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

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(54) **REMOVABLE DEVICE INTERFACE WITH ATTACHED DEVICES**

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

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Related U.S. Application Data

(63) Continuation-in-part of application No. 13/745,588, filed on Jan. 18, 2013, now Pat. No. 8,615,612.

(51) **LOC (10) Cl.** **14-02**

(52) **U.S. Cl.**
USPC **D14/435**

(58) **Field of Classification Search**

USPC D14/435-438, 478-480; 235/441, 443, 235/487, 492, 493, 495; 361/737, 679, 752, 361/736, 728, 796, 797, 729, 730, 361/725-727; 257/678, 679, 693, E23.064; 439/946, 948, 159; 174/250, 260, 52.1, 174/52.2; 710/300-303; 438/121; D13/110, D13/103

CPC G06K 19/06196; G06K 19/072; G06K 19/0721; G06K 19/0722; G06K 19/0723; G06K 19/0724; G06K 19/0725; G06K 19/0726; G06K 19/0727; G06K 19/0728; G06K 19/073; G06K 19/07309; G06K 19/077; G06K 19/07701; G06K 19/07715; G06K 19/0772; G06K 19/07722; G06K 19/07724; G06K 19/07726; G06K 19/07728; G06F 21/77-21/80; G06F 21/85-21/88; G06F 21/00; G06Q 20/3229; G06Q 20/34; G06Q 20/341; G06Q 20/346; G06Q 20/349; G06Q 20/3563;

G06Q 20/3567; G06Q 20/357; G06Q 20/3576; H05K 5/026; H05K 5/0256; H05K 5/0265; H05K 5/0269; H05K 5/0273; H05K 5/0278; H05K 5/0282; H05K 5/0286; H05K 5/0291; H05K 5/0295; H05K 5/03; H05K 5/04; H05K 5/06; H05K 5/061; H05K 5/062; H05K 5/063; H05K 5/064; H05K 5/065; H05K 5/066; H05K 5/067; H05K 5/068; H05K 5/069; H05K 7/00; H05K 7/005; H05K 7/02; H05K 7/023; H05K 7/026; H05K 7/04; H05K 7/10; H05K 7/1418; H05K 7/142; H05K 7/1424; H05K 7/1427-7/1439; H05K 7/1461; H05K 7/1464-7/1474; H05K 7/1479; H05K 7/1481-7/1488; H05K 2201/09745; H05K 2201/09754; H05K 2201/09763; H05K 2201/09772; H05K 2201/098; H05K 2201/09818; H05K 2201/10; H05K 2201/10007; H04N 2201/216

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,325,470 A * 7/1943 Bonanno et al. 336/92
D193,990 S * 11/1962 Stringer D14/385

(Continued)

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(57) **CLAIM**

We claim the ornamental design for a removable device interface with attached devices, as shown and described.

DESCRIPTION

FIG. 1 is a front perspective view of an embodiment of a removable device interface with attached devices showing our new design;

FIG. 2 is a rear perspective view thereof;

FIG. 3 is a front view thereof;

