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

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(54) **ELECTRICAL CONNECTOR**

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(73) Assignee: **SMK Corporation**, Tokyo (JP)

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

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

(52) **U.S. Cl.**
USPC **D13/133**; D13/146; D13/147

(58) **Field of Classification Search**
USPC D13/107, 110, 118, 120, 123, 133,
D13/146-147, 149, 154, 184, 199
CPC H01R 9/053; H01R 9/0527; H01R 13/193;
H01R 13/426; H01R 13/504; H01R
13/635; H01R 13/6584; H01R 13/7033;
H01R 12/73; H01R 24/44; H01R 24/46
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D531,122 S * 10/2006 Asai D13/147
D695,692 S * 12/2013 Takenaga D13/147
D744,429 S * 12/2015 Kobuchi D13/147
D745,463 S * 12/2015 Kobuchi D13/147
D885,347 S * 5/2020 Ishida D13/147
10,847,917 B2 * 11/2020 Ishida H01R 13/426
D916,663 S * 4/2021 Yanase D13/146
D917,399 S * 4/2021 Yanase D13/146

D918,146 S * 5/2021 Yanase D13/133
11,165,204 B2 * 11/2021 Ishida H01R 12/73
2018/0331444 A1 * 11/2018 Ono H01R 13/504
2020/0119470 A1 * 4/2020 Yanase H01R 9/053
2021/0005993 A1 * 1/2021 Yanase H01R 13/193

FOREIGN PATENT DOCUMENTS

JP 2010198813 A * 9/2010
JP 2019121439 A * 7/2019

OTHER PUBLICATIONS

SMK Corporation, Date: Sep. 20, 2017, [online], [site visited Nov. 15, 2021]. Available from internet, URL: <https://www.smkusa.com/new-products/2017/10/9/fb-9-series-fpc-to-board-battery-connector> (Year: 2017).*

* cited by examiner

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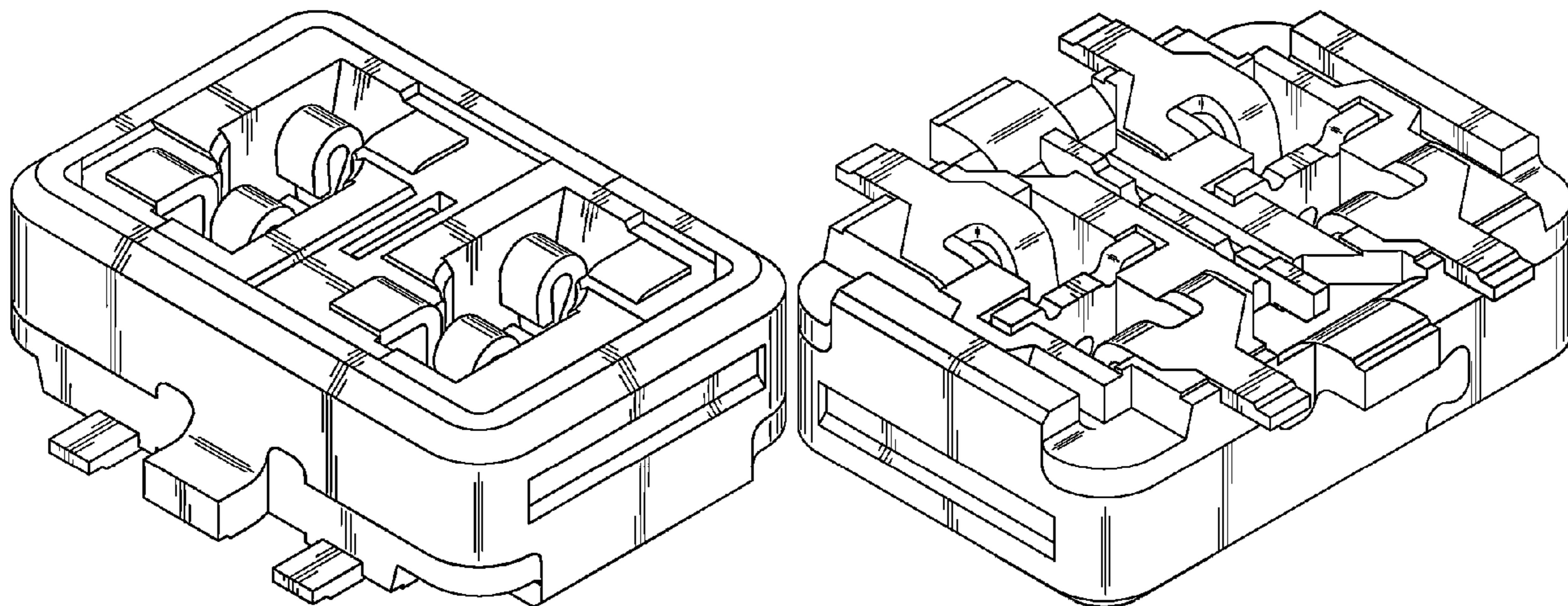
(57) **CLAIM**

The ornamental design for an electrical connector, as shown and described.

