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(12) United States Design Patent

Shimohama et al.

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(54) **DATA DISPLAY FOR NUMERICAL CONTROLLER**

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

(21) Appl. No.: **29/523,862**

(22) Filed: **Apr. 14, 2015**

(30) **Foreign Application Priority Data**

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(51) **LOC (10) Cl.** **13-03**

(52) **U.S. Cl.**
USPC **D13/164**

(58) **Field of Classification Search**
USPC D13/162, 162.1, 164; D10/49, 50; D14/336, 371
CPC G05B 19/0425; G05B 19/0426; G05B 19/05; G05B 19/409; G05B 19/4147; G06F 3/0484; G06F 3/0489; G06F 1/1601
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D275,851 S * 10/1984 Bambeck D13/164
4,524,414 A * 6/1985 Kiyokawa G05B 19/409 345/168
D280,406 S * 9/1985 Walker D13/164
4,916,639 A * 4/1990 Yoneda G05B 19/409 700/180
D334,542 S * 4/1993 Lowe D10/104.1
5,724,069 A * 3/1998 Chen G06F 3/0489 345/172
D406,830 S * 3/1999 Herbstritt D10/103
7,092,248 B2 * 8/2006 Shu G06F 1/1601 312/223.1
D559,792 S * 1/2008 Gemme D13/162
D573,108 S * 7/2008 Pan D13/164

(Continued)

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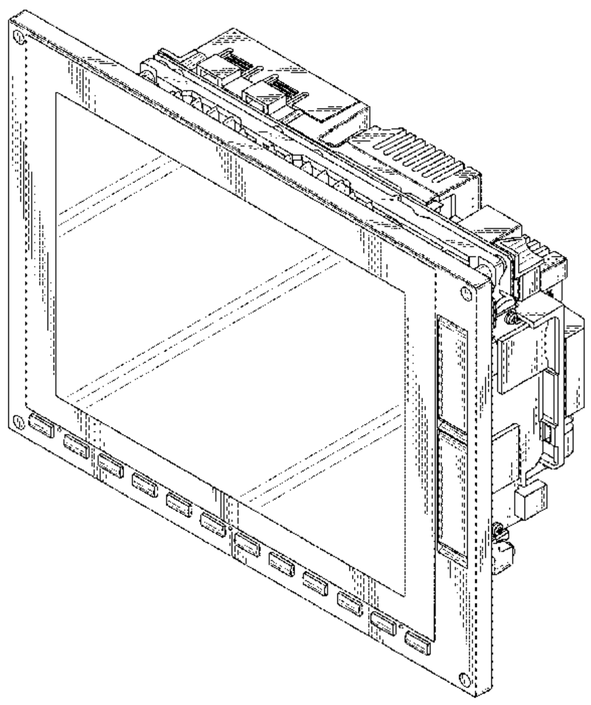
(57) **CLAIM**

The ornamental design for data display for numerical controller, as shown and described.

DESCRIPTION

FIG. **1** is a front perspective view of a data display for numerical controller, showing our new design;
FIG. **2** is a rear perspective view thereof;
FIG. **3** is a front elevational view thereof;
FIG. **4** is a rear elevational view thereof;
FIG. **5** is a left side elevational view thereof;
FIG. **6** is a right side elevational view thereof;
FIG. **7** is a top plan view thereof;
FIG. **8** is a bottom plan view thereof;
FIG. **9** is a front perspective view thereof;
FIG. **10** is a rear perspective view thereof;
FIG. **11** is a front elevational view thereof;
FIG. **12** is a rear elevational view thereof;
FIG. **13** is a left side elevational view thereof;
FIG. **14** is a right side elevational view thereof;
FIG. **15** is a top plan view thereof;
FIG. **16** is a bottom plan view thereof;
FIG. **17** is a front perspective view thereof;
FIG. **18** is a rear perspective view thereof;
FIG. **19** is a front elevational view thereof;
FIG. **20** is a rear elevational view thereof;
FIG. **21** is a left side elevational view thereof;
FIG. **22** is a right side elevational view thereof;
FIG. **23** is a top plan view thereof; and,
FIG. **24** is a bottom plan view thereof.

1 Claim, 24 Drawing Sheets



(56) **References Cited**

U.S. PATENT DOCUMENTS

7,499,029	B2 *	3/2009	Hara	G06F 1/1616 345/168
7,978,465	B2 *	7/2011	Osaka	G05B 19/05 248/917
D753,607	S *	4/2016	Lee	D13/162
2003/0040884	A1 *	2/2003	Walther	G05B 19/409 702/150
2010/0175012	A1 *	7/2010	Allstrom	G05B 19/0428 715/771
2012/0109343	A1 *	5/2012	Shah	G05B 19/409 700/83
2012/0268240	A1 *	10/2012	Frerking	G05B 19/409 340/5.51
2015/0205287	A1 *	7/2015	Igarashi	B23Q 1/0045 318/591
2016/0048121	A1 *	2/2016	Shinohara	G05B 19/409 700/179
2016/0113130	A1 *	4/2016	Le	G02F 1/0105 361/679.01

