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(12) United States Design Patent

Alali et al.

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(54) **MODULARLY CONNECTING BRIDGE, METER AND POWER SUPPLY UNIT ASSEMBLY**

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(73) Assignee: **PANORAMIC POWER LTD.**, Kfar-Saba (IL)

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

(21) Appl. No.: **29/675,303**

(22) Filed: **Dec. 31, 2018**

(51) **LOC (12) Cl.** **13-02**

(52) **U.S. Cl.**
USPC **D13/110**

(58) **Field of Classification Search**
USPC D13/110, 108, 118, 123, 162, 168, 169, D13/174, 177, 184, 199; D14/257, 432, D14/438

(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

D667,784 S * 9/2012 Choi D13/102
D673,114 S * 12/2012 Schnakenberg, III D13/110

(Continued)

Primary Examiner — Susan Bennett Hattan
Assistant Examiner — Suzanne E Tisdell
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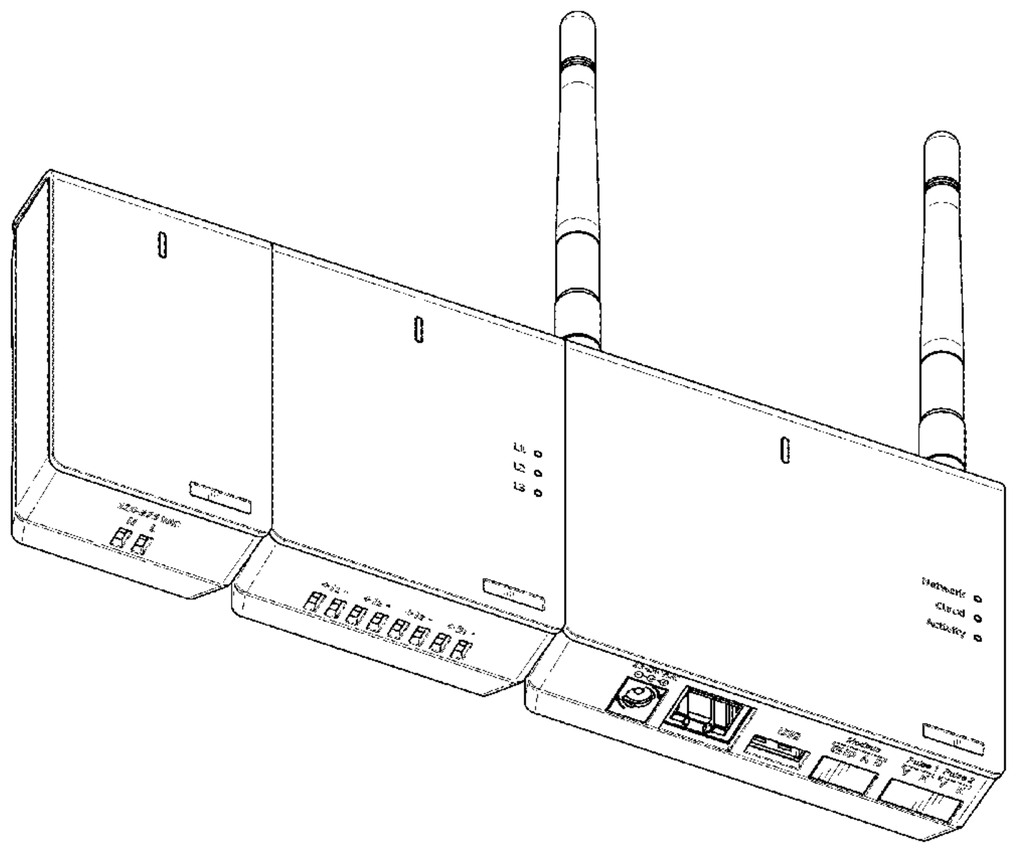
(57) **CLAIM**

We claim the ornamental design for modularly connecting bridge, meter and power supply unit assembly, as shown and described.

