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

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(54) **INPUT-AND-OUTPUT DEVICE FOR NETWORKS**

(71) Applicant: **LSIS CO., LTD.**, Anyang-si (KR)

(72) Inventor: **Minho Choi**, Anyang-si (KR)

(73) Assignee: **LSIS CO., LTD.**, Anyang-si (KR)

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(52) **U.S. Cl.**

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(58) **Field of Classification Search**

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CPC . G06F 1/16; G06F 1/1683; G06F 1/20; G06F 1/181; G06F 1/182; G06F 1/183; G06F 1/187; G06F 15/163; G05B 9/02; G05B 19/042; G05B 19/05; G05B 19/054; G05B 19/056; H02G 3/08; H02G 3/083; H05K 7/1432; H05K 7/1465

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D281,493 S * 11/1985 Prager D13/162.1
D282,461 S * 2/1986 Shimizu D13/162.1
D293,779 S * 1/1988 Dantoft D13/169
D302,972 S * 8/1989 Boucher D13/162.1
D309,446 S * 7/1990 Russell D13/162.1

D309,600 S * 7/1990 Backes D13/162.1
D325,900 S * 5/1992 Shimizu D13/162.1
D330,012 S * 10/1992 Takahashi D13/162
D333,461 S * 2/1993 Shimizu D13/162.1
D351,138 S * 10/1994 Shimizu D13/152
D366,243 S * 1/1996 Kurokawa D13/162
D366,244 S * 1/1996 Kurokawa D13/162
D366,867 S * 2/1996 Kurokawa D13/162
D368,252 S * 3/1996 Nakai D13/162.1
D400,180 S * 10/1998 Shimizu D13/162.1
D409,155 S * 5/1999 Goletto D13/162.1

(Continued)

OTHER PUBLICATIONS

Programmable logic controllers. (Design—© Questel) orbit.com. [online PDF]43 pgs. Print Dates Range Aug. 16, 2010 through Dec. 19, 2019. [retrieved Sep. 21, 2020] <https://www.orbit.com/export/QPTUJ214/pdf2/dec897eb-ddef-46aa-adf3-652e03b9d8e3-212931.pdf>.*