* cited by examiner

FIG. 1

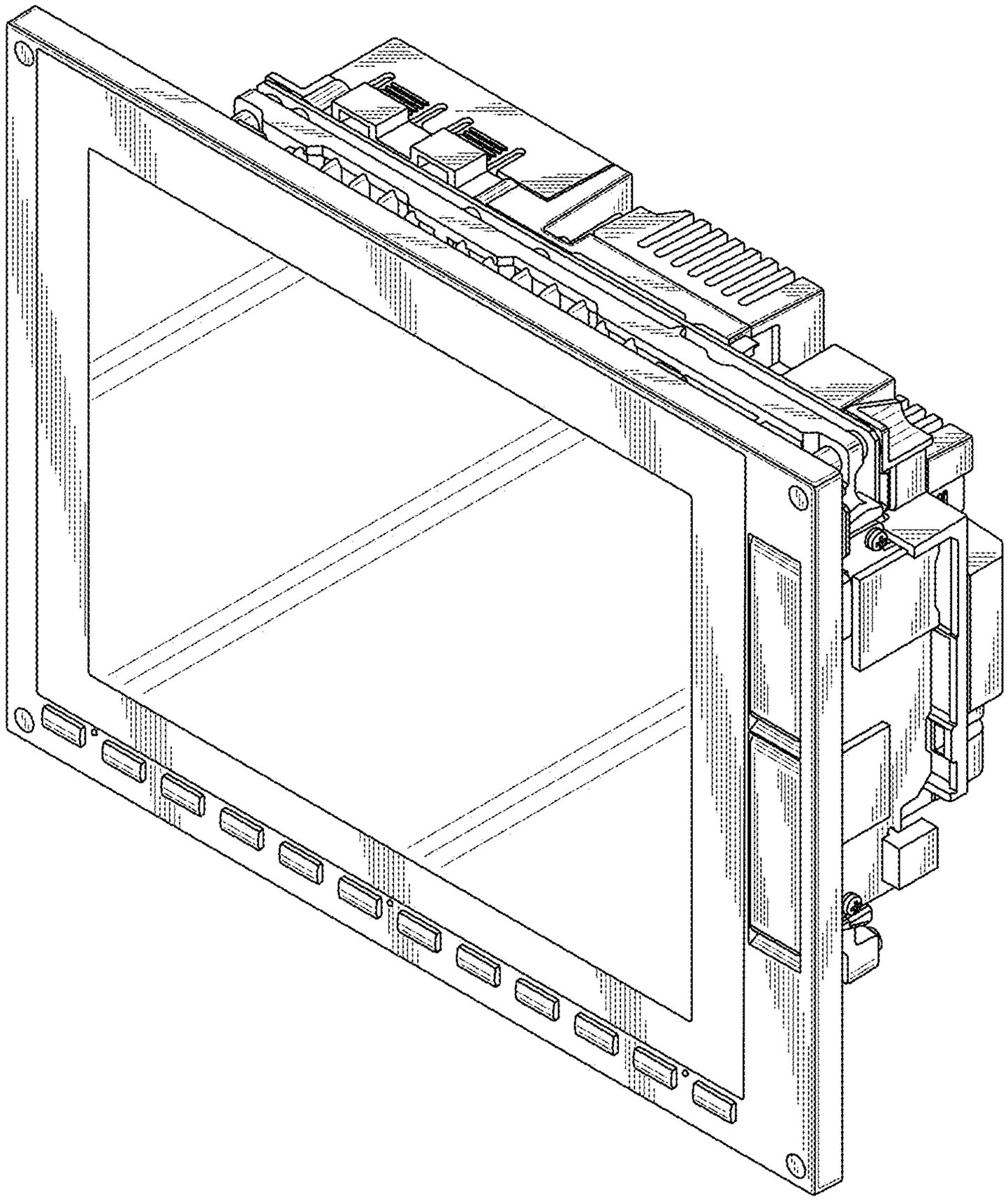


FIG. 2

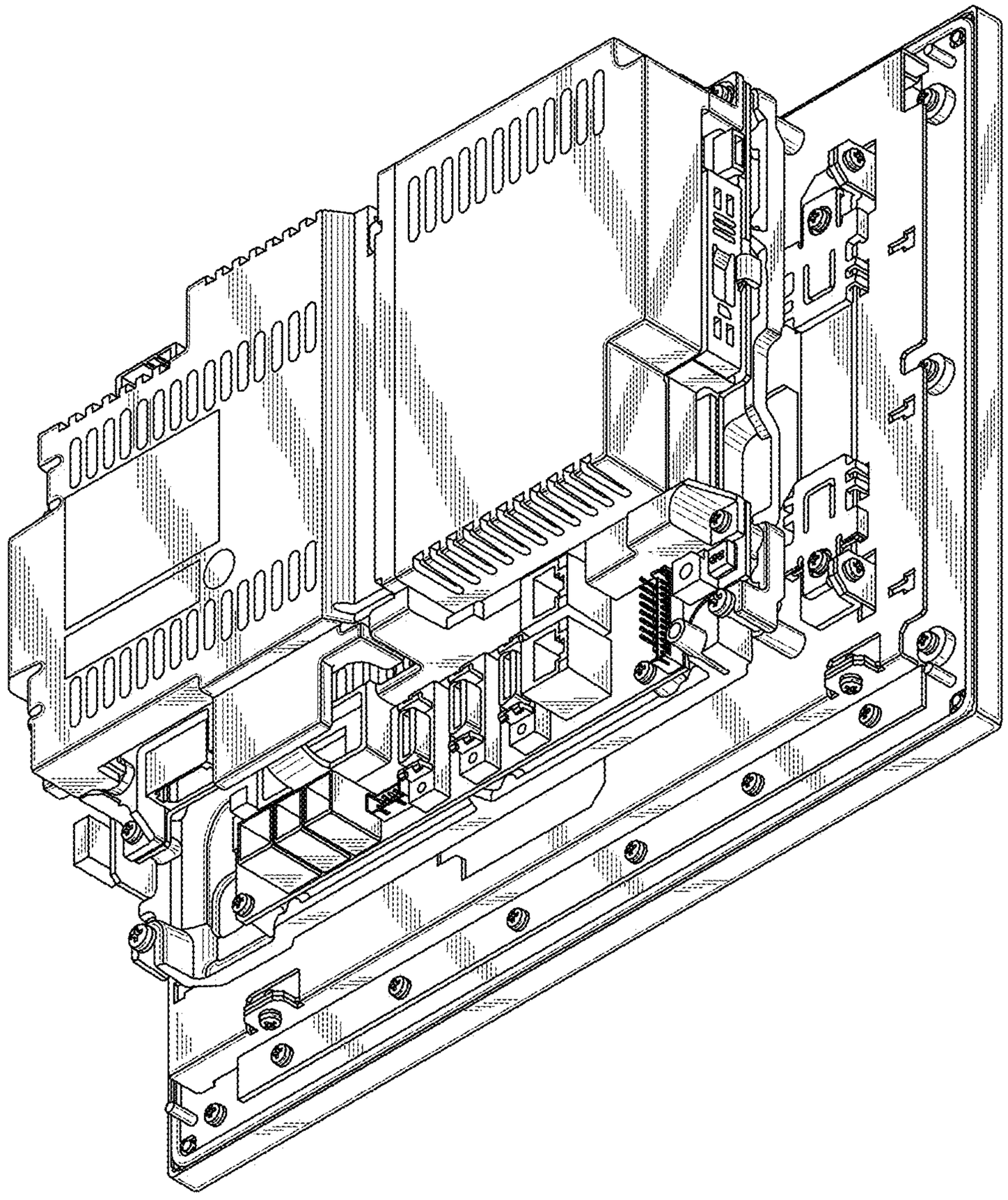


FIG. 3

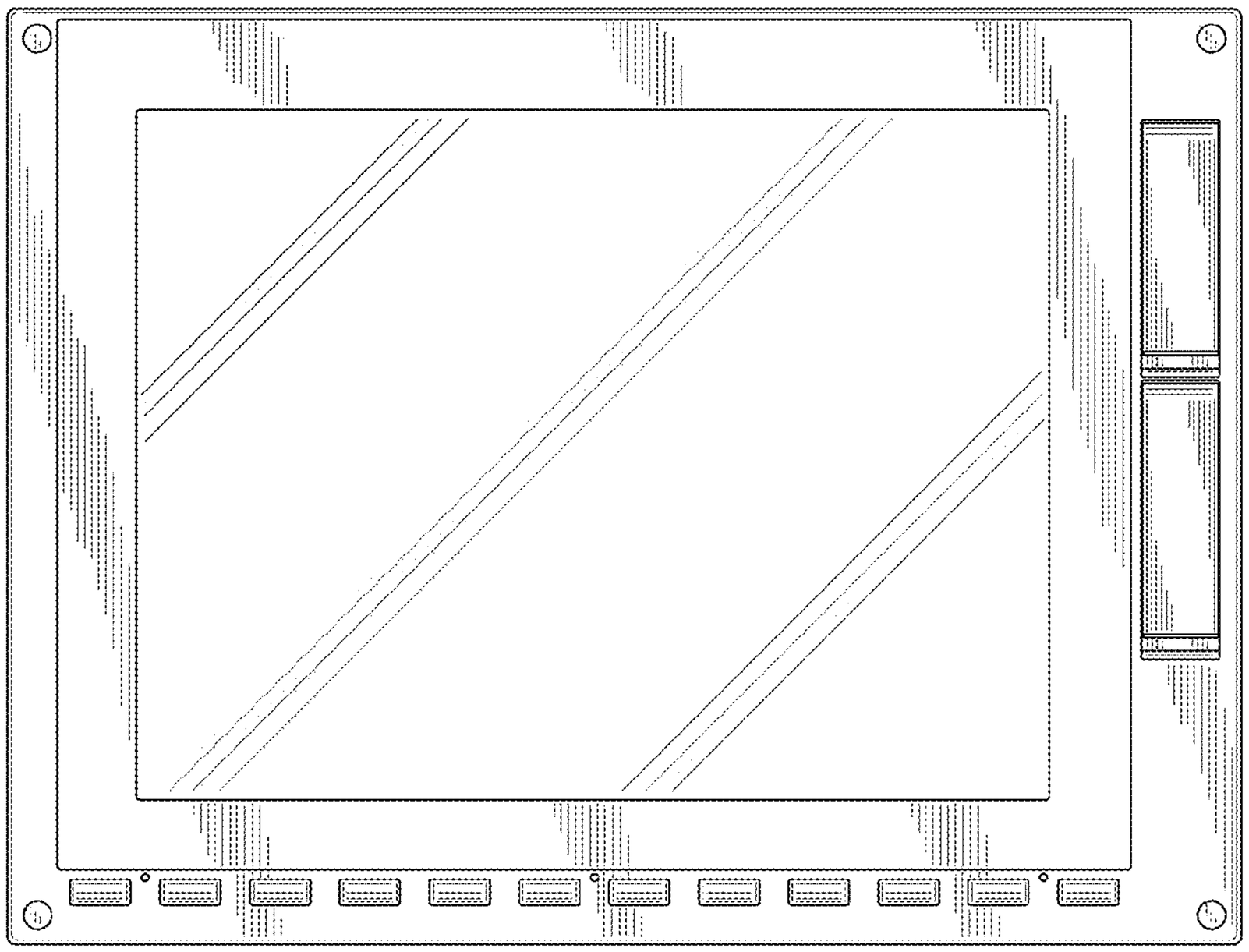


