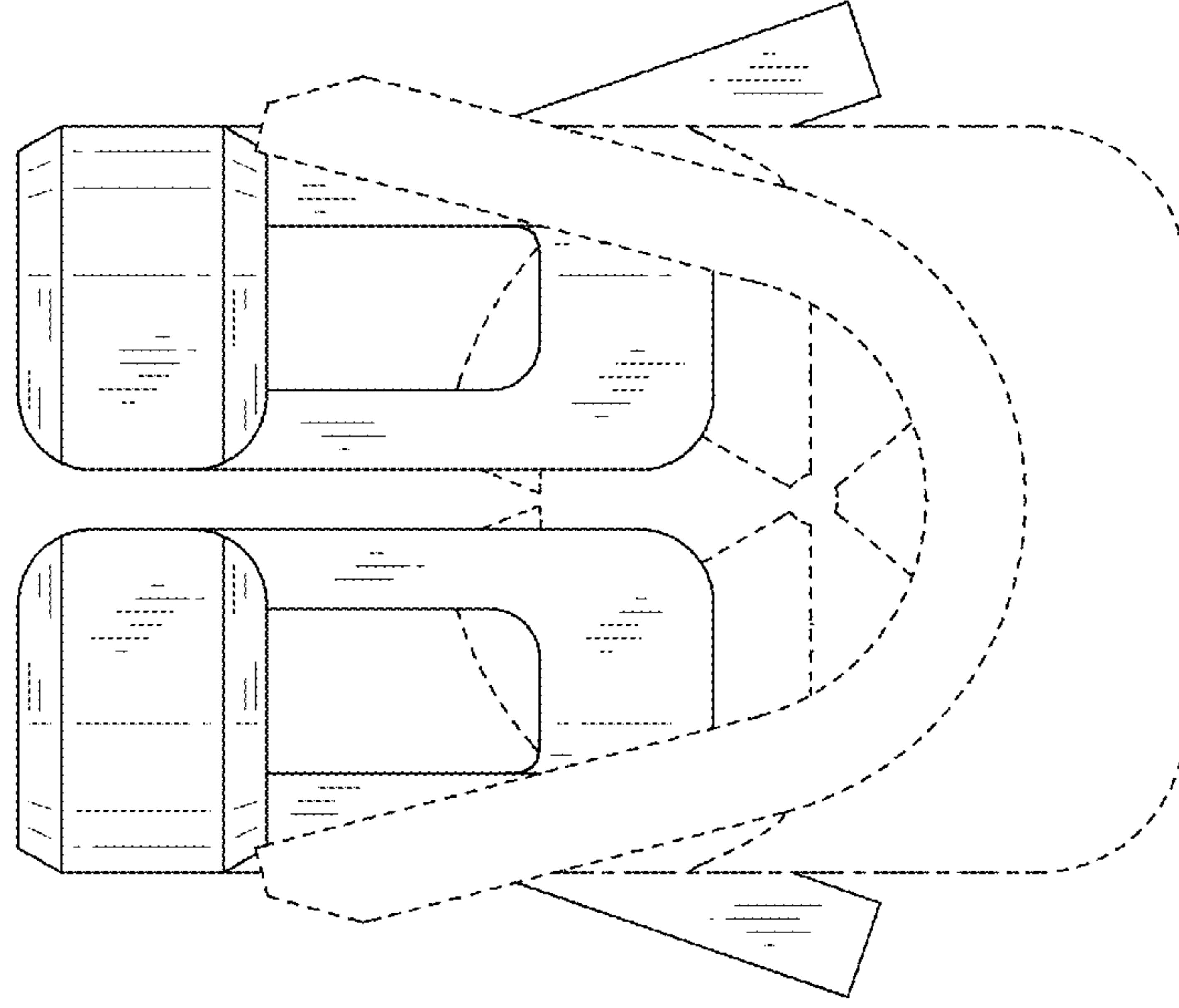


Fig.6