DESCRIPTION

FIG. 1 is a front, right, bottom perspective view of an electrical connector, showing our new design;
FIG. 2 is a front, left, top perspective view thereof.
FIG. 3 is a rear, left, top perspective view thereof.
FIG. 4 is a front elevation view thereof;
FIG. 5 is a rear elevation view thereof;
FIG. 6 is a top plan view thereof;
FIG. 7 is a bottom plan view thereof;
FIG. 8 is a right side view thereof; and,
FIG. 9 is a left side view thereof.
The broken lines in the drawings illustrate portions of the electrical connector that form no part of the claimed design.

1 Claim, 9 Drawing Sheets



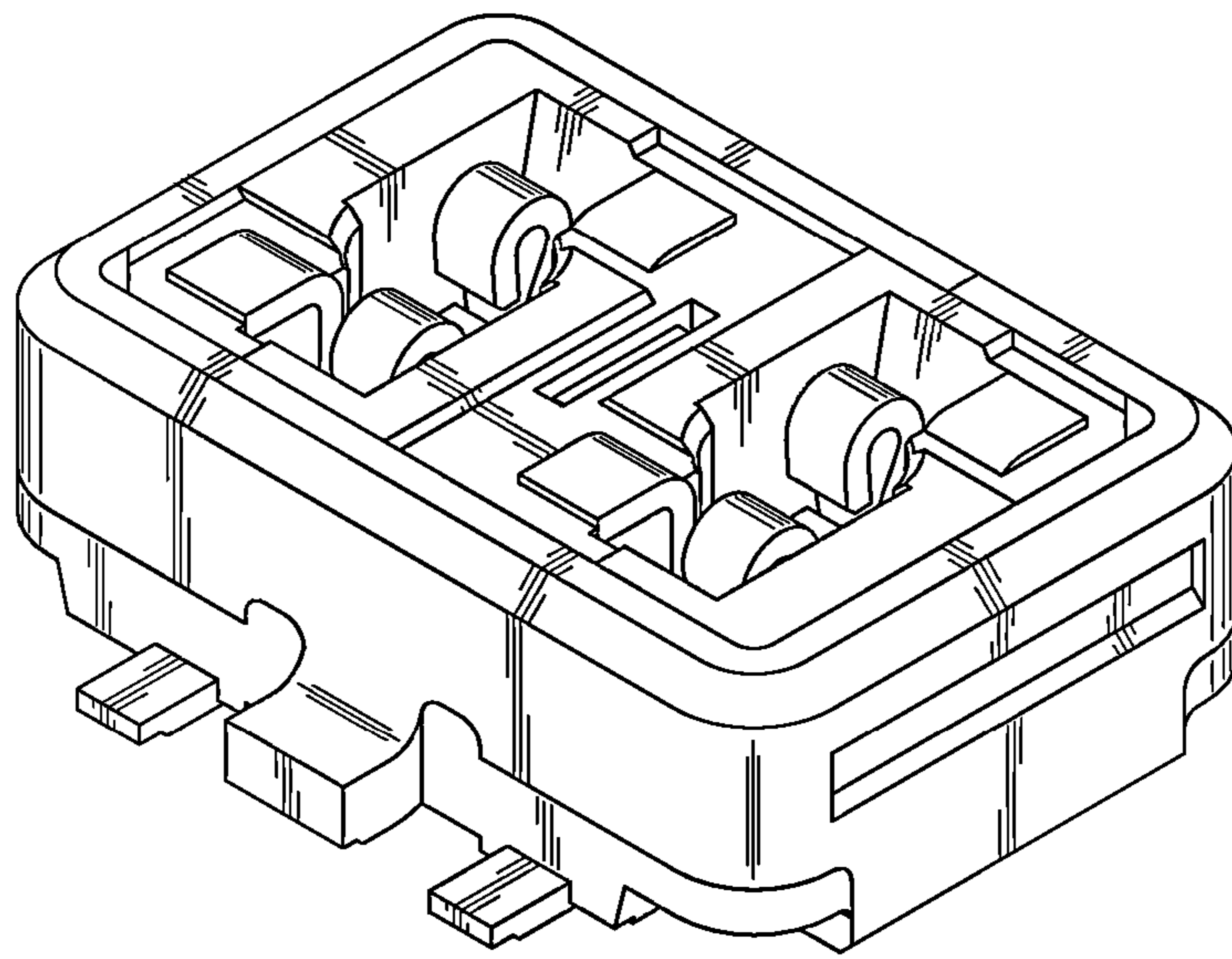


Fig. 1

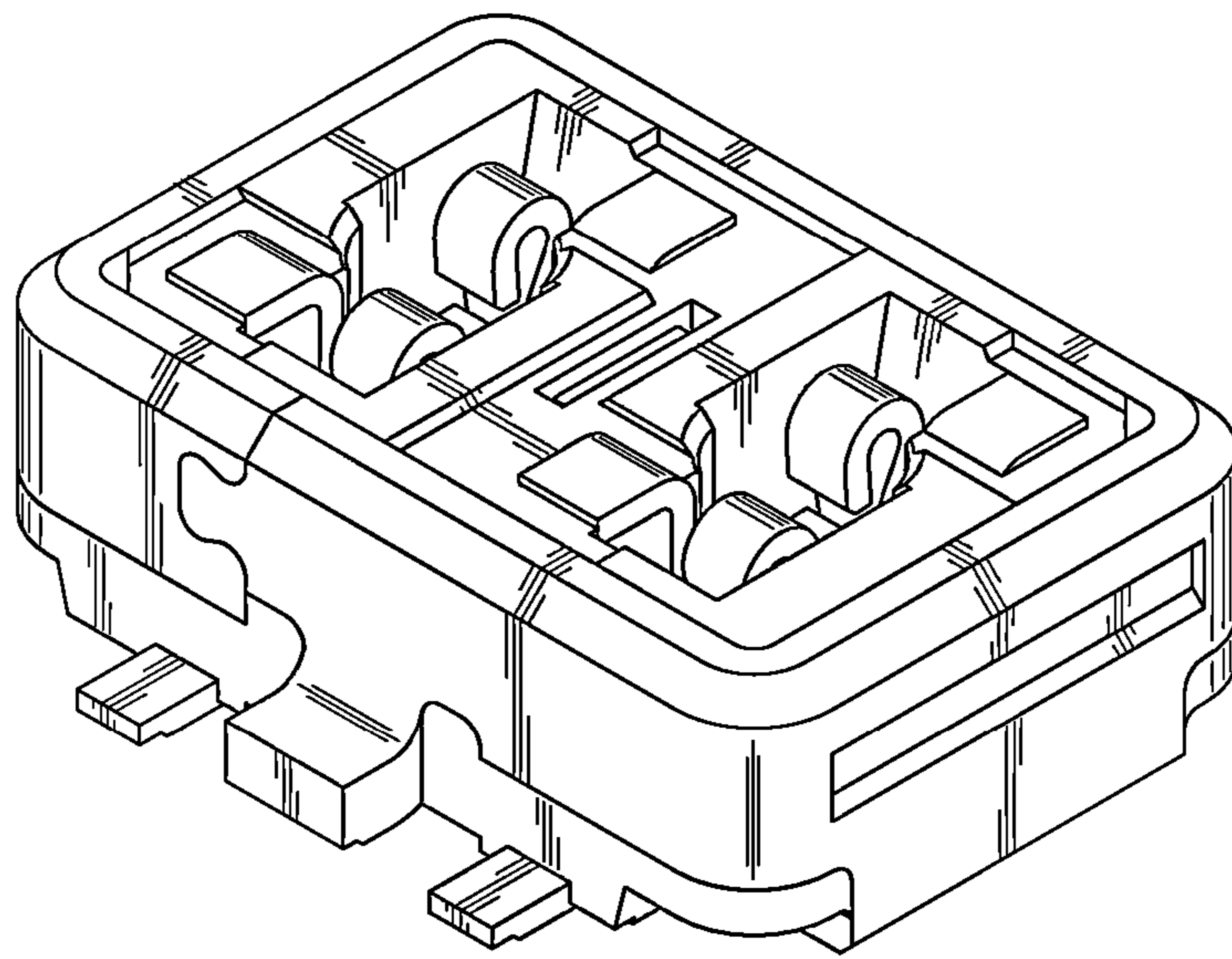


Fig.2

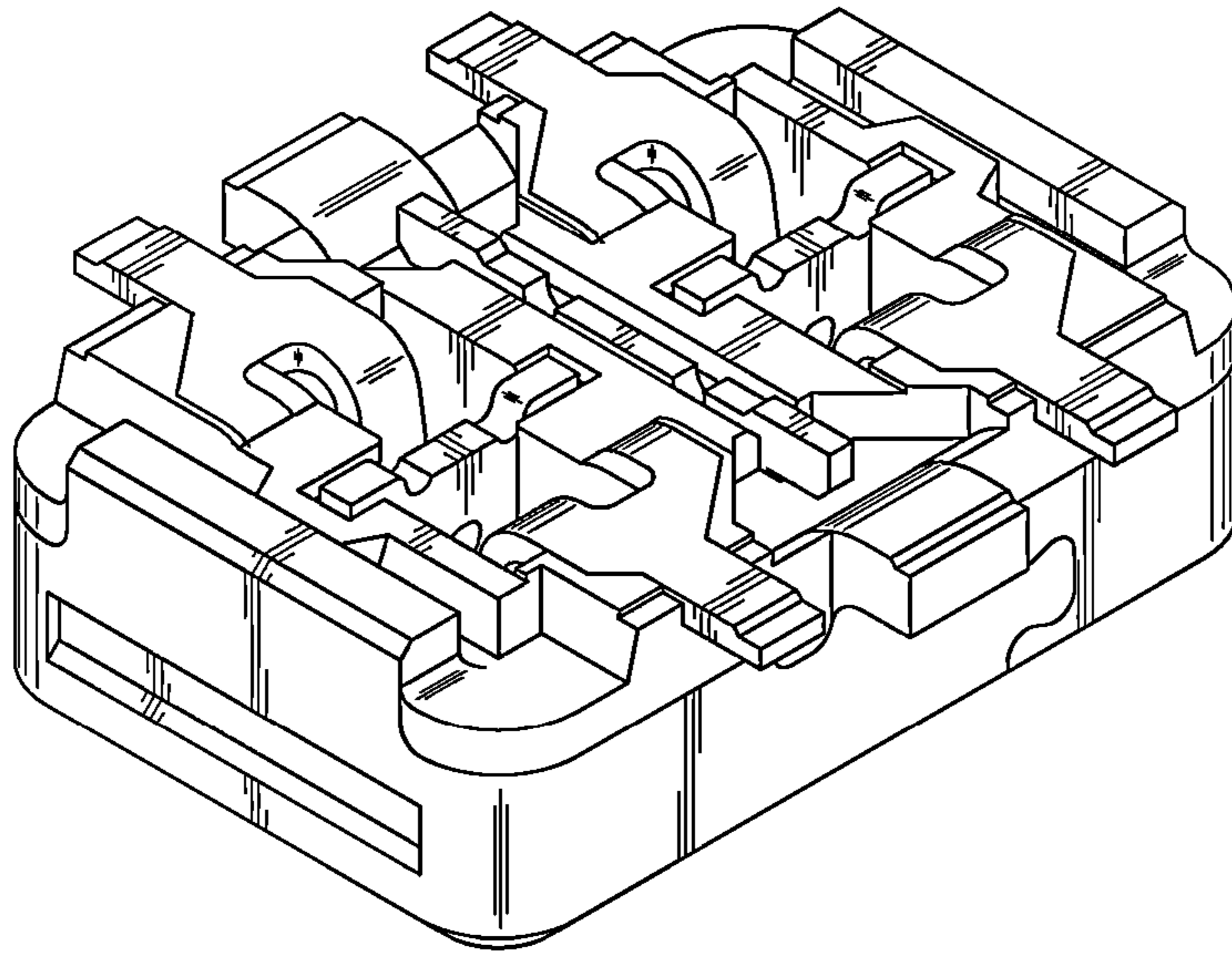


Fig.3