Primary Examiner — Marie D. Fast Horse

(74) *Attorney, Agent, or Firm* — K&L Gates LLP

(57) **CLAIM**

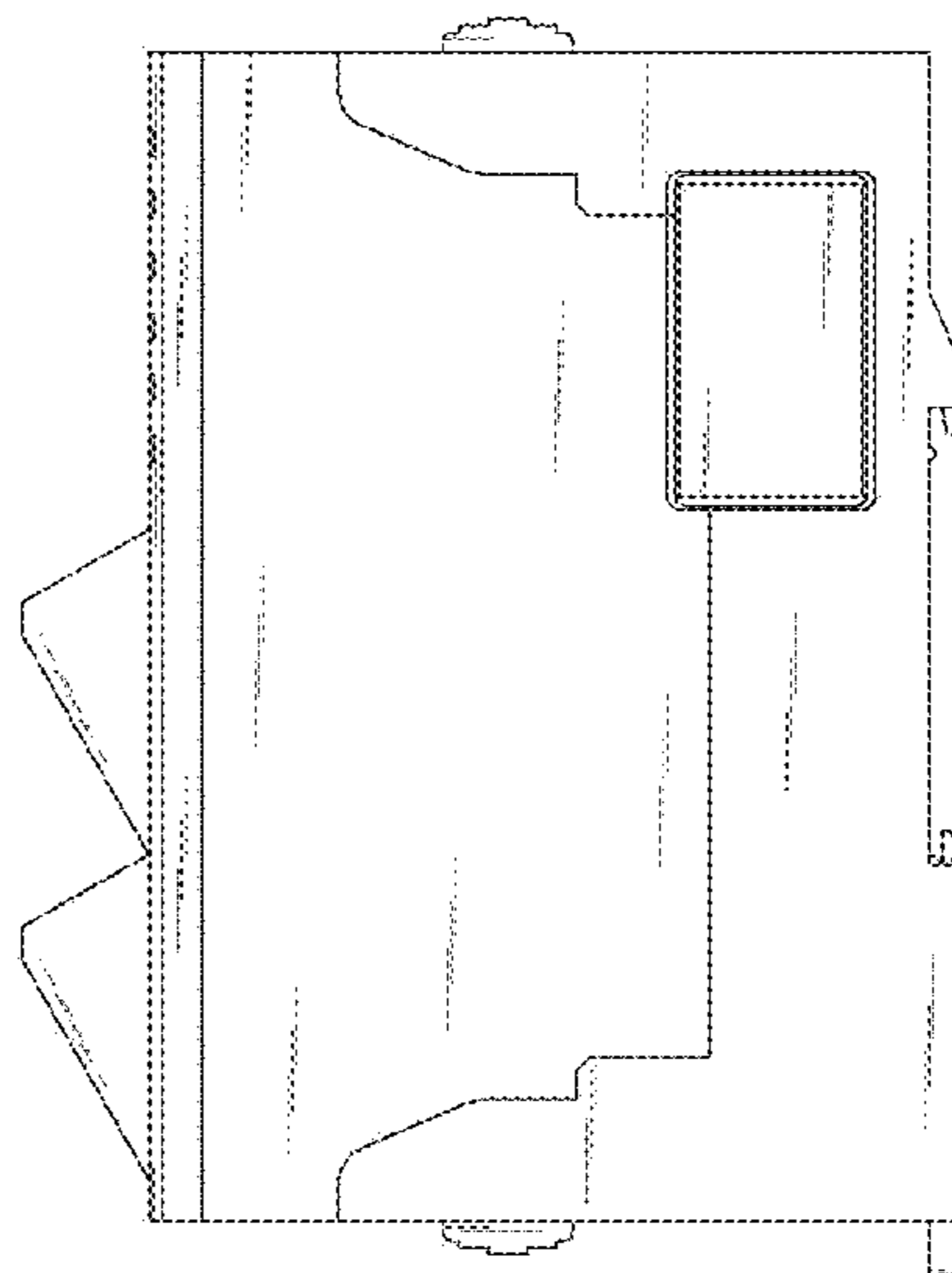
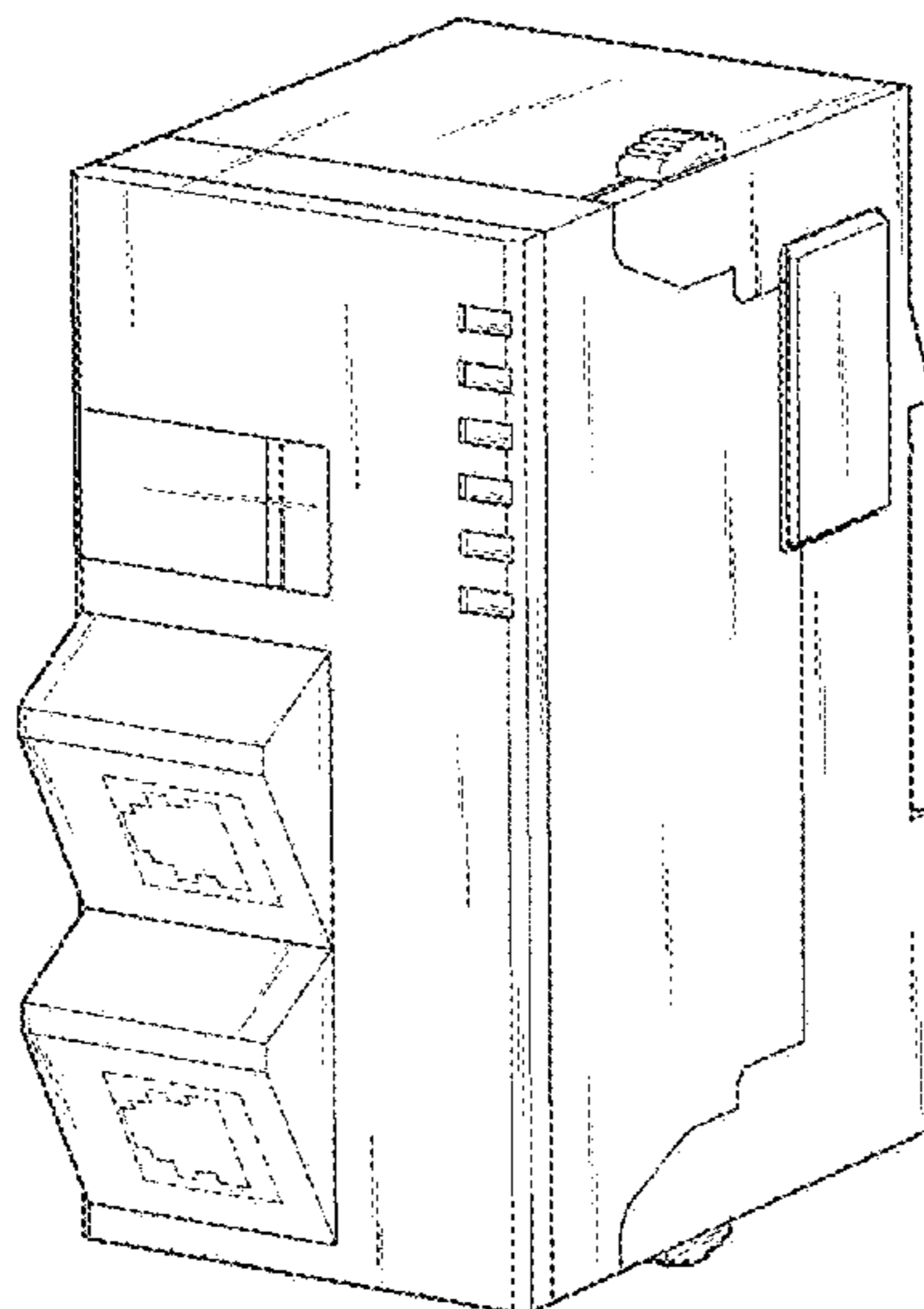
The ornamental design for an input-and-output device for networks, as shown and described herein.