FIG. 4

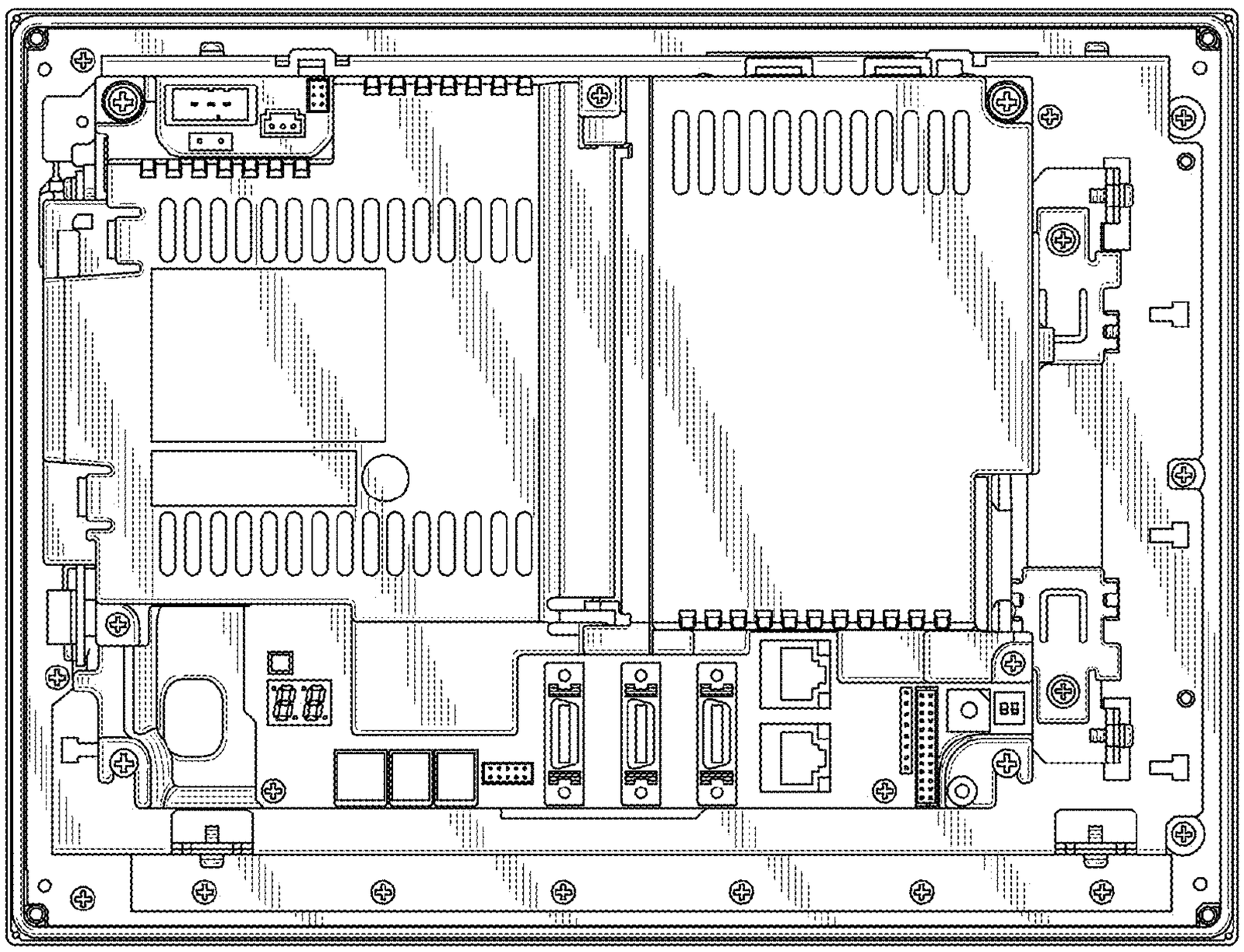


FIG. 5

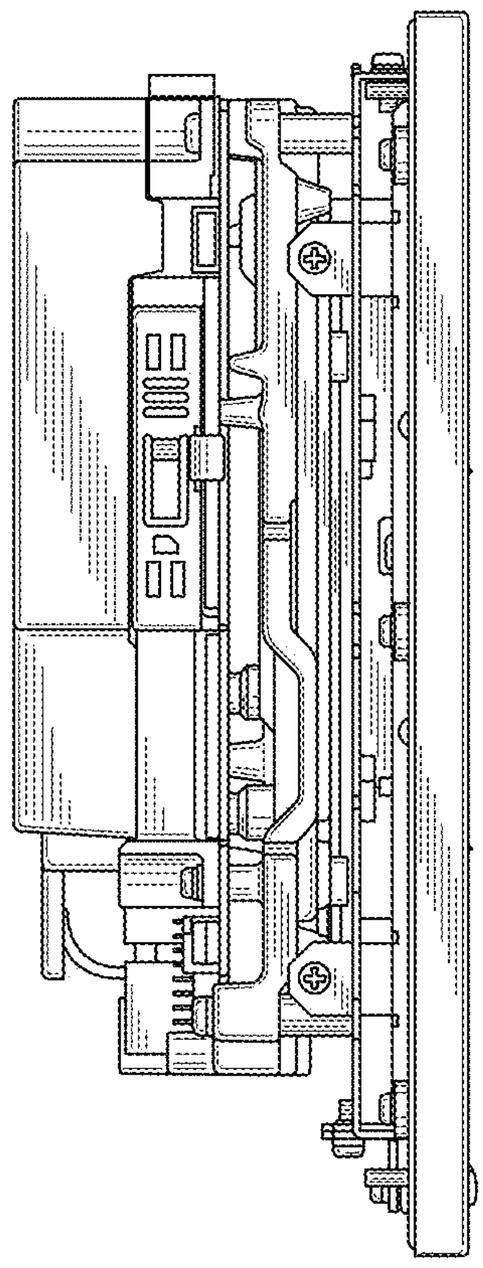


FIG. 6

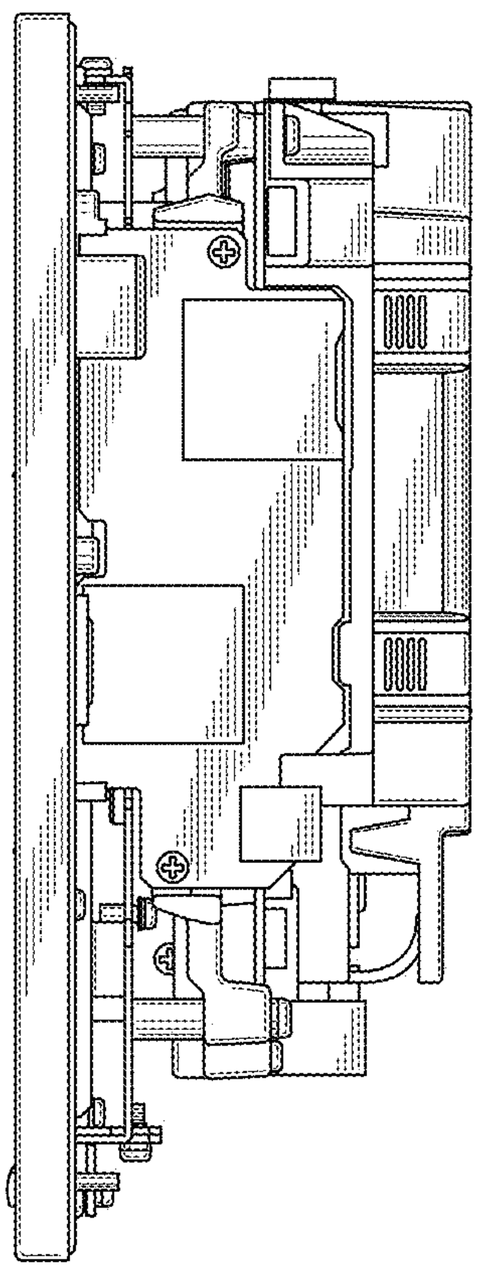


FIG. 7