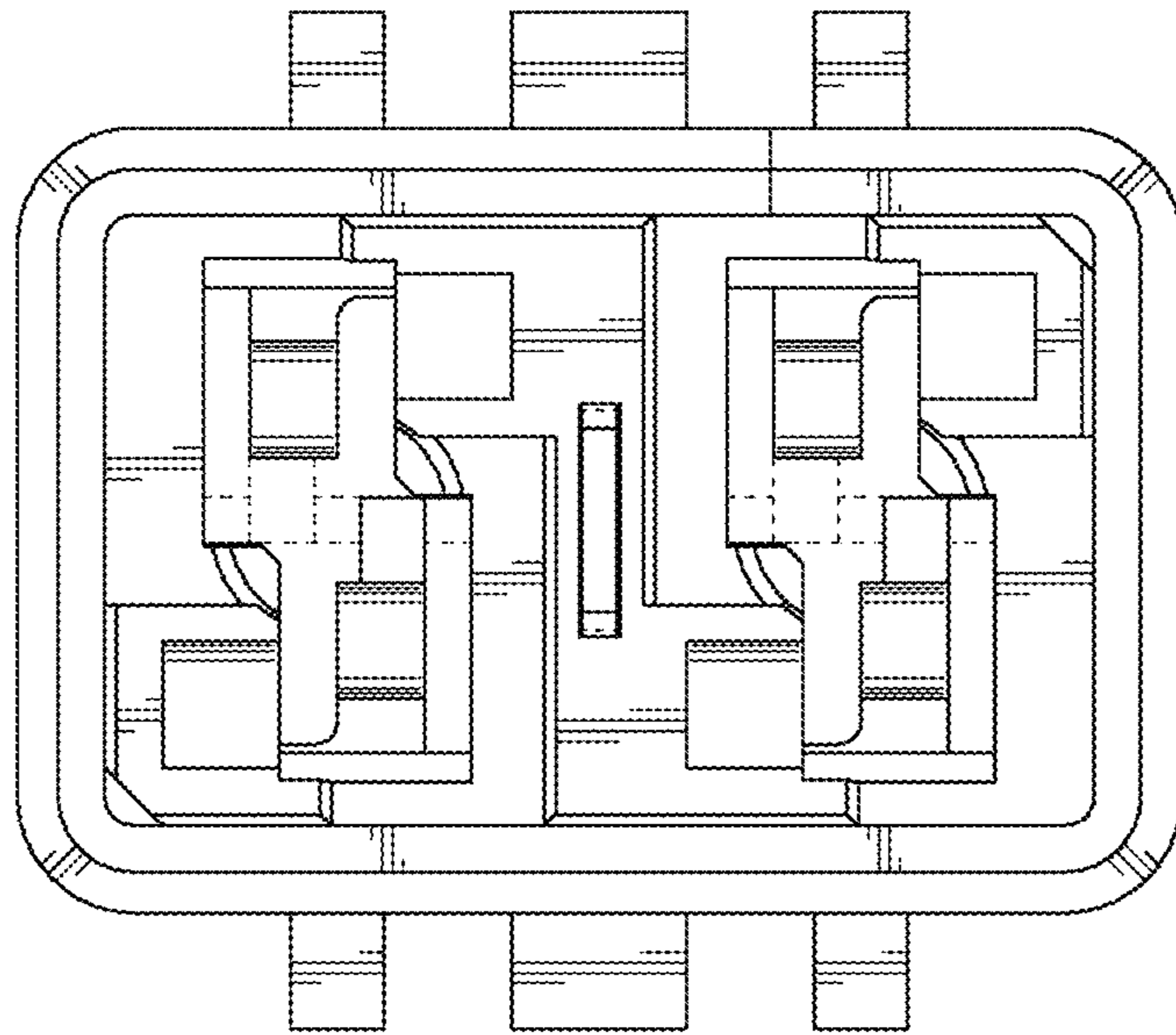


Fig. 4

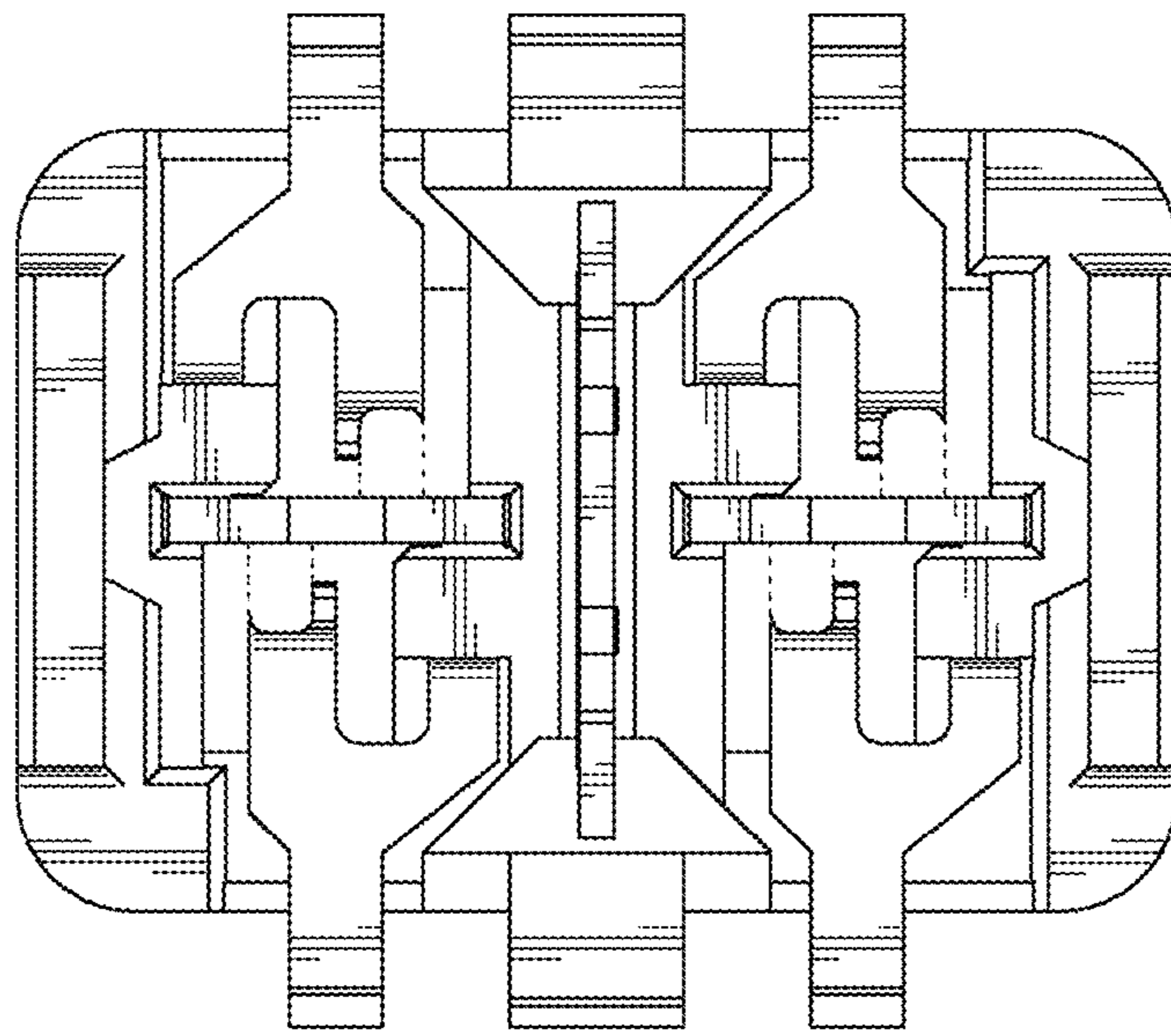


Fig. 5

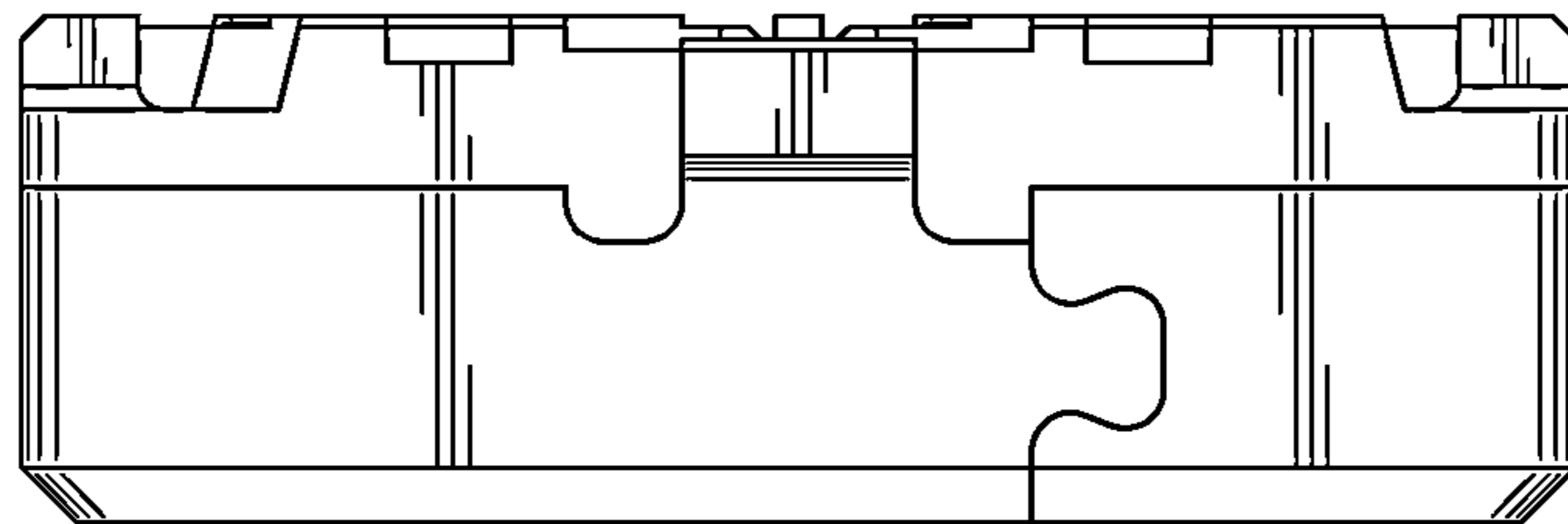