DESCRIPTION

FIG. 1 is a front perspective view of an input-and-output device for networks showing the new design; FIG. 2 is a front elevation view thereof; FIG. 3 is a rear elevation view thereof; FIG. 4 is a left-side elevation view thereof; FIG. 5 is a right-side elevation view thereof; FIG. 6 is a top plan view thereof; FIG. 7 is a bottom plan view thereof; and, FIG. 8 is a rear perspective view thereof.

Any broken lines in the drawings depict portions of the input-and-output device for networks that form no part of the claimed design.

1 Claim, 6 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D428,600 S *	7/2000	Futami	D13/123	D705,171 S *	5/2014	Fukano	D13/146
D454,873 S *	3/2002	Clark	D14/358	D729,224 S *	5/2015	Kishita	D14/300
D479,219 S *	9/2003	Abe	D14/188	D738,829 S *	9/2015	Cech	D13/162
D481,014 S *	10/2003	Droulin	D13/162.1	D753,608 S *	4/2016	Chen	D13/162.1
D494,142 S *	8/2004	Schon	D13/162	D754,614 S *	4/2016	Chen	D13/162.1
7,277,295 B2 *	10/2007	Zimmerman	G06F 1/182 257/E23.086	9,360,847 B2 *	6/2016	Feldmann	G05B 19/042
D566,049 S *	4/2008	Radau	D13/162	D768,585 S *	10/2016	Moore	D13/184
D573,985 S *	7/2008	Jeong	D14/240	D773,427 S *	12/2016	Kondo	D14/155
D583,380 S *	12/2008	Lindner	D14/439	D774,016 S *	12/2016	Kondo	D14/155
D583,382 S *	12/2008	Lindner	D14/439	D776,077 S *	1/2017	Kondo	D14/155
D588,600 S *	3/2009	Lindner	D14/439	D795,201 S *	8/2017	Hagimoto	D13/162
D590,402 S *	4/2009	Lindner	D14/349	D806,708 S *	1/2018	Nada	D14/356
D594,456 S *	6/2009	Huang	D14/358	D809,515 S *	2/2018	Nada	D14/356
D595,239 S *	6/2009	Inoue	D13/158	D815,606 S *	4/2018	Nada	D13/162.1
D598,867 S *	8/2009	Nada	D13/162.1	D827,570 S *	9/2018	Molnar	D13/110
D600,213 S *	9/2009	Inoue	D13/133	D846,538 S *	4/2019	Wild	D14/240
D602,445 S *	10/2009	Liu	D13/162.1	D853,334 S *	7/2019	Mastel	D13/146
D603,349 S *	11/2009	Liu	D13/162.1	D853,996 S *	7/2019	Wild	D14/240
D652,036 S *	1/2012	Huang	D14/358	D854,522 S *	7/2019	Wild	D14/240
D662,091 S *	6/2012	Loponen	D14/240	D855,025 S *	7/2019	Jurgens	D13/158
D671,099 S *	11/2012	Loponen	D14/240	D855,568 S *	8/2019	Takahashi	D13/123
D671,925 S *	12/2012	Tsuda	D14/240	D856,931 S *	8/2019	Takahashi	D13/123
D692,397 S *	10/2013	Liu	D13/162.1	D857,636 S *	8/2019	Ueda	D13/162.1
D692,840 S *	11/2013	Liu	D13/162.1	D857,637 S *	8/2019	Ueda	D13/162.1
D695,235 S *	12/2013	Liu	D13/162.1	D858,495 S *	9/2019	Wild	D14/240
D695,686 S *	12/2013	Fukano	D13/146	D858,496 S *	9/2019	Wild	D14/240
D695,687 S *	12/2013	Fukano	D13/146	D865,731 S *	11/2019	Sun	D14/240
D702,242 S *	4/2014	Tsuda	D14/439	D868,006 S *	11/2019	Ueda	D13/162.1
D702,647 S *	4/2014	Liu	D13/162.1	D869,404 S *	12/2019	Ueda	D13/162.1
				2016/0170922 A1 *	6/2016	Rose	G06F 13/4068 710/305
				2017/0244197 A1 *	8/2017	Takahashi	H05K 7/1432