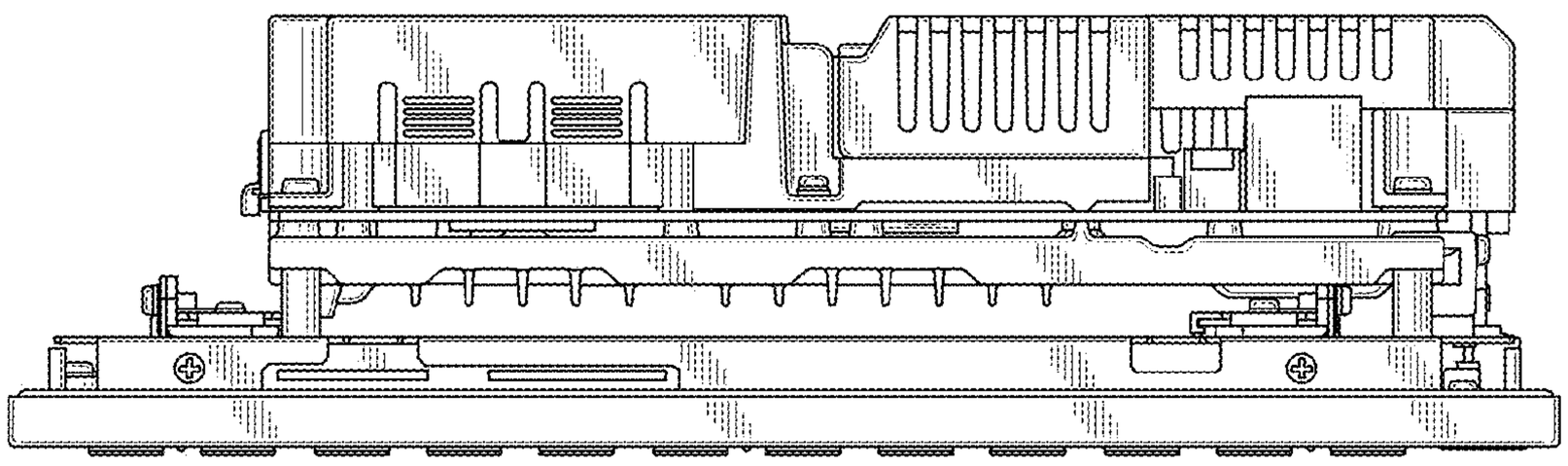


FIG. 8

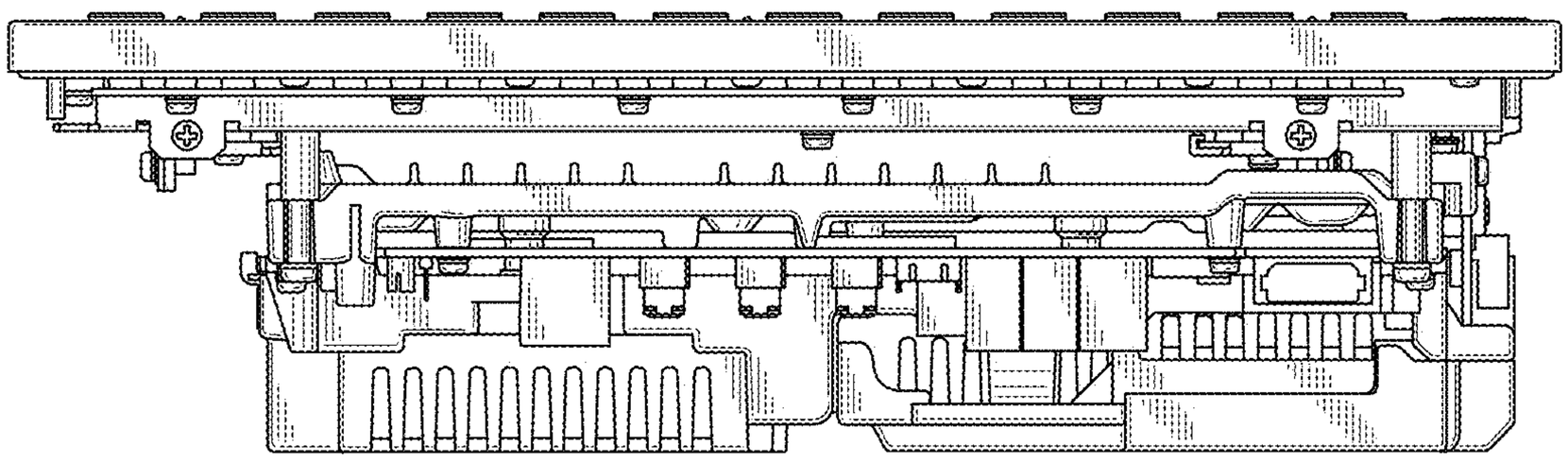


FIG. 9

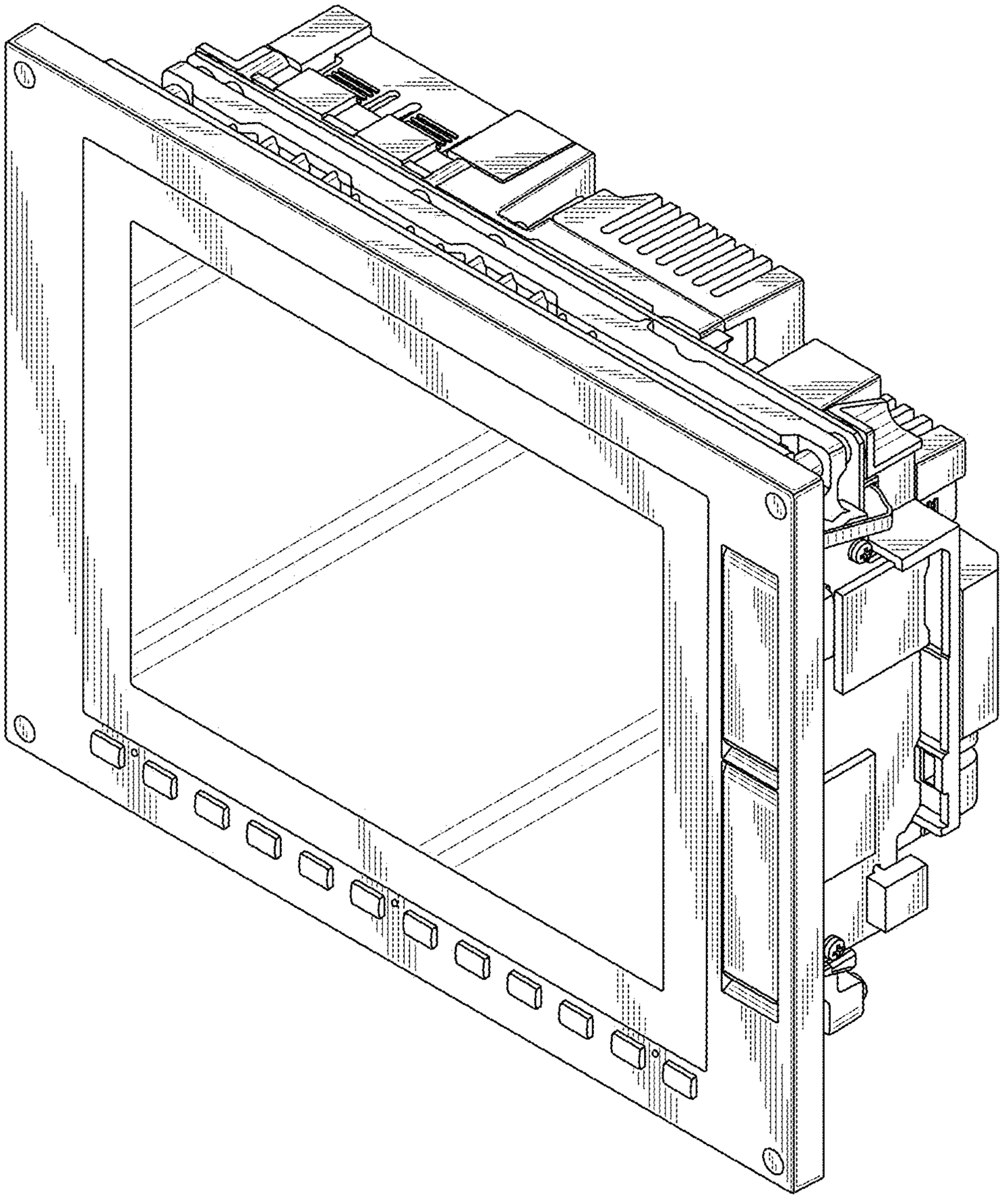


FIG. 10

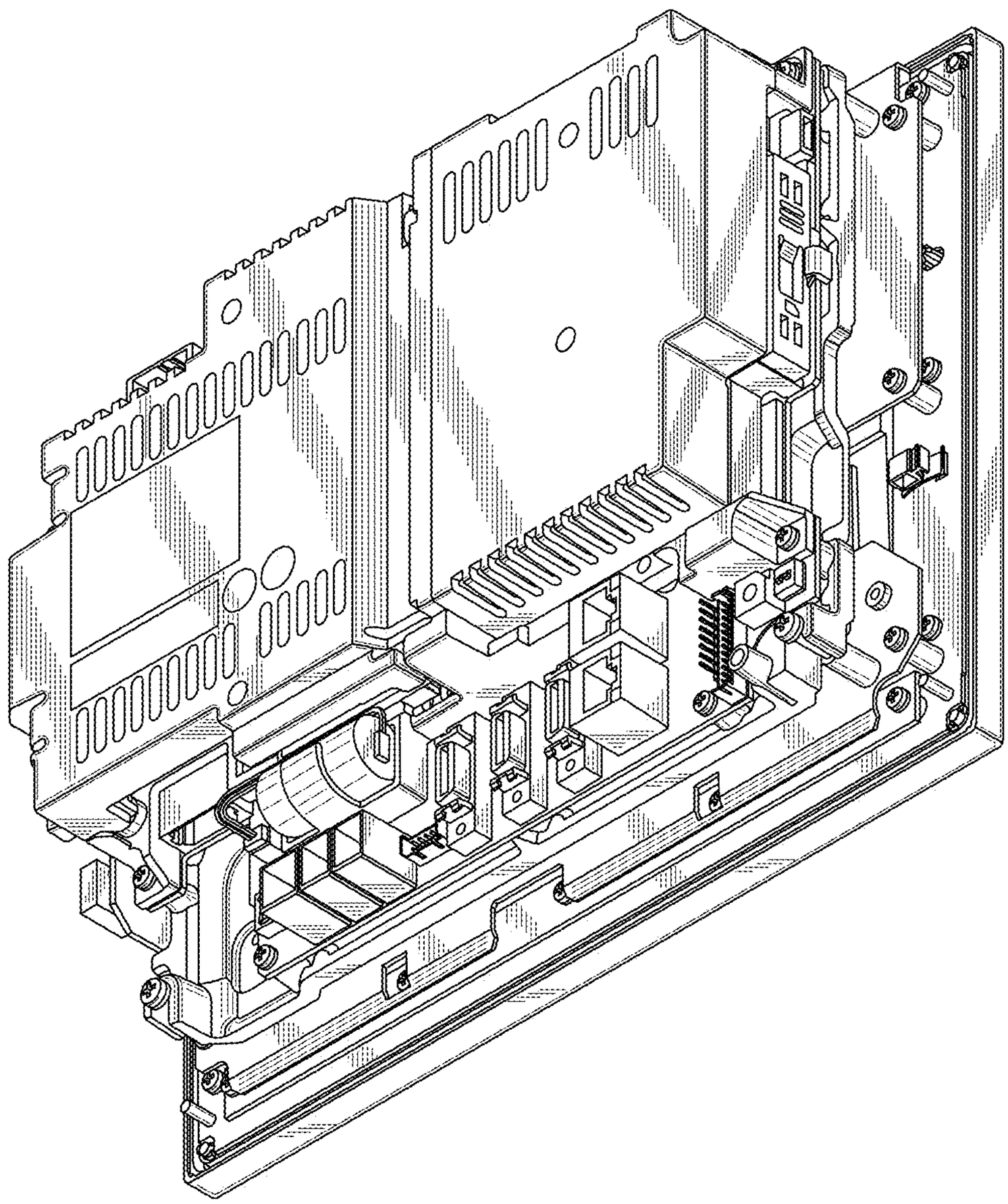