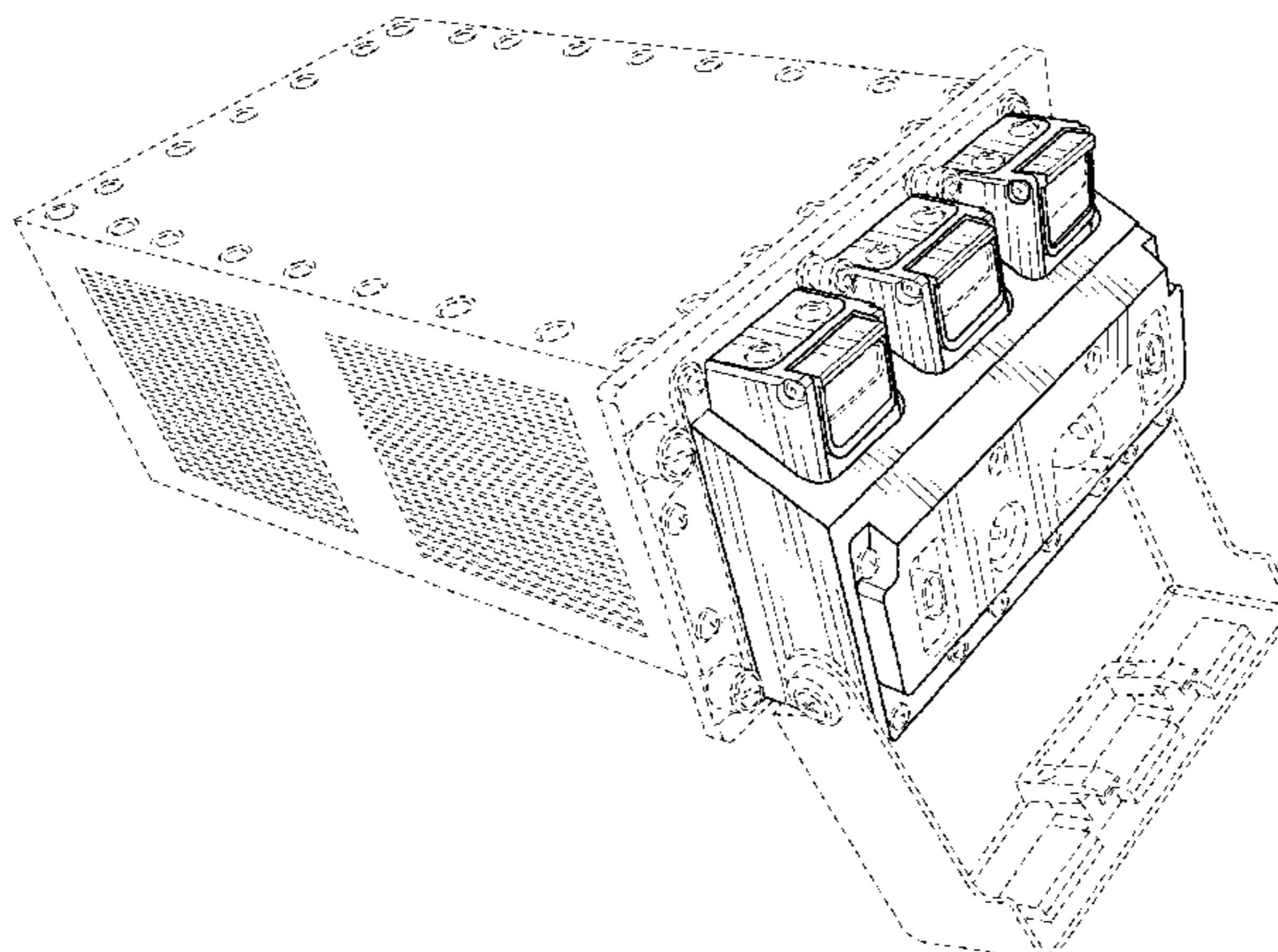
FIG. 4 is a side view thereof;

FIG. 5 is a top view thereof; and,

FIG. 6 is a bottom view thereof.

Broken lines and entirely unshaded portions contained within broken line are not claimed.