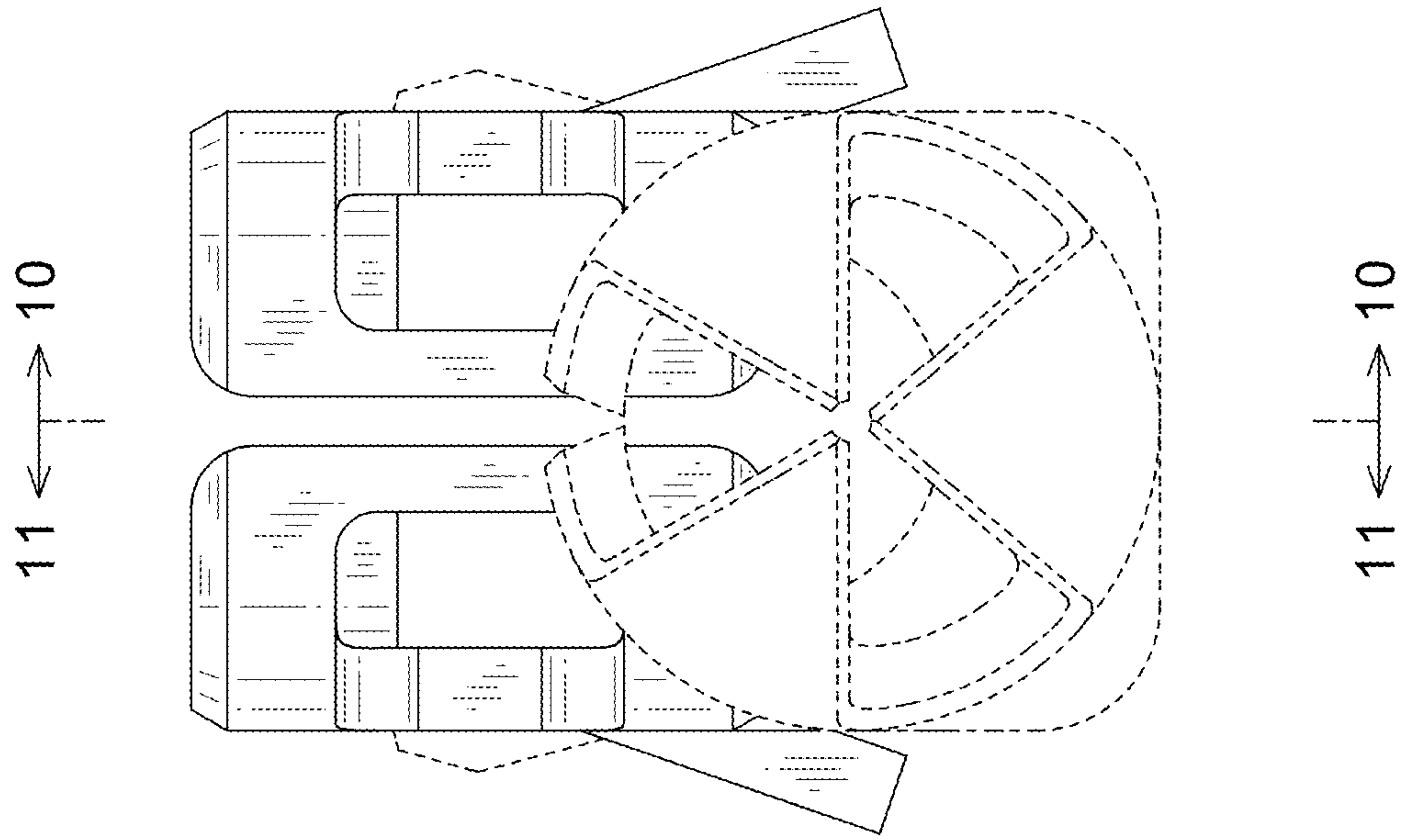


FIG.8

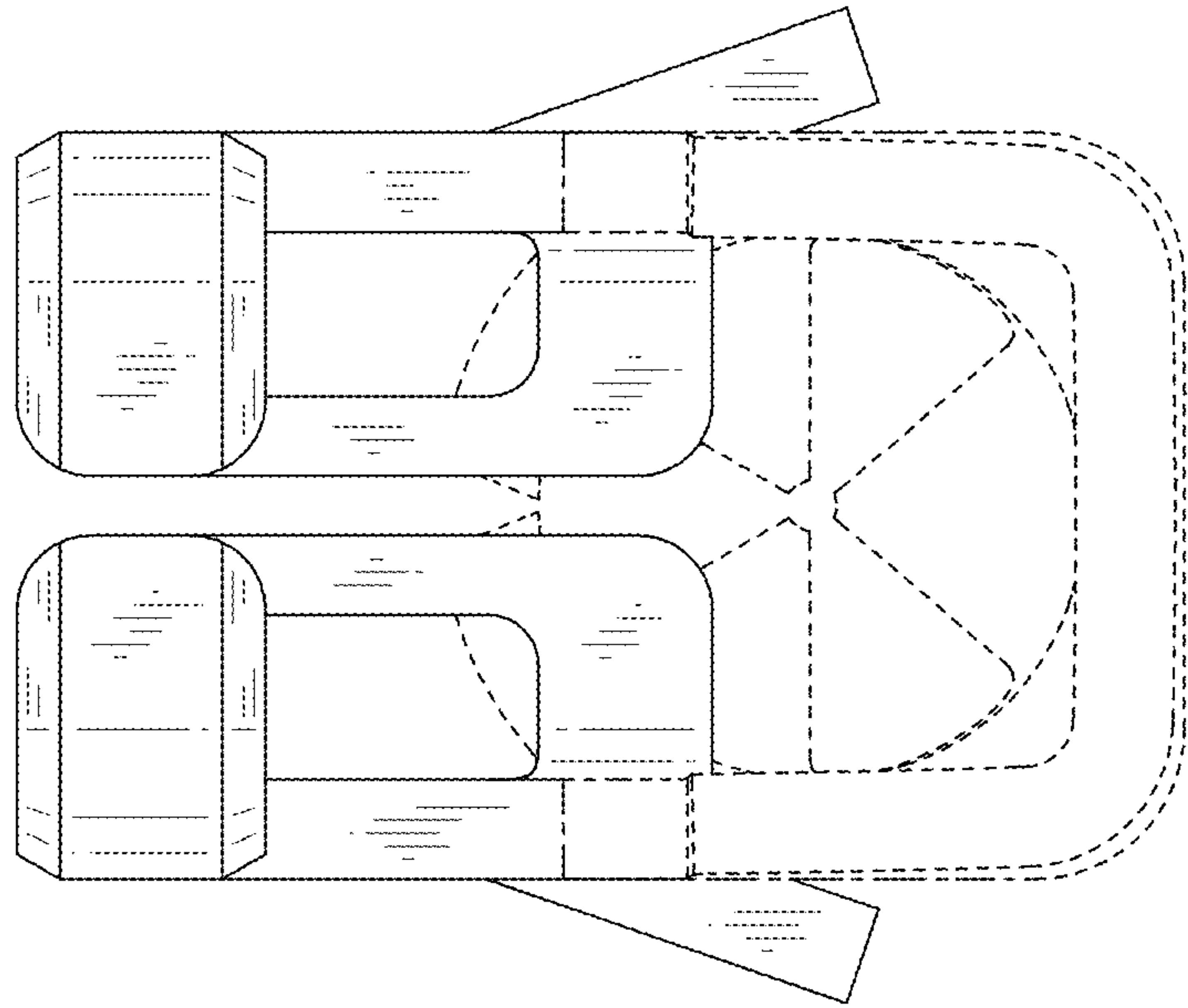