FIG. 11

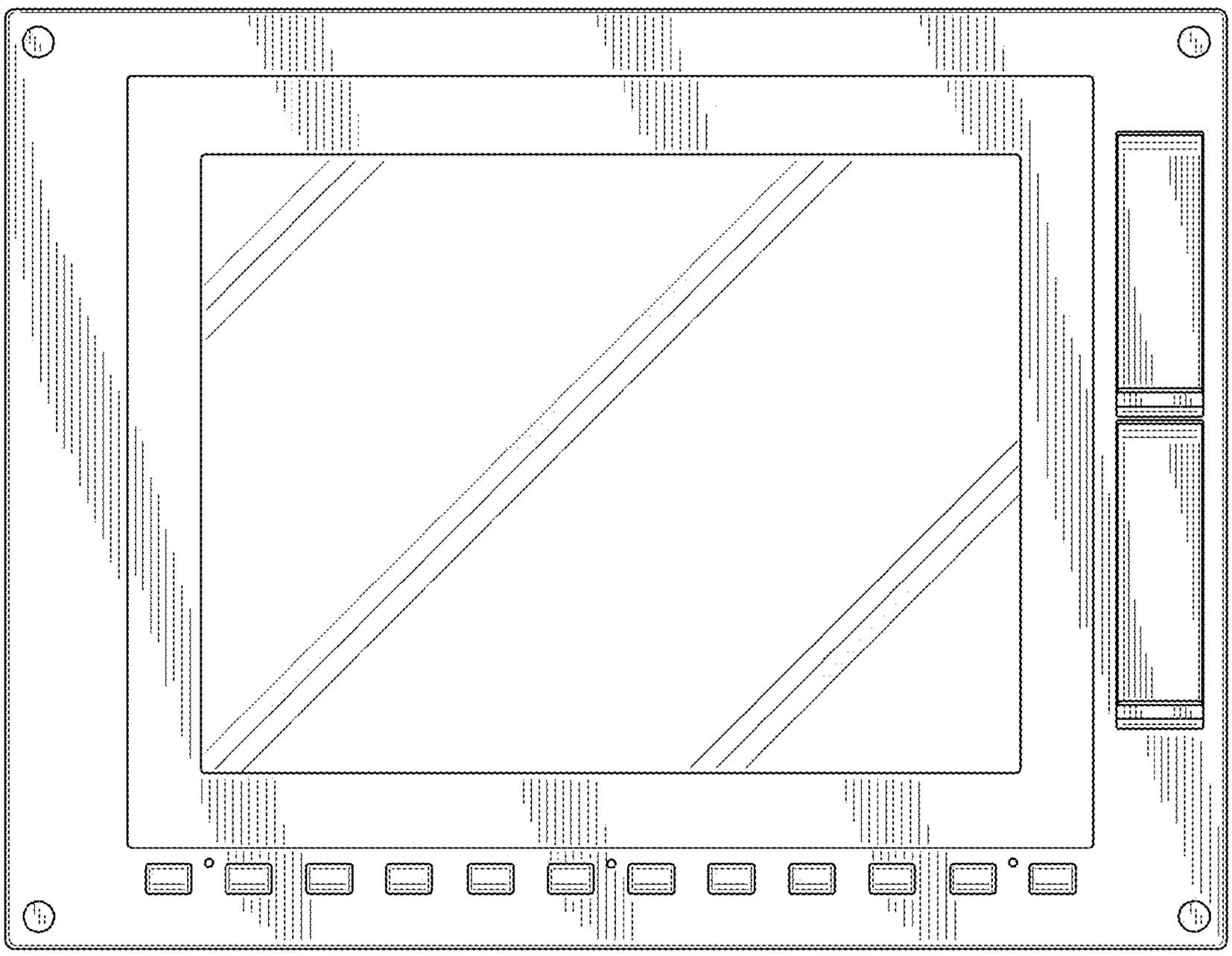


FIG. 12

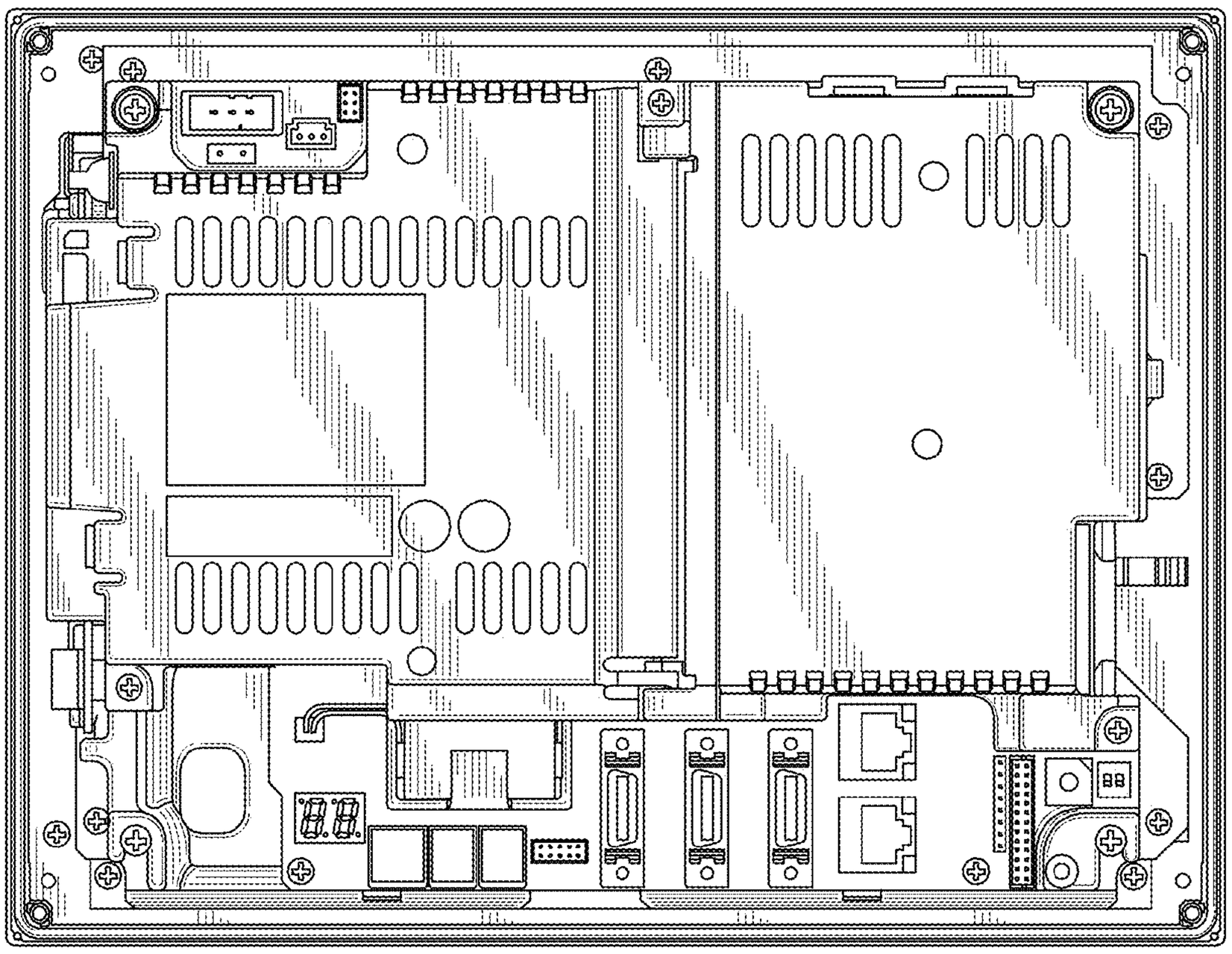


FIG. 13

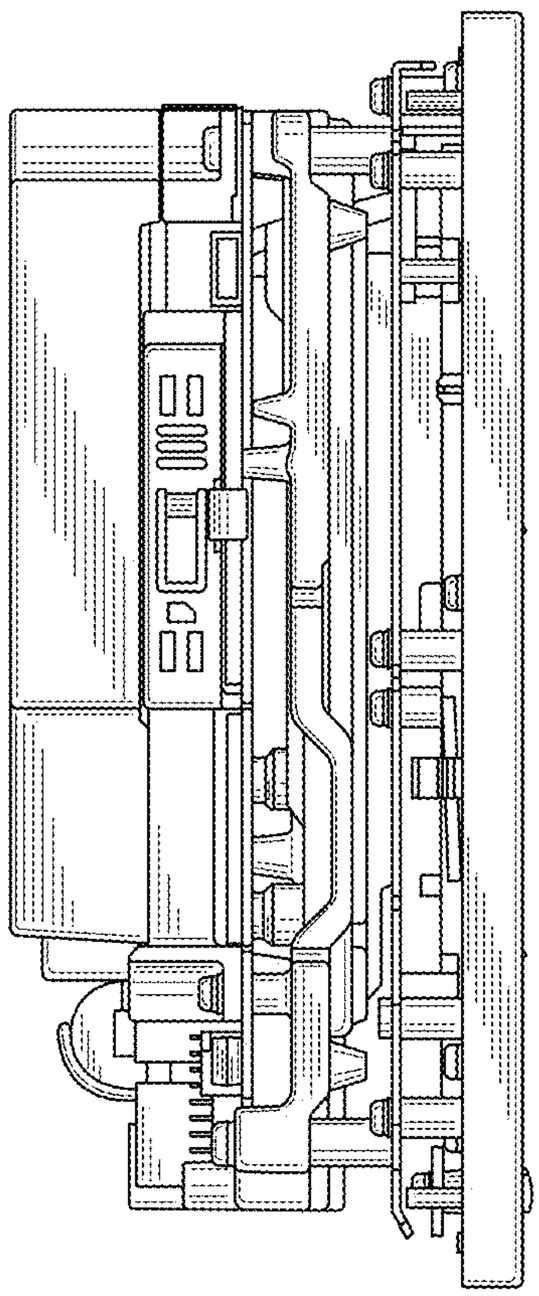


FIG. 14