1 Claim, 5 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D216,799	S	*	3/1970	Kapper et al.	.....	D14/385
D239,720	S	*	4/1976	Stewart	.....	D14/445
D246,368	S	*	11/1977	Barnich et al.	.....	D14/314
D263,957	S	*	4/1982	Pemberton	.....	D14/356
D280,318	S	*	8/1985	Barone	.....	D13/110
D285,795	S	*	9/1986	Chandler et al.	.....	D14/445
D285,926	S	*	9/1986	Kies et al.	.....	D14/357
D294,146	S	*	2/1988	Duke	.....	D14/385
D303,246	S	*	9/1989	Freeman et al.	.....	D13/147
D311,176	S	*	10/1990	Hill et al.	.....	D14/356
D314,174	S	*	1/1991	Wong	.....	D13/123
D314,183	S	*	1/1991	Wong	.....	D13/160
D314,568	S	*	2/1991	Martin	.....	D14/445
D316,853	S	*	5/1991	Dickey	.....	D14/356
D326,447	S	*	5/1992	Hofland et al.	.....	D14/438
D331,572	S	*	12/1992	Roe	.....	D14/433
D332,256	S	*	1/1993	Lewis	.....	D14/367
D344,710	S	*	3/1994	Morgan et al.	.....	D13/147
D346,662	S	*	5/1994	Larsen et al.	.....	D24/233
D348,043	S	*	6/1994	Hamilton et al.	.....	D13/103
D348,873	S	*	7/1994	Mizusugi et al.	.....	D14/357
D354,737	S	*	1/1995	Fladung	.....	D13/164
D362,247	S	*	9/1995	Erickson et al.	.....	D14/442
D383,736	S	*	9/1997	Corrington et al.	.....	D14/367
D383,737	S	*	9/1997	Zinck	.....	D14/356
D391,556	S	*	3/1998	Corrington et al.	.....	D14/367
D392,645	S	*	3/1998	Wakabayashi	.....	D14/240
D393,632	S	*	4/1998	Sherry	.....	D14/435
D399,498	S	*	10/1998	Chang	.....	D14/367
D404,383	S	*	1/1999	Chang	.....	D14/367
D413,572	S	*	9/1999	Byrd et al.	.....	D13/146
5,949,640	A	*	9/1999	Cameron et al.	.....	361/600
D421,964	S	*	3/2000	Nagasawa et al.	.....	D13/147
D423,451	S	*	4/2000	Heckenast et al.	.....	D13/110
D424,518	S	*	5/2000	Chin-Kuan et al.	.....	D13/123
D429,213	S	*	8/2000	Colver et al.	.....	D13/110
6,134,115	A	*	10/2000	Sim et al.	.....	361/747
D433,995	S	*	11/2000	Romano	.....	D13/110
D435,828	S	*	1/2001	Chou	.....	D13/110
6,178,086	B1	*	1/2001	Sim et al.	.....	361/679.59
D440,937	S	*	4/2001	Germagian et al.	.....	D13/110
D442,601	S	*	5/2001	Goto	.....	D14/442
D445,761	S	*	7/2001	Weng	.....	D13/110
D452,677	S	*	1/2002	Weng	.....	D13/110
D464,027	S	*	10/2002	Weng	.....	D13/110
D467,930	S	*	12/2002	Hwang	.....	D14/447
D469,060	S	*	1/2003	Noguchi et al.	.....	D13/110
D494,538	S	*	8/2004	Erskine	.....	D13/110
D503,676	S	*	4/2005	Krieger et al.	.....	D13/110
D505,915	S	*	6/2005	Hussaini et al.	.....	D13/110
D530,276	S	*	10/2006	Albano et al.	.....	D13/110
D534,490	S	*	1/2007	Ogawa	.....	D13/118
D538,742	S	*	3/2007	Pickvet et al.	.....	D13/110
D541,216	S	*	4/2007	Albano et al.	.....	D13/110
D551,620	S	*	9/2007	McClelland, II	.....	D13/110
D553,120	S	*	10/2007	Yano	.....	D14/214
D566,045	S	*	4/2008	Chang	.....	D13/147
7,354,293	B2	*	4/2008	Liang	.....	439/372
D571,813	S	*	6/2008	Chen et al.	.....	D14/445
D573,533	S	*	7/2008	Soeda et al.	.....	D13/110
D575,778	S	*	8/2008	Dearborn et al.	.....	D14/349
D577,668	S	*	9/2008	Buck	.....	D13/110
D600,698	S	*	9/2009	Kramer et al.	.....	D14/432
D601,956	S	*	10/2009	Liu et al.	.....	D13/110
D612,803	S	*	3/2010	Du et al.	.....	D13/110
D668,221	S	*	10/2012	McKune et al.	.....	D13/110
8,376,760	B1	*	2/2013	Kostrzewski et al.	.....	439/138
D677,224	S	*	3/2013	Chen et al.	.....	D13/110
D685,332	S	*	7/2013	Garrett et al.	.....	D13/155
D685,726	S	*	7/2013	Kaneshige	.....	D13/103
D693,766	S	*	11/2013	Hiroto et al.	.....	D13/110
D700,898	S	*	3/2014	Min et al.	.....	D13/159
D701,176	S	*	3/2014	Min et al.	.....	D13/159
D703,625	S	*	4/2014	Lim et al.	.....	D13/182
D705,172	S	*	5/2014	Nomura et al.	.....	D13/147
D706,221	S	*	6/2014	Grant et al.	.....	D13/147
D708,150	S	*	7/2014	Cech et al.	.....	D13/162
D717,803	S	*	11/2014	Takano et al.	.....	D14/439
D718,244	S	*	11/2014	Scholeno	.....	D13/147
D718,250	S	*	11/2014	Lord	.....	D13/147
2005/0111200	A1	*	5/2005	Hardt et al.	.....	361/727
2008/0106871	A1	*	5/2008	James	.....	361/727
2011/0174534	A1	*	7/2011	Krietzman et al.	.....	174/520
2011/0261524	A1	*	10/2011	Wieder et al.	.....	361/679.31
2014/0204537	A1	*	7/2014	Rust	.....	361/727
2014/0302703	A1	*	10/2014	Wu	.....	439/372