DESCRIPTION

FIG. **1** is a front left bottom view of a modularly connecting bridge, meter and power supply unit assembly showing our new design;
FIG. **2** is a back right back perspective view thereof;
FIG. **3** is a front left bottom perspective view thereof without antennae protruding from the BRIDGE UNIT;
FIG. **4** is a back right back perspective view thereof without antennae protruding from the BRIDGE UNIT;
FIG. **5** is a front left bottom perspective view of the BRIDGE UNIT;
FIG. **6** is a back right top perspective view of the BRIDGE UNIT;
FIG. **7** is a front left bottom perspective view of the BRIDGE UNIT without antennae protruding therefrom;
FIG. **8** is a back right top perspective view of the BRIDGE UNIT without antennae protruding therefrom;
FIG. **9** is a front left bottom perspective view of the METER UNIT according to our new design;
FIG. **10** is a back right top perspective view of the METER UNIT;
FIG. **11** is a front left bottom perspective view of the POWER SUPPLY UNIT;
FIG. **12** is a back right top perspective view of the POWER SUPPLY UNIT;
FIG. **13** is a perspective view of the modularly connecting bridge, meter and power supply unit assembly showing a connecting socket between the BRIDGE UNIT and the METER UNIT;
FIG. **14** is a perspective view thereof showing a connecting socket between the BRIDGE UNIT and the METER UNIT;
FIG. **15** is a back right top perspective view showing the modularly connecting bridge, meter and power supply unit assembly mounted on a rail;
FIG. **16** is a back right top perspective view showing the modularly connecting bridge, meter and power supply unit assembly mounted on a rail without antennae protruding from the BRIDGE UNIT;
FIG. **17** is a front view of the BRIDGE UNIT; and,
FIG. **18** is a back view of the BRIDGE UNIT.
The broken lines throughout the drawing figures depict an environmental rail that forms no part of the claimed design.

1 Claim, 13 Drawing Sheets



(58) **Field of Classification Search**
CPC B60L 15/00; B60L 15/007; B60L 50/51; B60K 17/04; H02K 5/06; H05K 5/00; H05K 5/02; H05K 5/0247; H05K 7/00; H05K 7/20; H05K 7/20136; H05K 7/20154; H05K 7/209; H02M 7/00; H02M 7/003
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D684,533	S *	6/2013	Nakahira	D13/110
D698,725	S *	2/2014	Shin	D13/110
D703,136	S *	4/2014	Choi	D13/110
D705,728	S *	5/2014	Choi	D13/110
D706,215	S *	6/2014	Nakahira	D13/110
D707,176	S *	6/2014	Choi	D13/110
D709,449	S *	7/2014	Oba	D13/110
8,848,370	B2 *	9/2014	Shin	H02M 7/003 165/104.33
8,854,816	B2 *	10/2014	Shintani	H05K 7/20909 361/678
D716,728	S *	11/2014	Oyadomari	D13/110
8,882,479	B2 *	11/2014	Asai	F04B 35/04 417/423.14
D728,474	S *	5/2015	Orlando	D13/110
D739,352	S *	9/2015	Benn	D13/123
D745,847	S *	12/2015	Ho	D13/110
9,203,217	B2 *	12/2015	Takano	H05K 7/1432
9,241,428	B1 *	1/2016	Doo	H05K 7/20927
9,318,935	B2 *	4/2016	Nakagami	H02K 11/044
D756,921	S *	5/2016	Benn	D13/110
D773,393	S *	12/2016	Simoni	D13/110
9,599,109	B2 *	3/2017	Yakushiji	F04B 39/06
D789,887	S *	6/2017	Zeng	D13/110
D798,809	S *	10/2017	Benn	D13/110
D798,810	S *	10/2017	Benn	D13/110
9,795,066	B2 *	10/2017	Dong	H02M 7/003
D803,780	S *	11/2017	Gudgel	D13/110
9,812,919	B2 *	11/2017	Arashi	H02K 5/225
D813,810	S *	3/2018	McCool	D13/110
D817,273	S *	5/2018	Kato	D13/110
D817,275	S *	5/2018	Yeh	D13/110
9,961,758	B1 *	5/2018	Pickering	H05K 1/0206
D831,569	S *	10/2018	Simoni	D13/110
10,110,141	B2 *	10/2018	Bethke	H05K 7/20909
D852,740	S *	7/2019	Aitzetmueller	D13/110
D856,927	S *	8/2019	Eppinger	D13/110
10,388,589	B2 *	8/2019	Kawase	H01L 25/072
10,464,439	B2 *	11/2019	Liu	H02K 5/06
10,477,733	B1 *	11/2019	Skalski	H01G 2/08