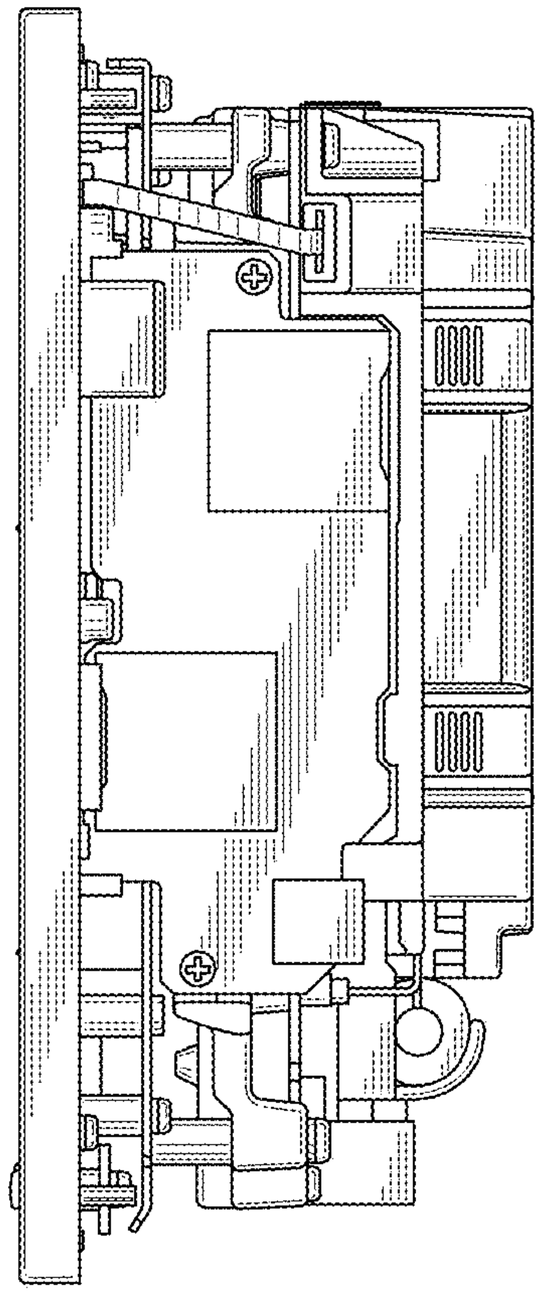


FIG. 15

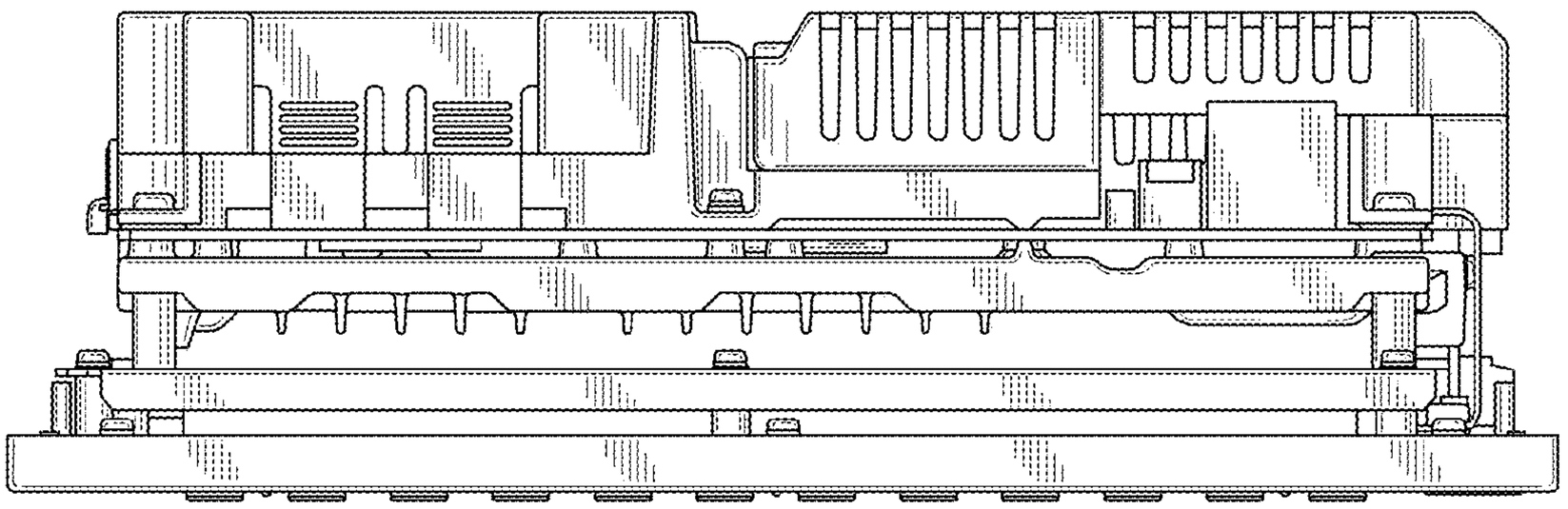


FIG. 16

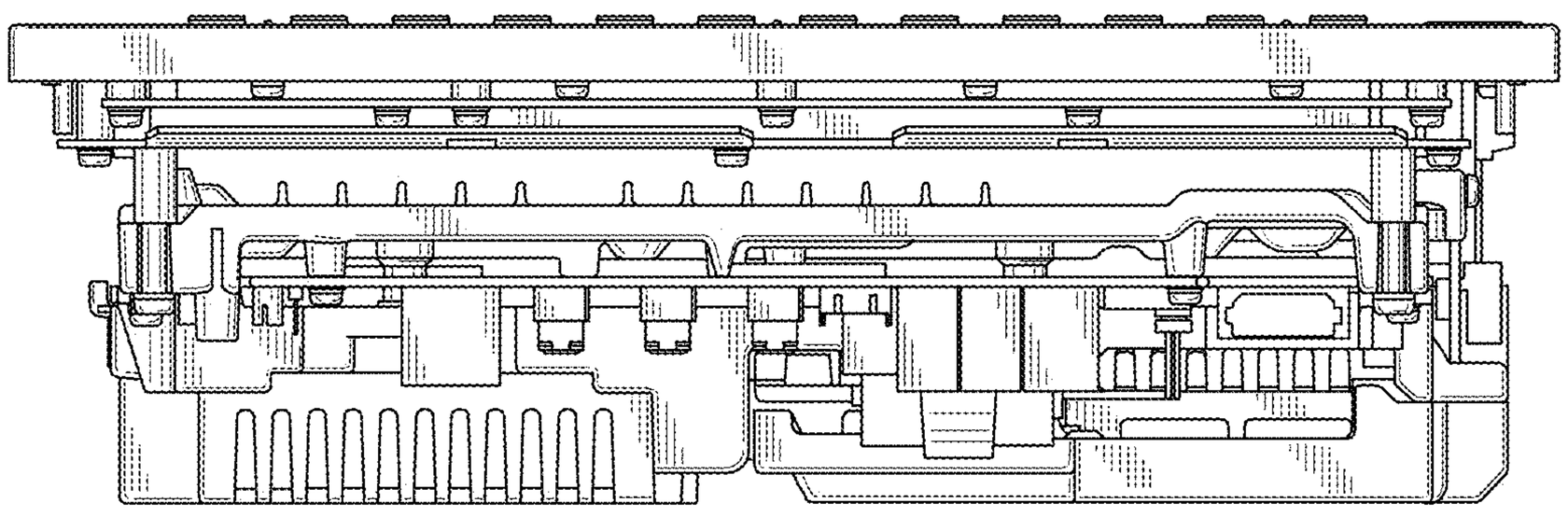


FIG. 17