* cited by examiner

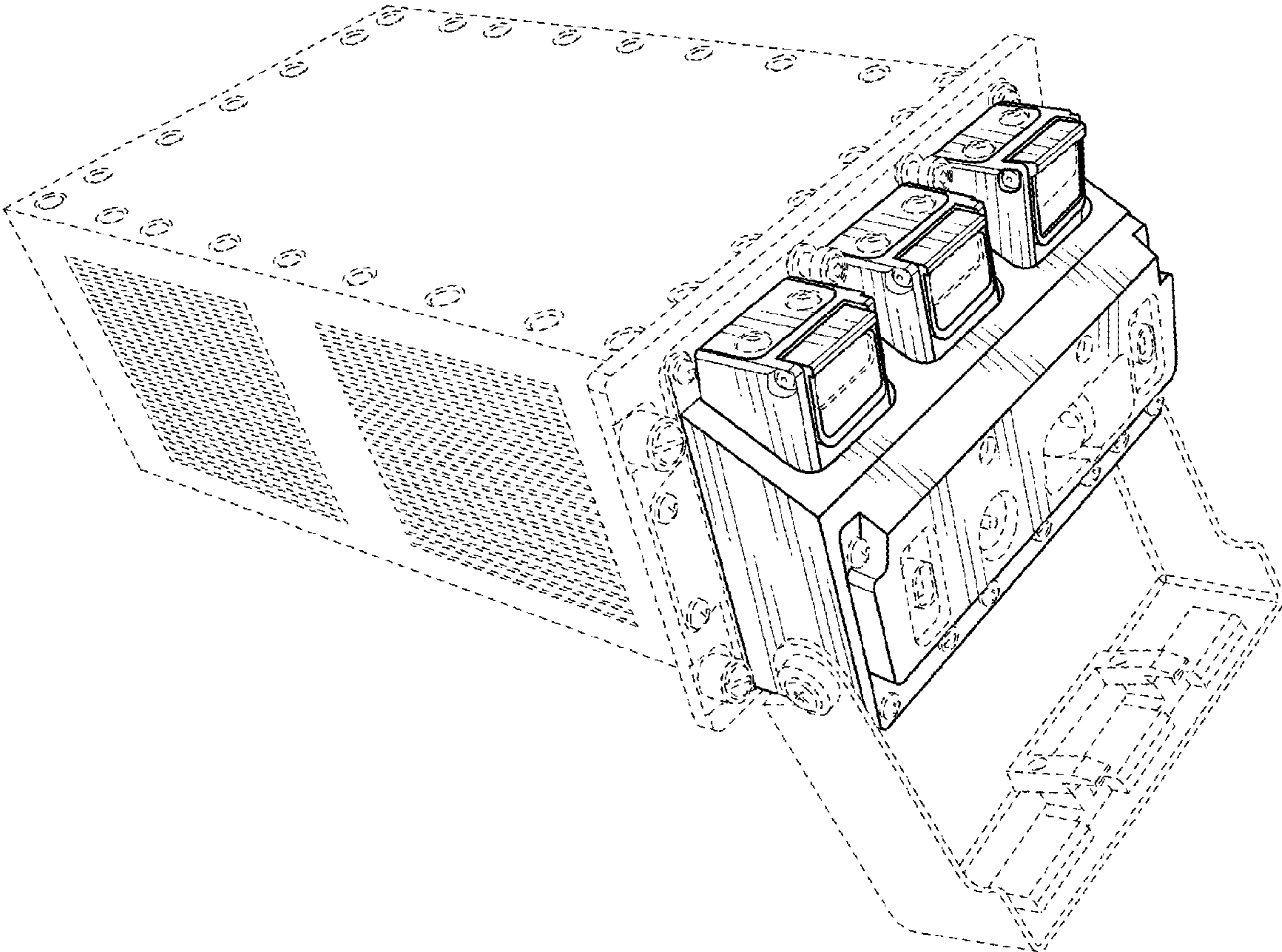