Fig.6

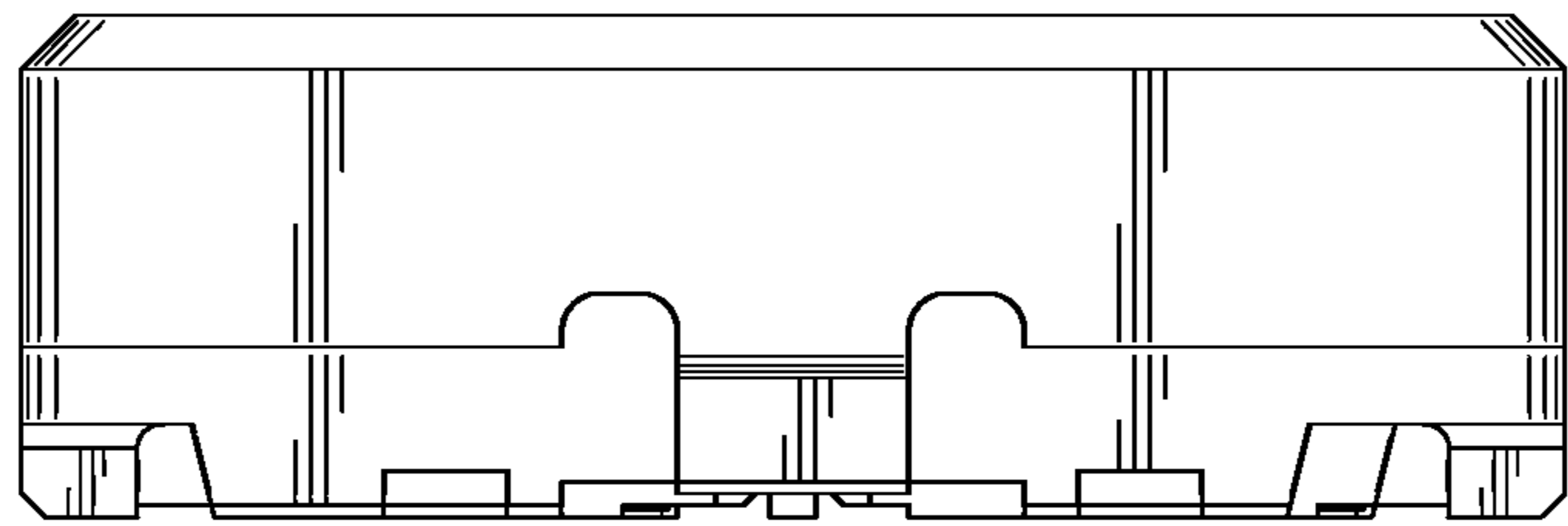


Fig.7

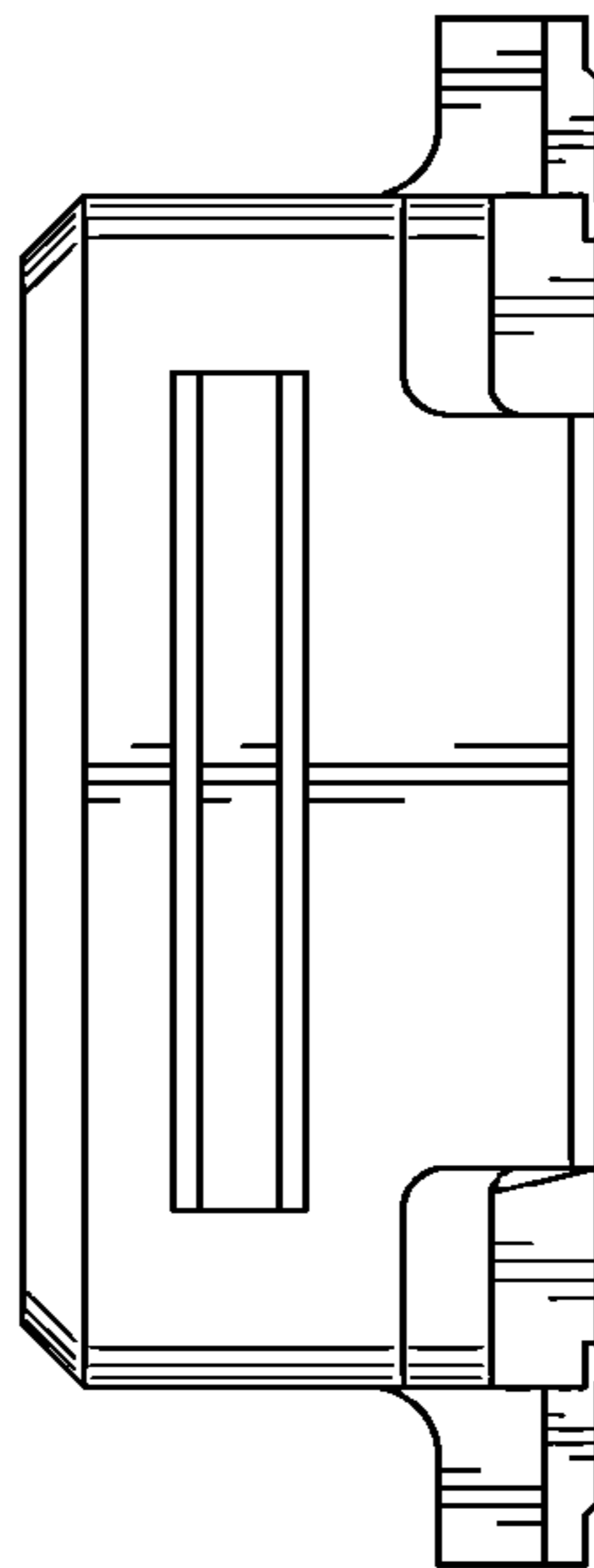


Fig.8

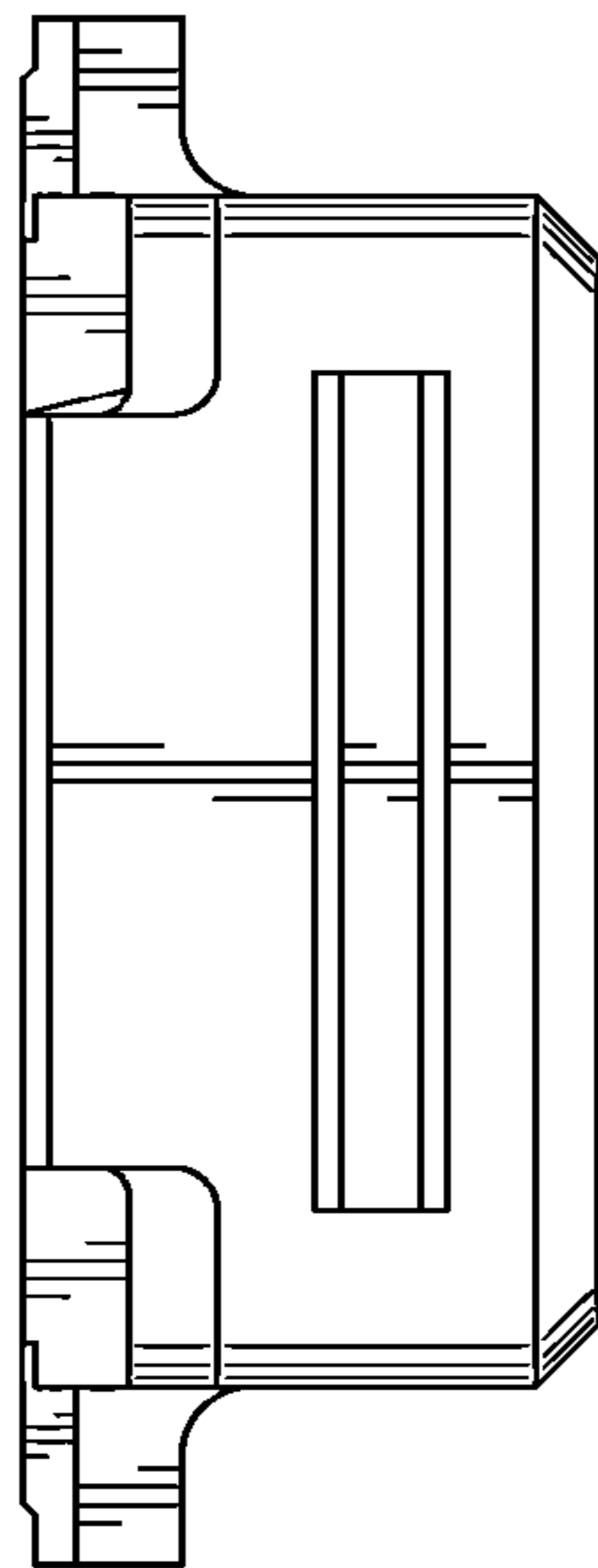


Fig.9