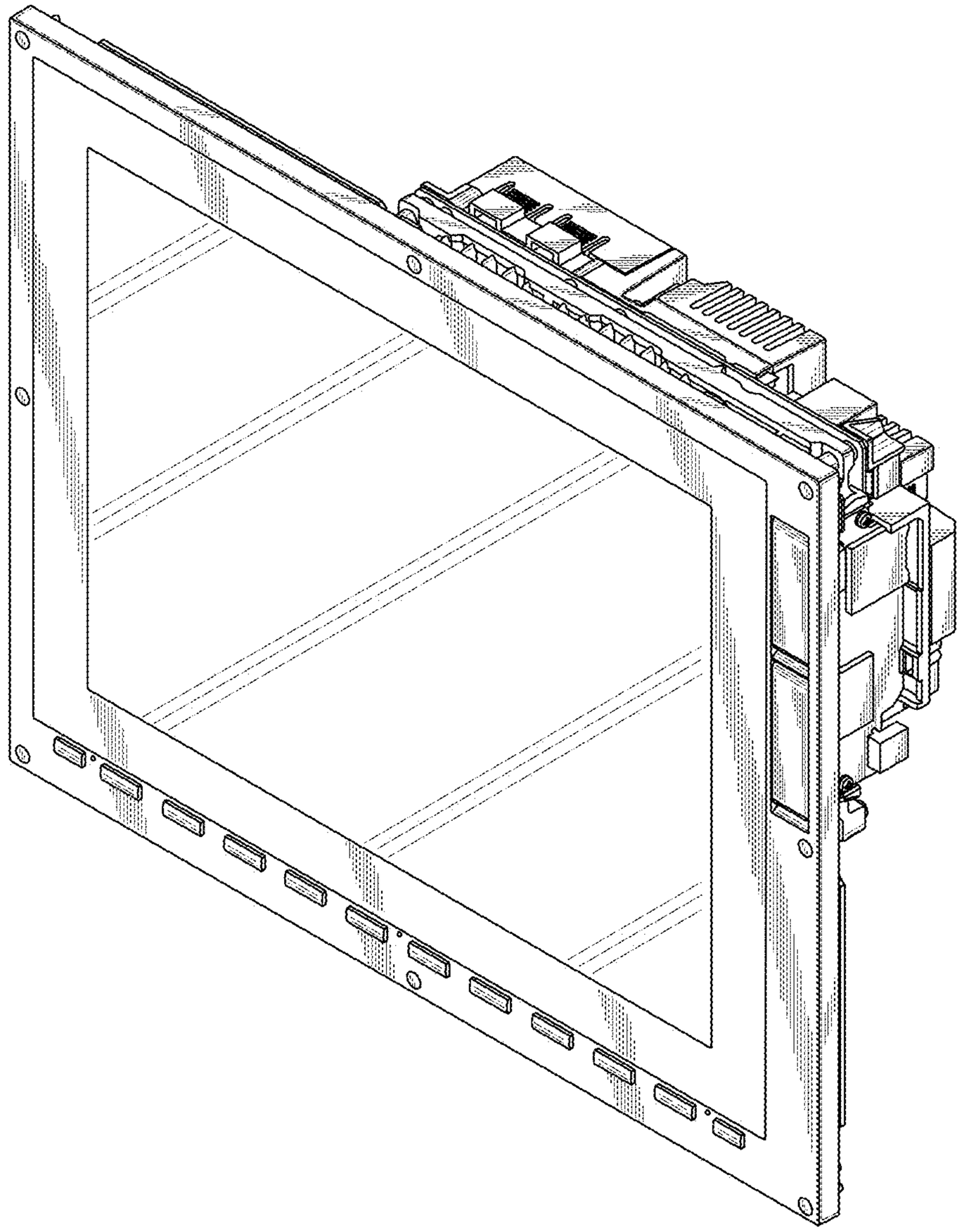


FIG. 18

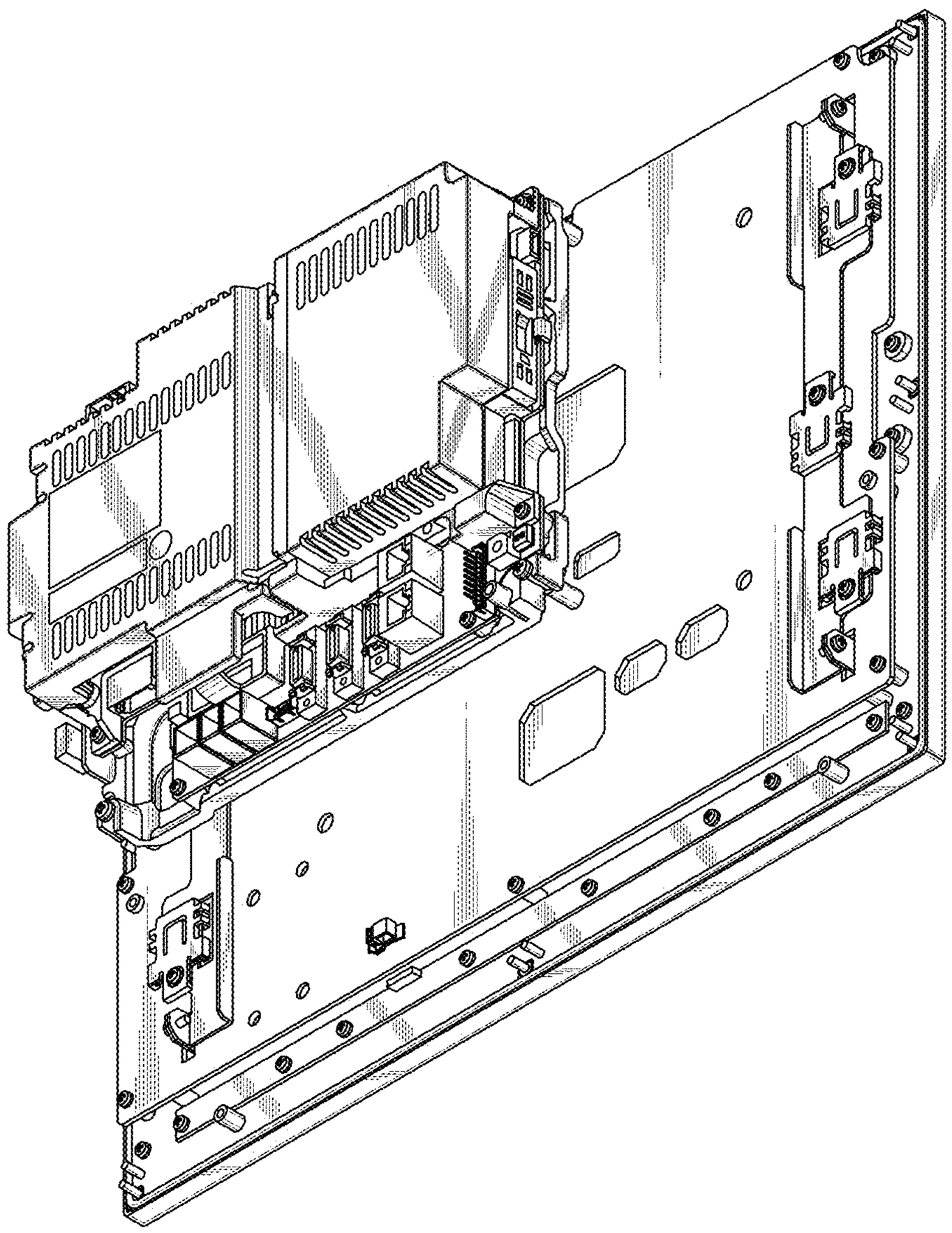


FIG. 19

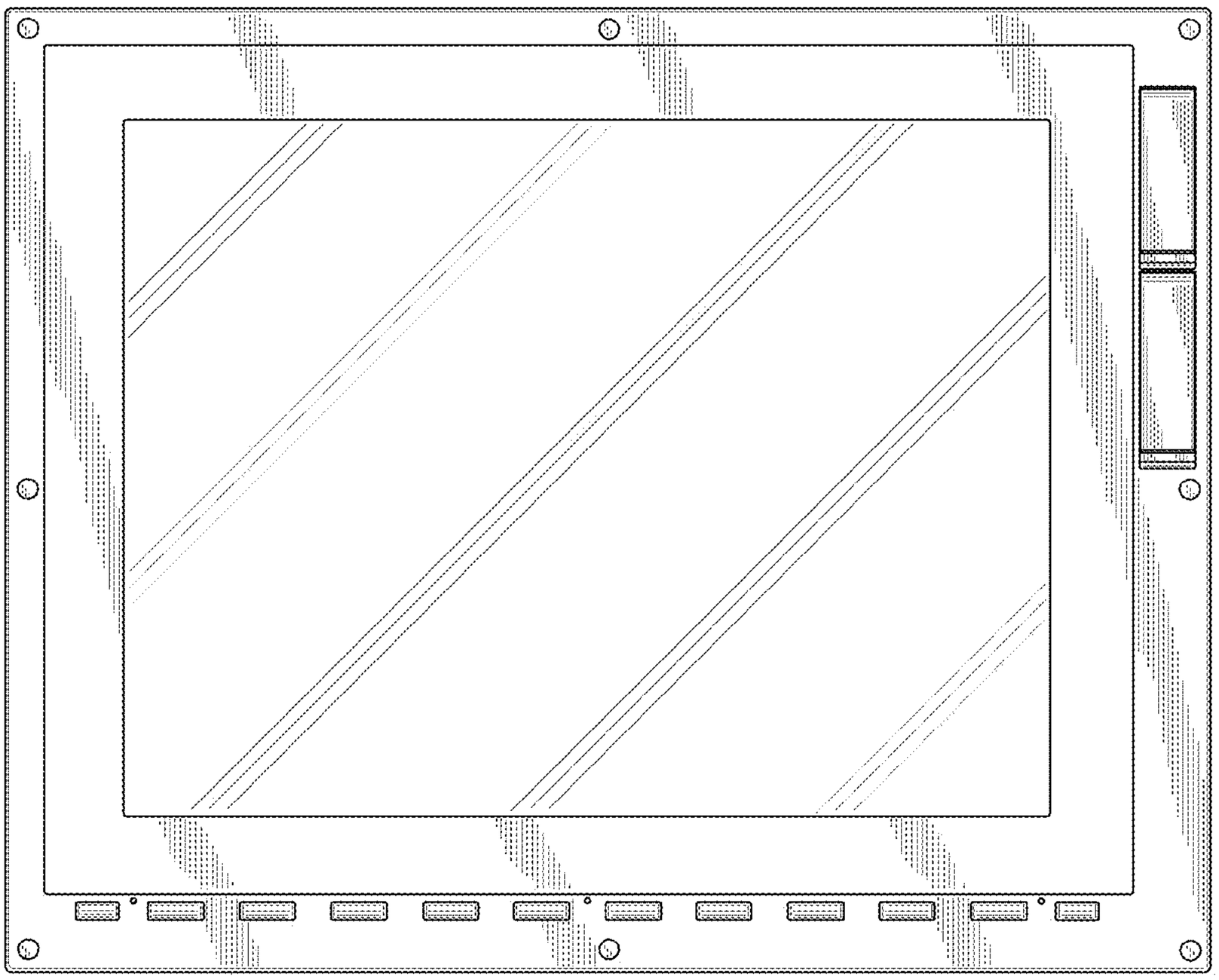


FIG.20

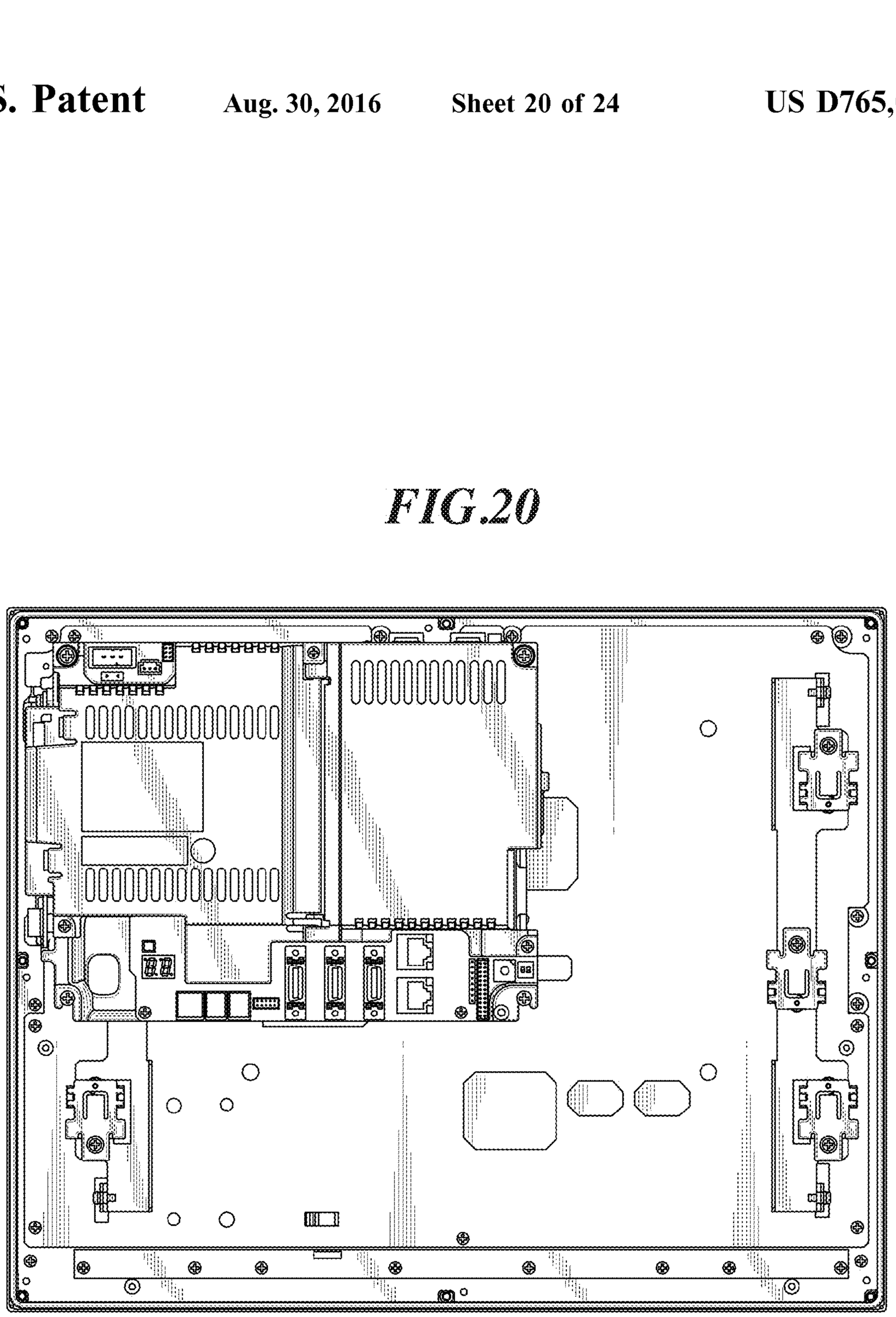