FIG. 1

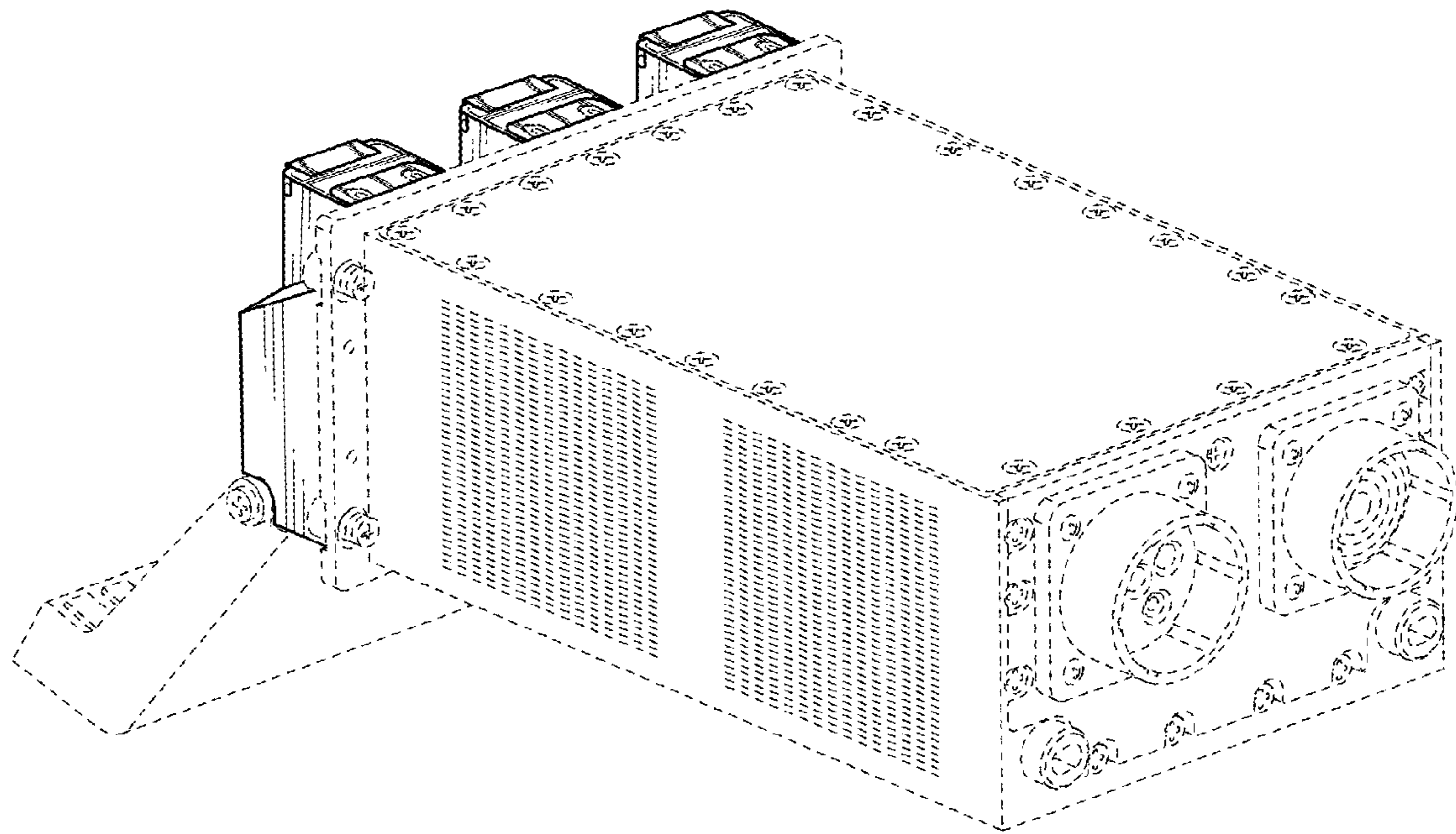


FIG. 2