* cited by examiner

FIG. 1

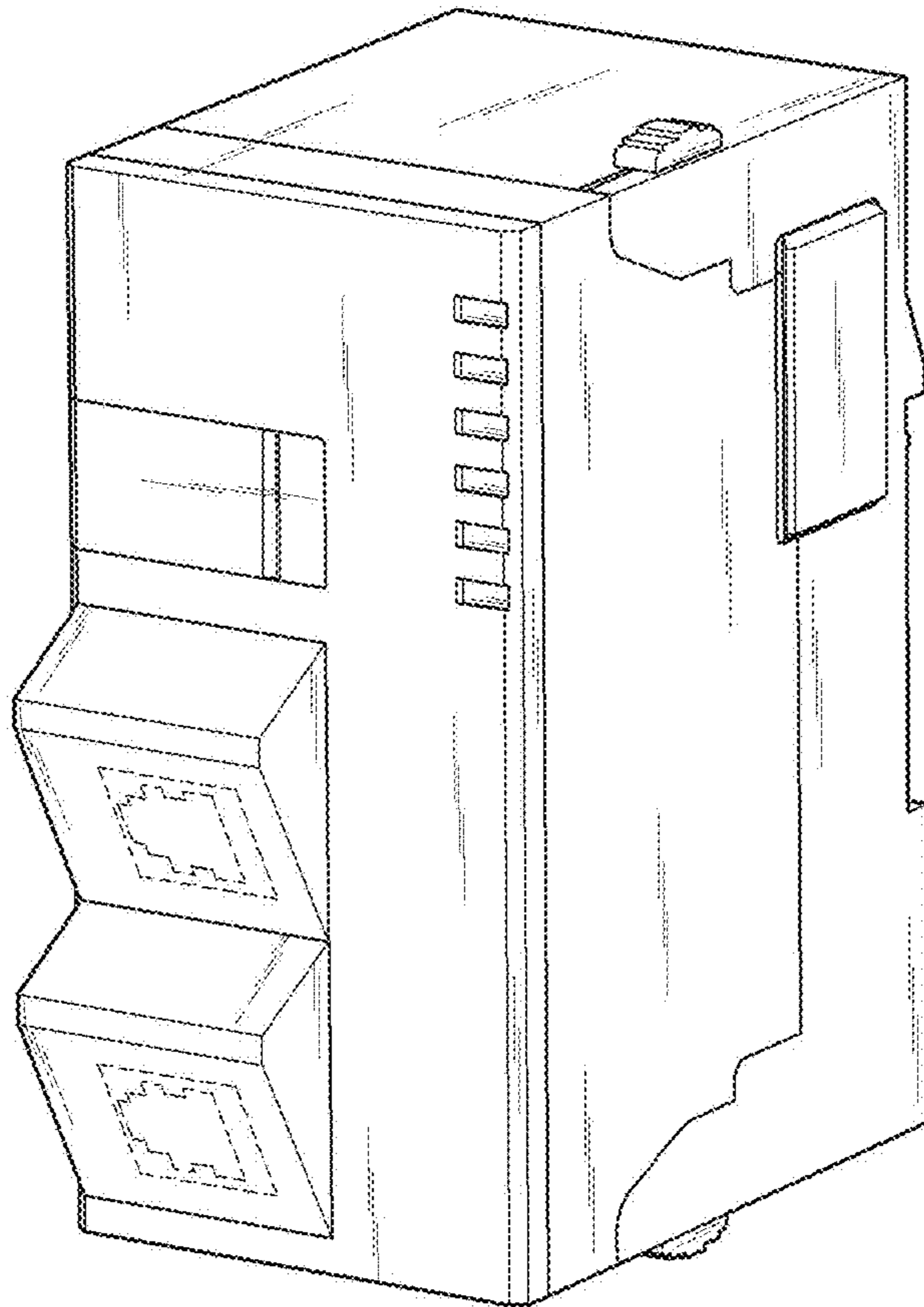


FIG. 2