Fig.9

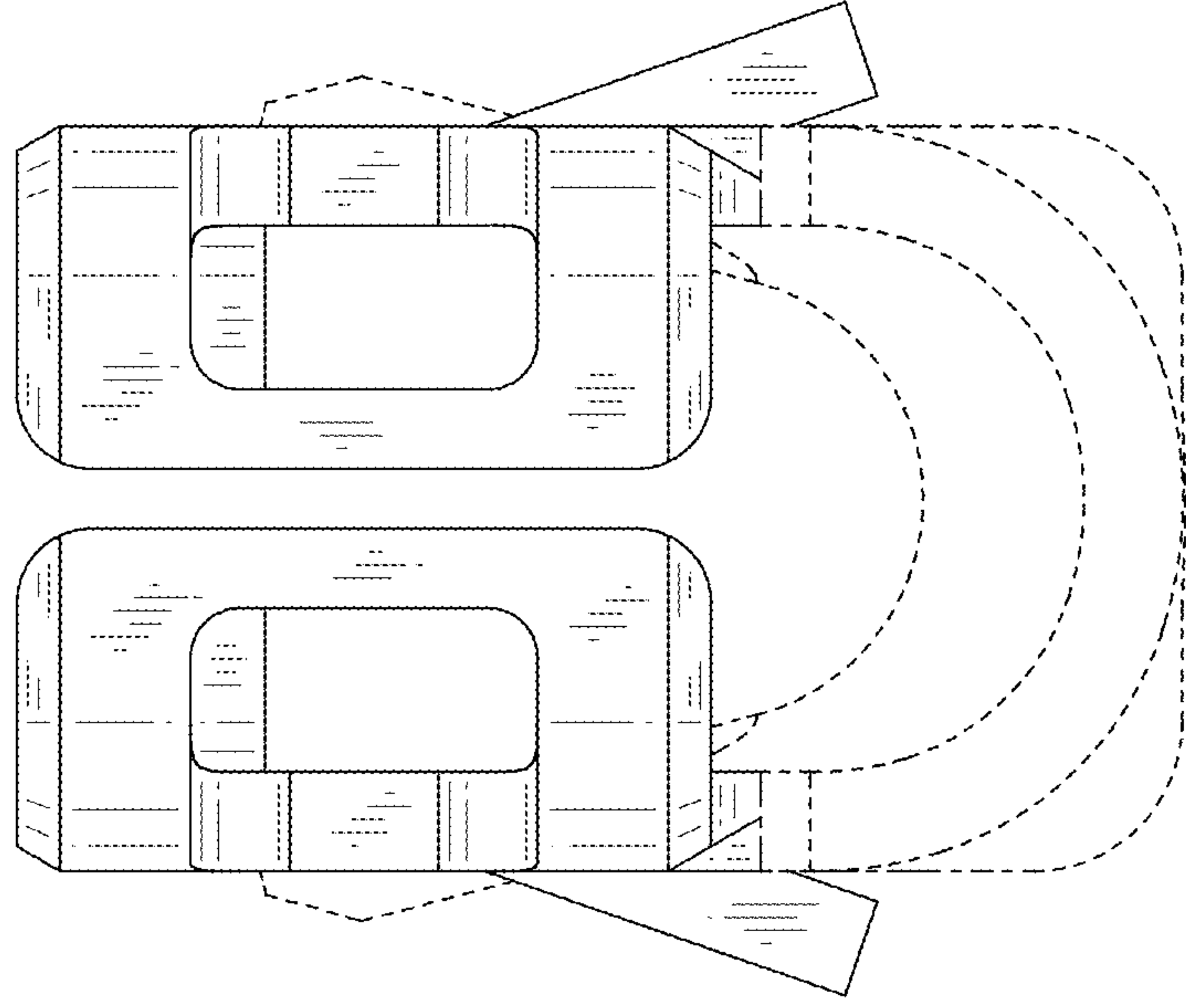