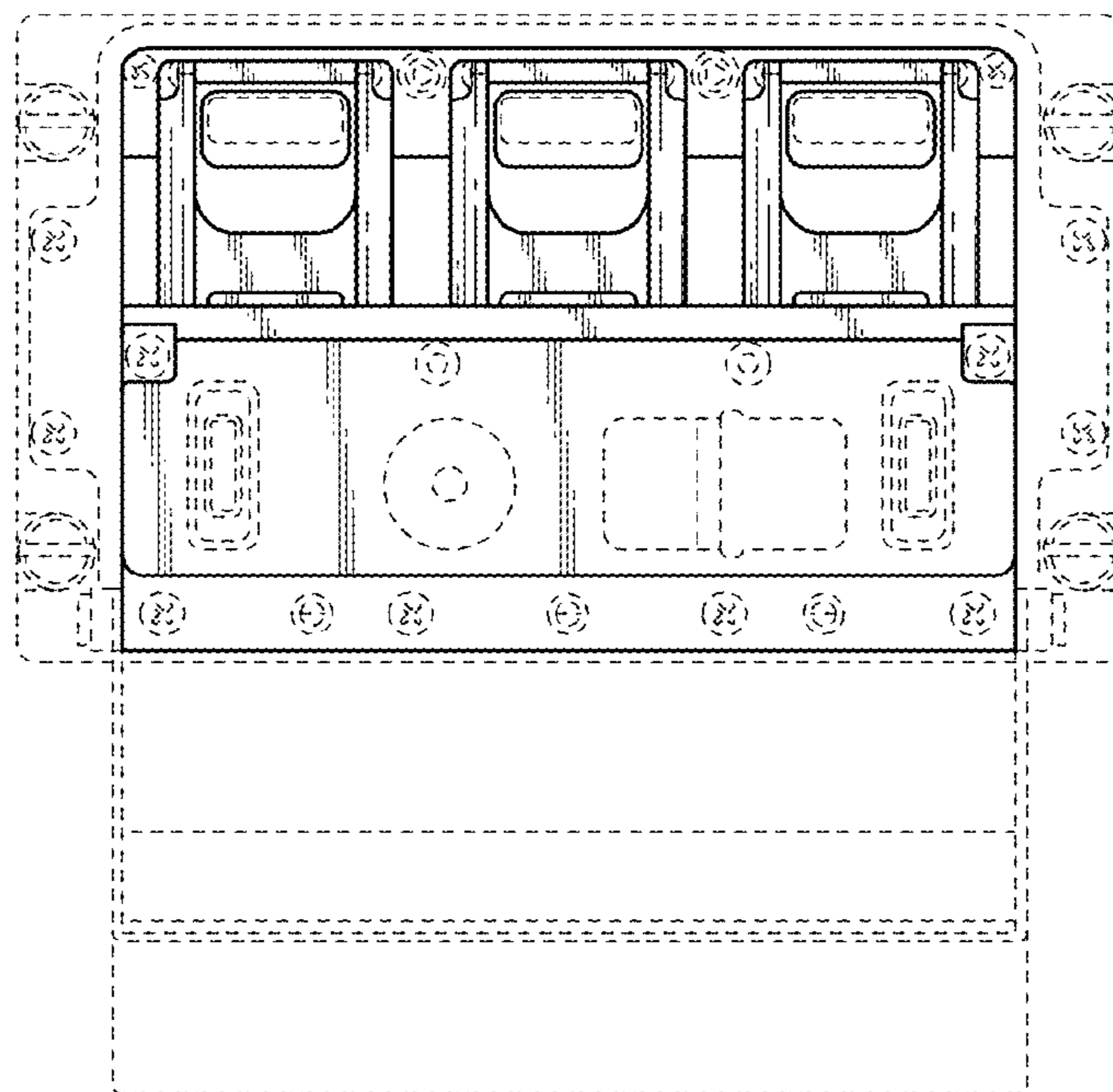


FIG. 3

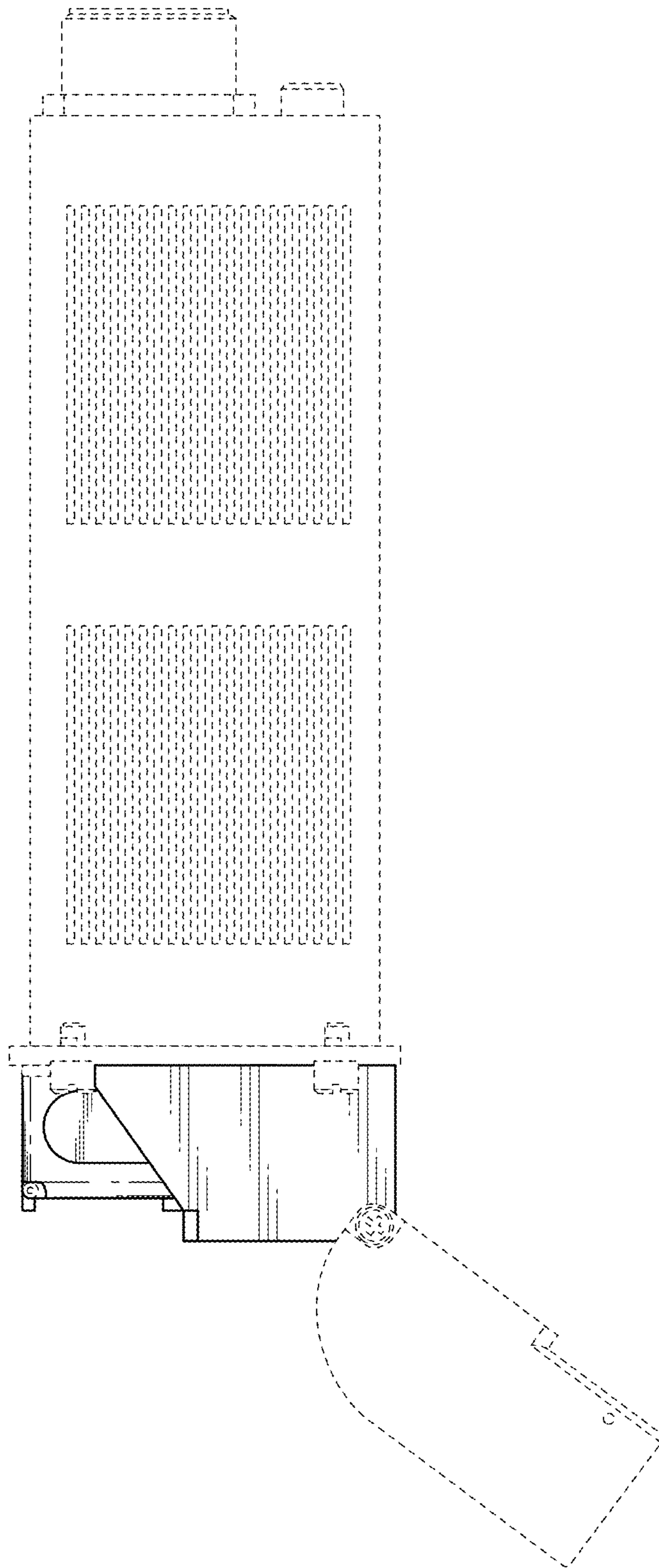