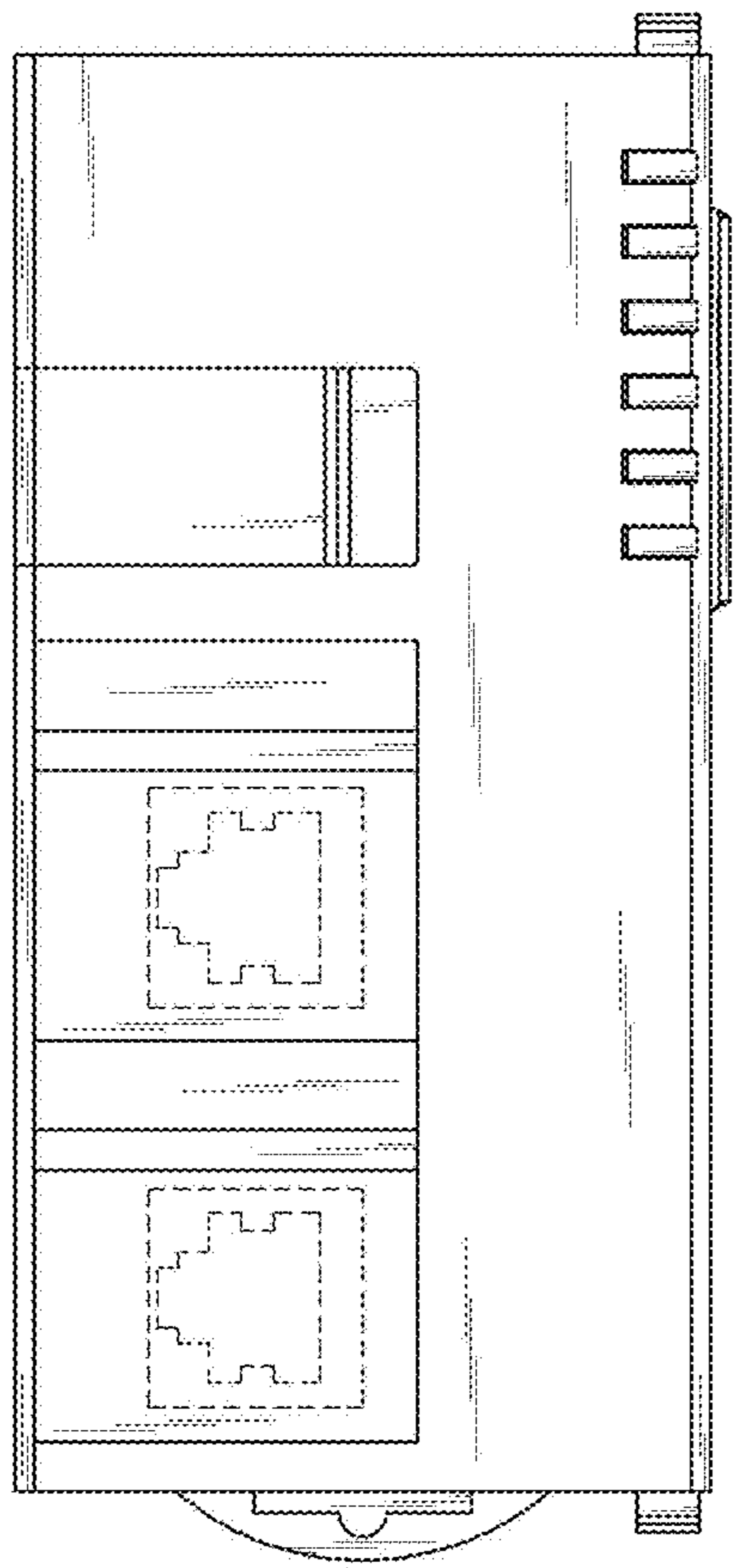


FIG. 3

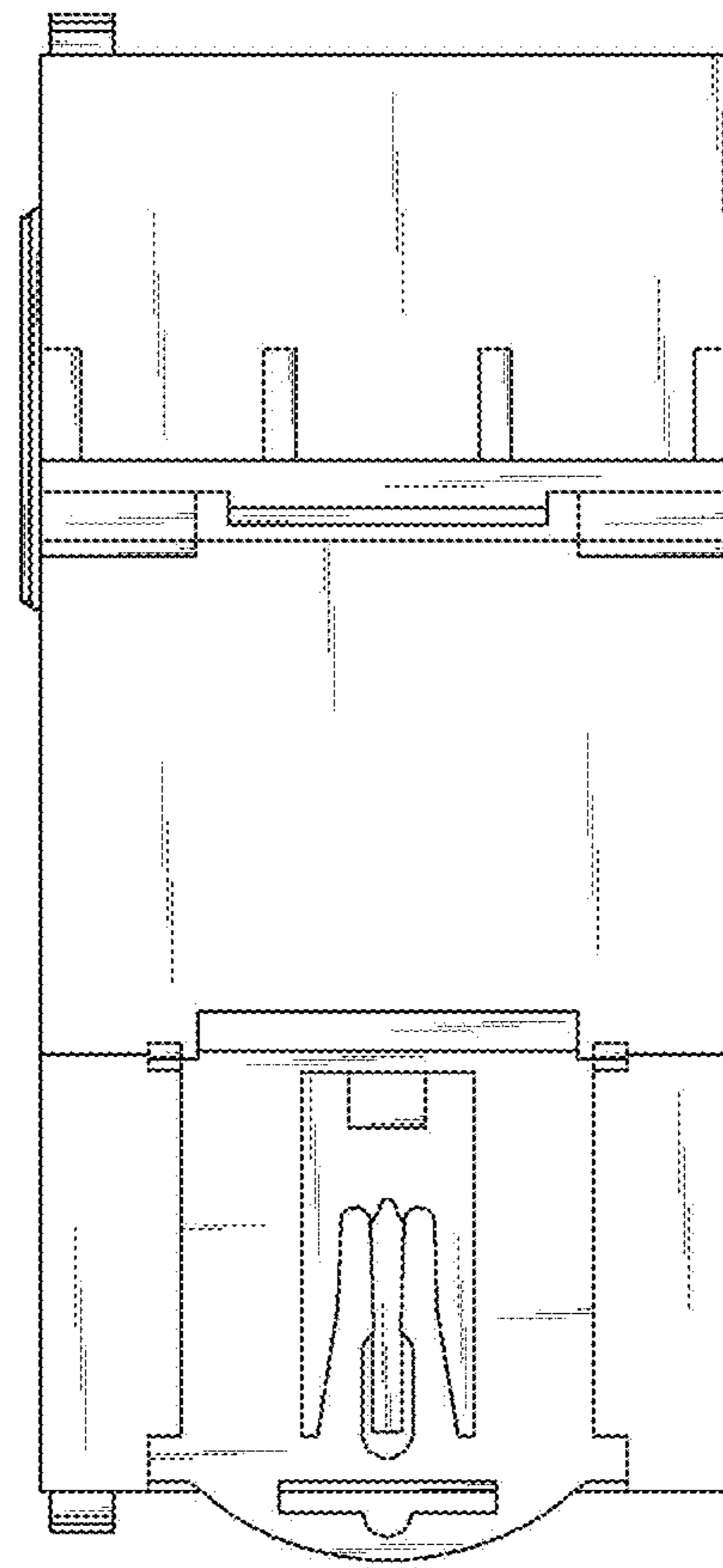