Fig.10

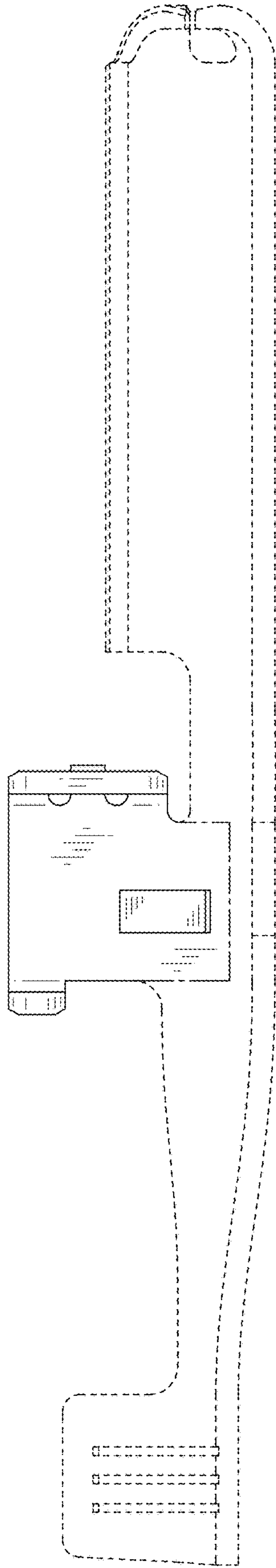


Fig.11