FIG. 4

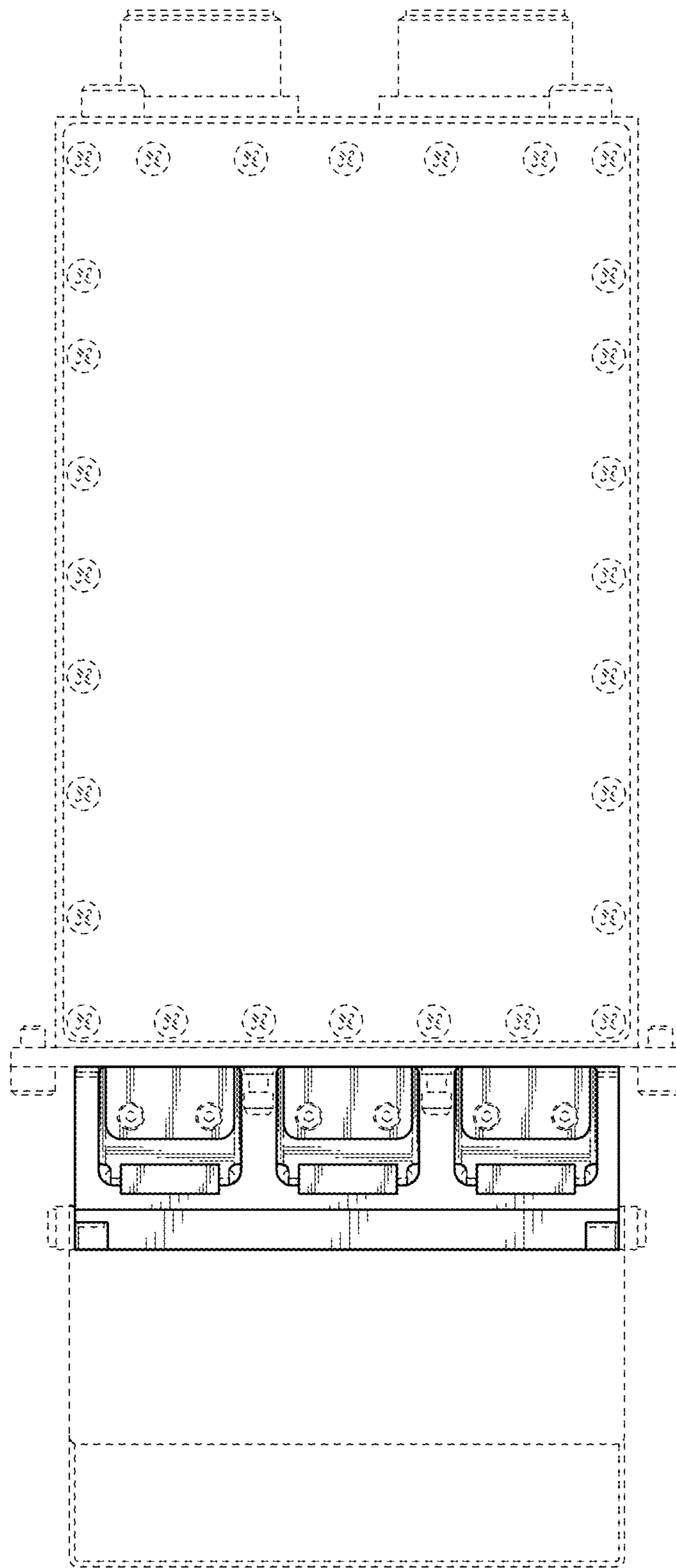