FIG. 4

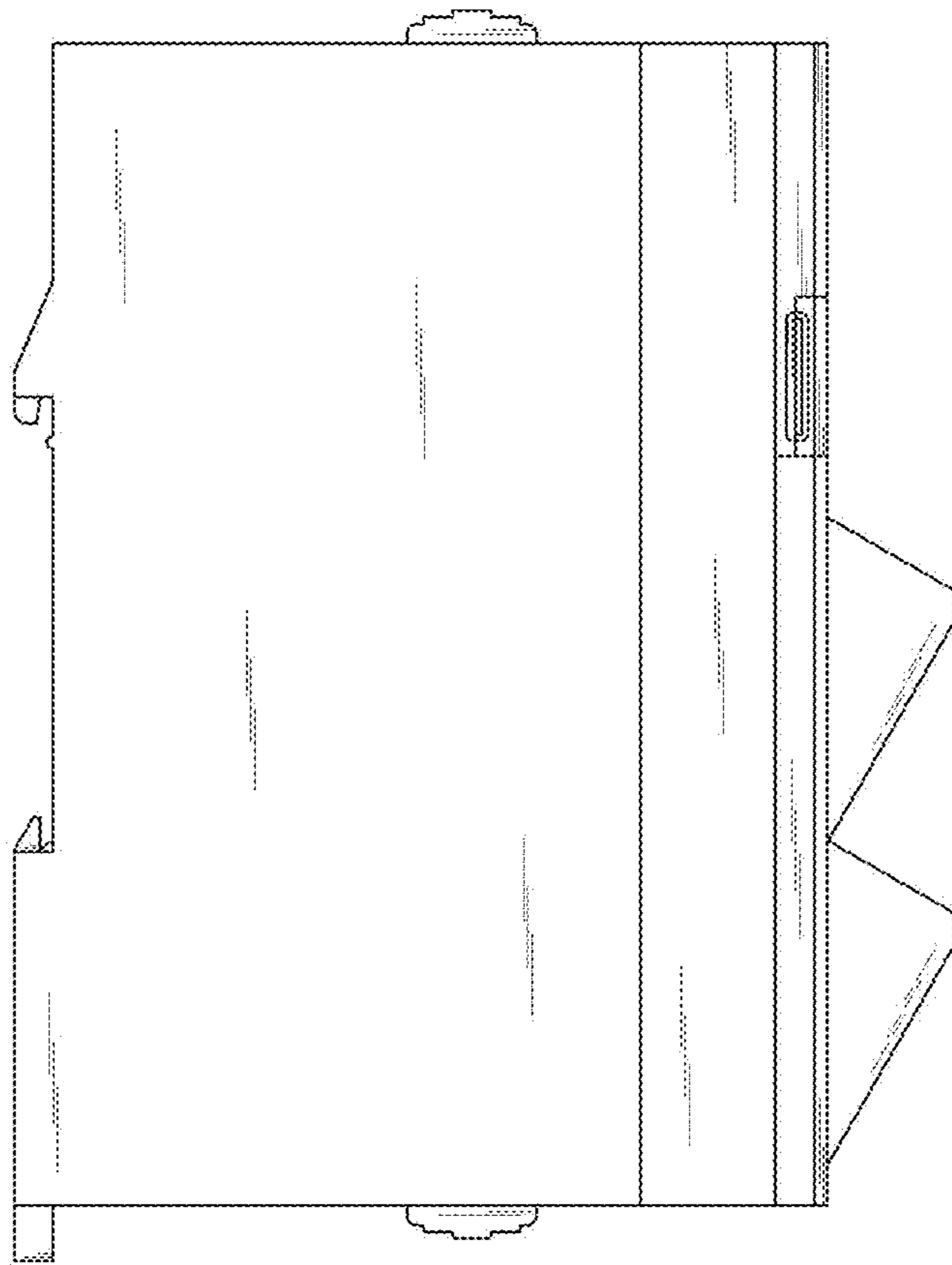


FIG. 5