FIG. 21

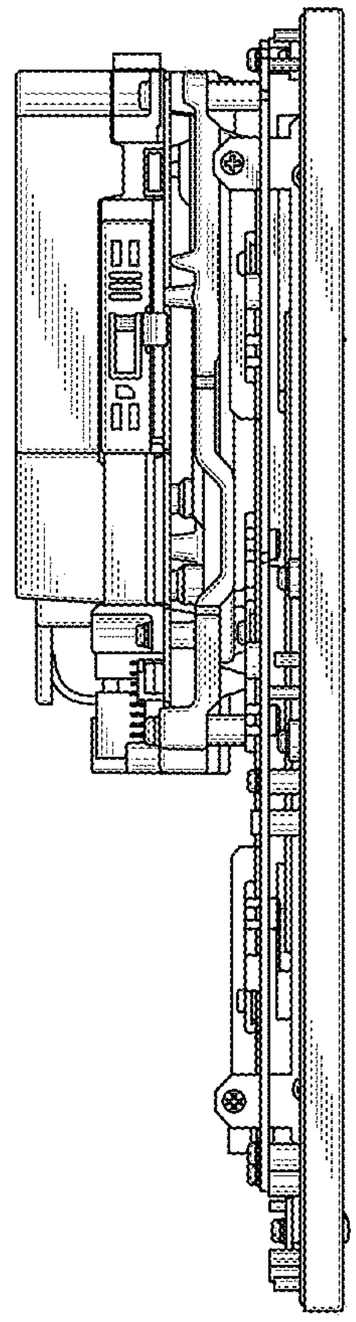


FIG. 22

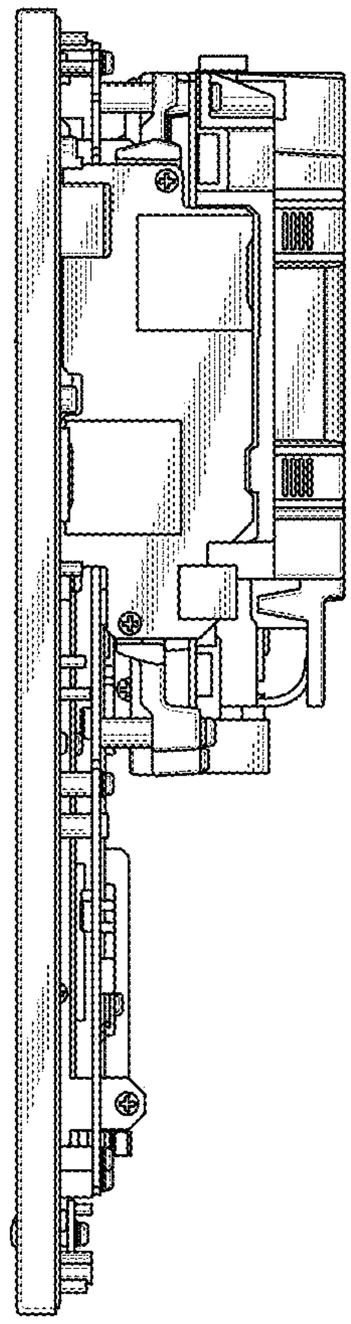


FIG. 23

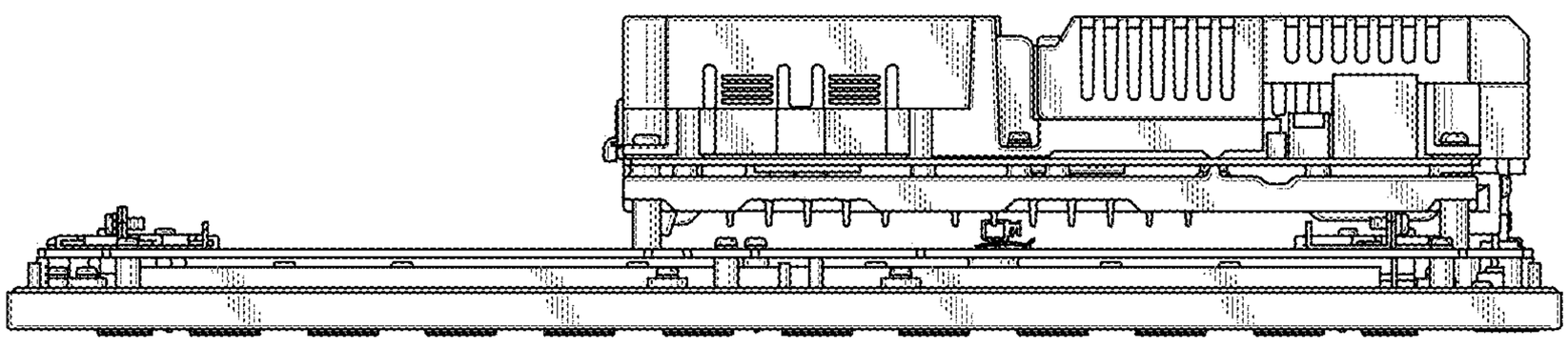


FIG. 24