FIG. 5

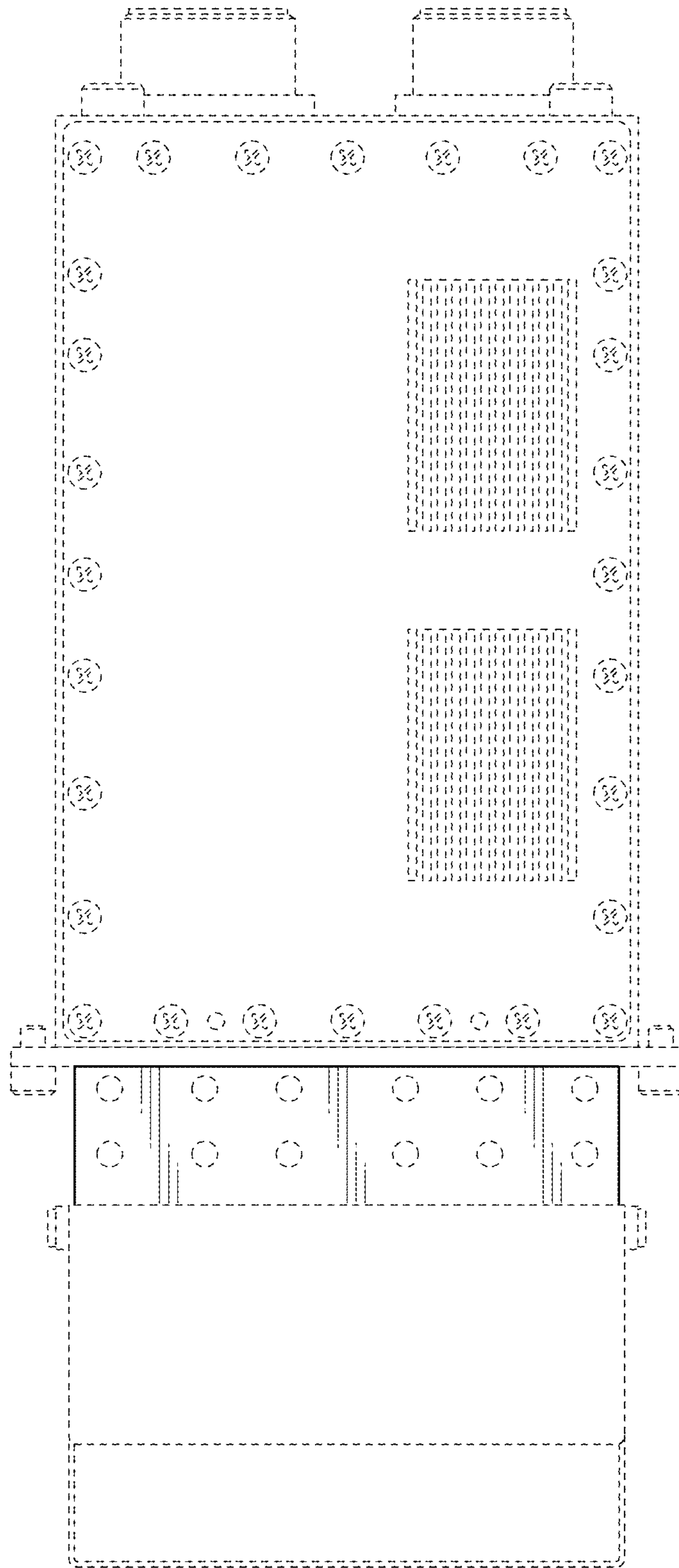


FIG. 6