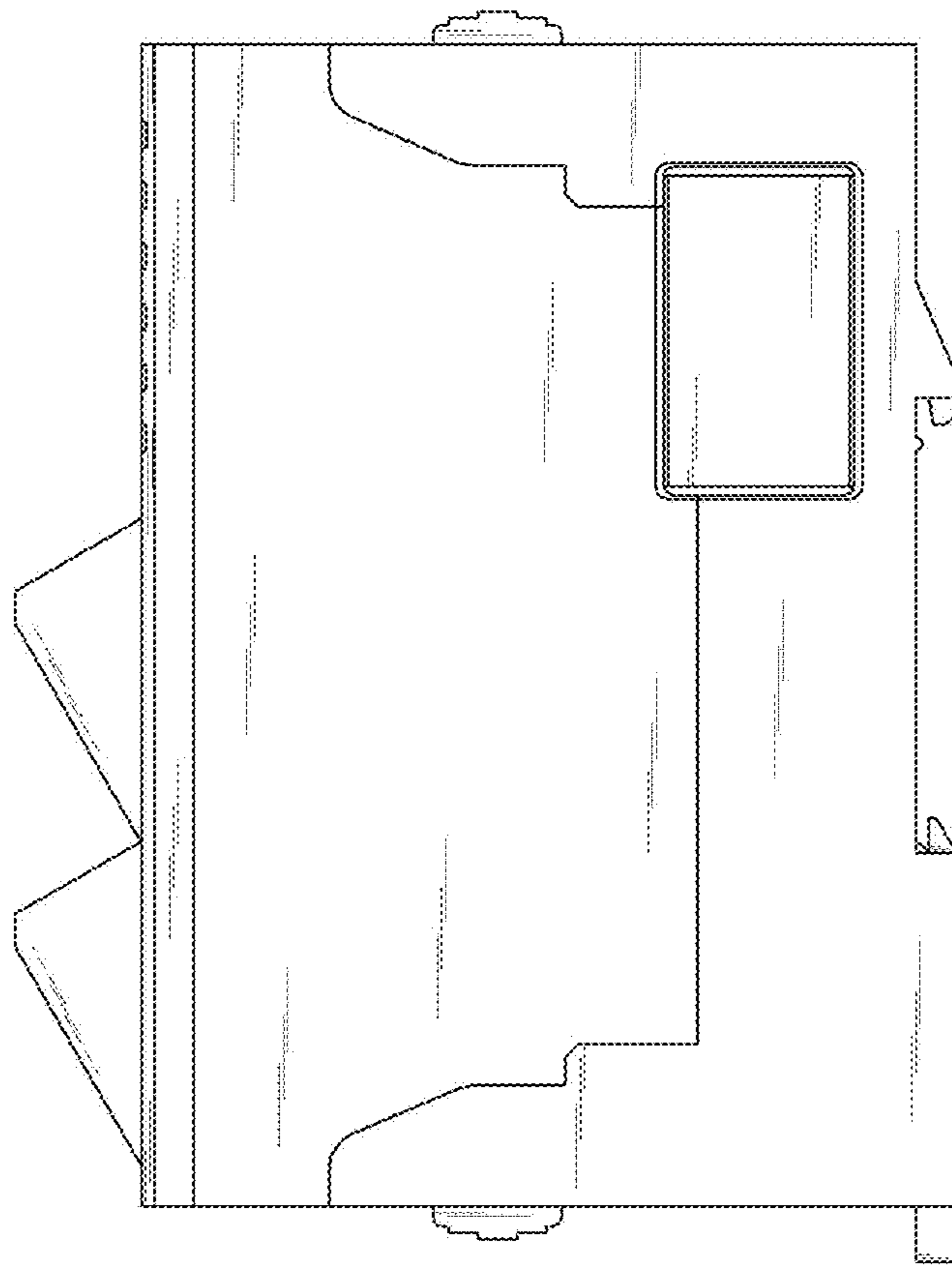


FIG. 6

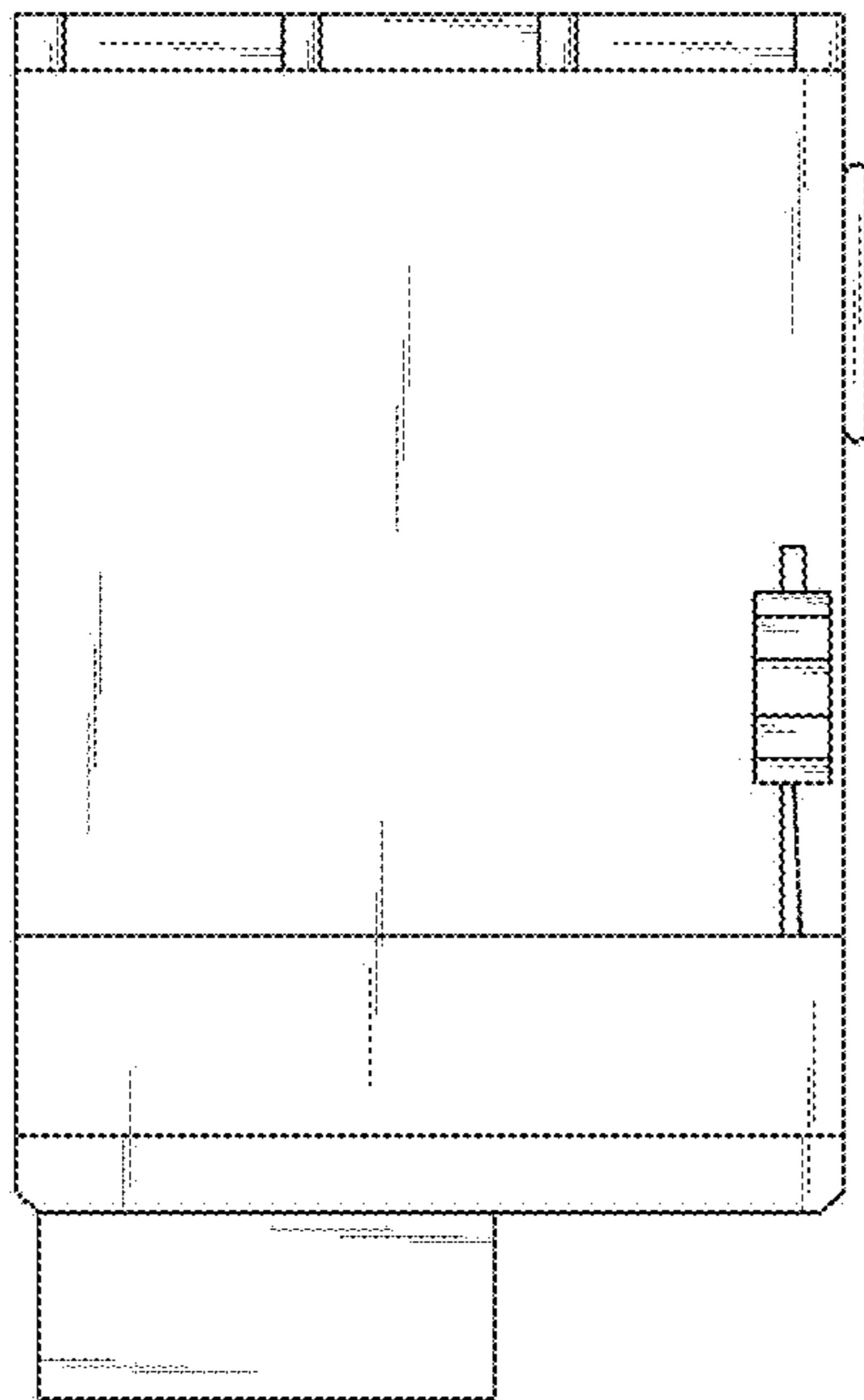


FIG. 7

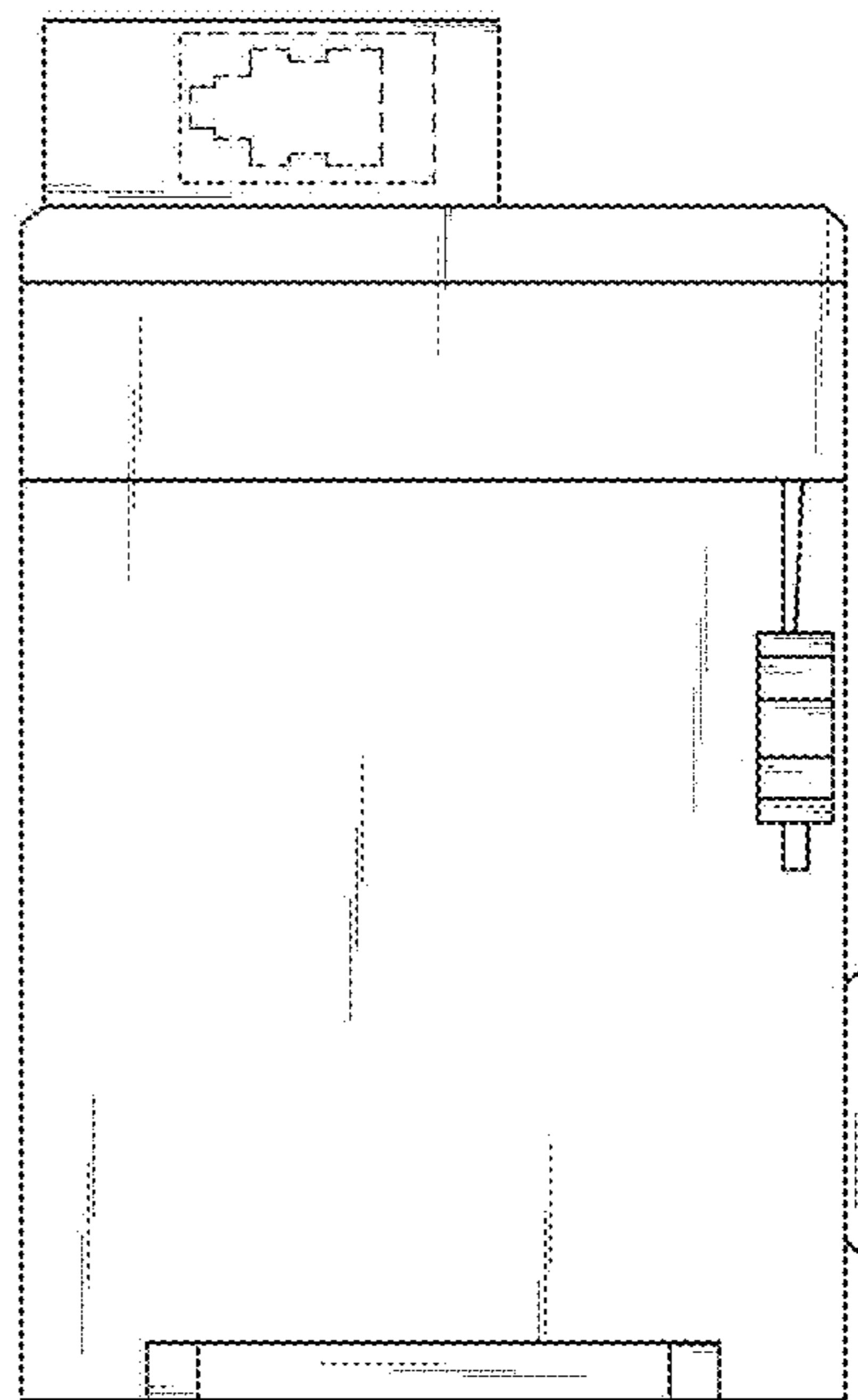


FIG. 8