* cited by examiner

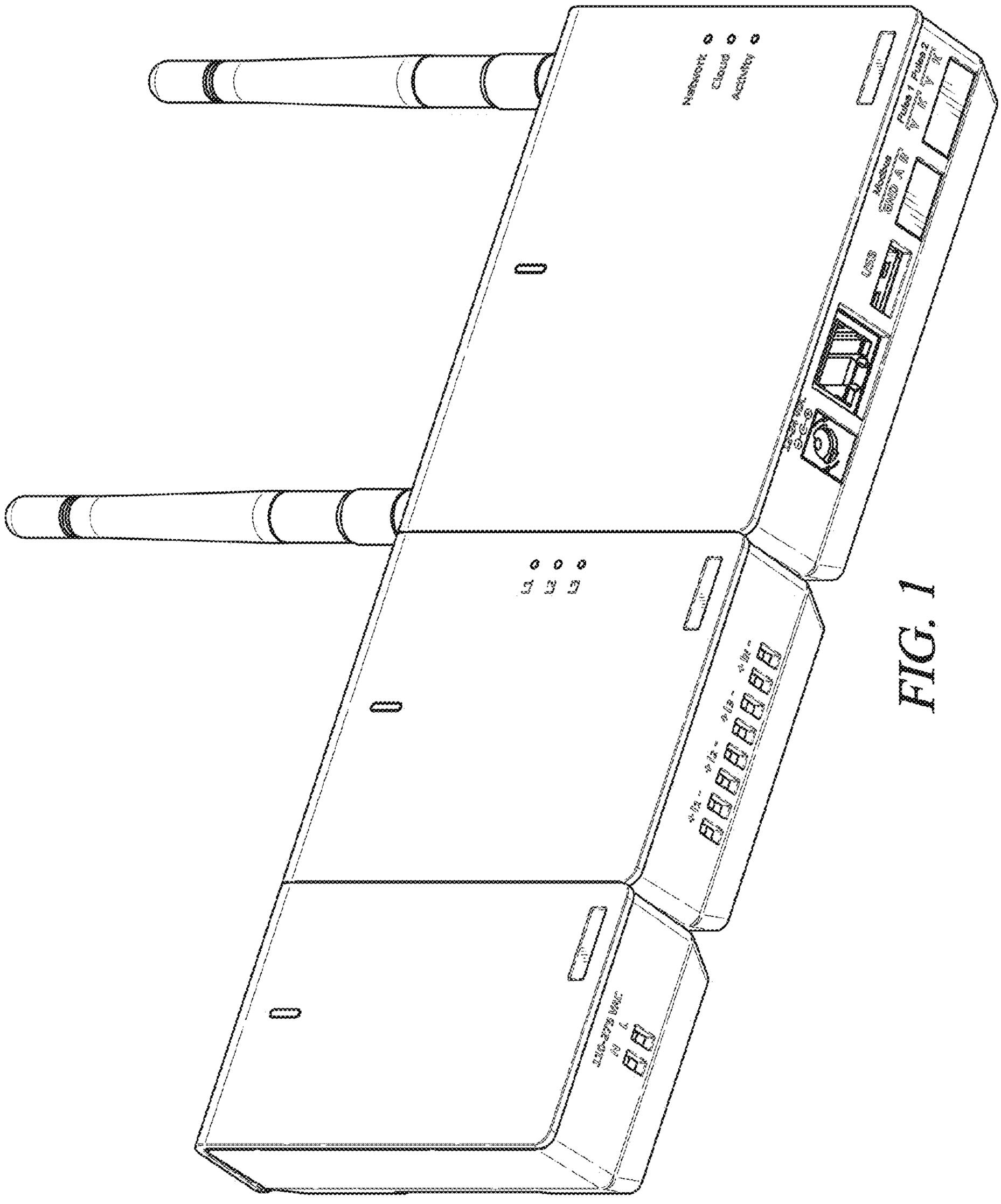


FIG. 1

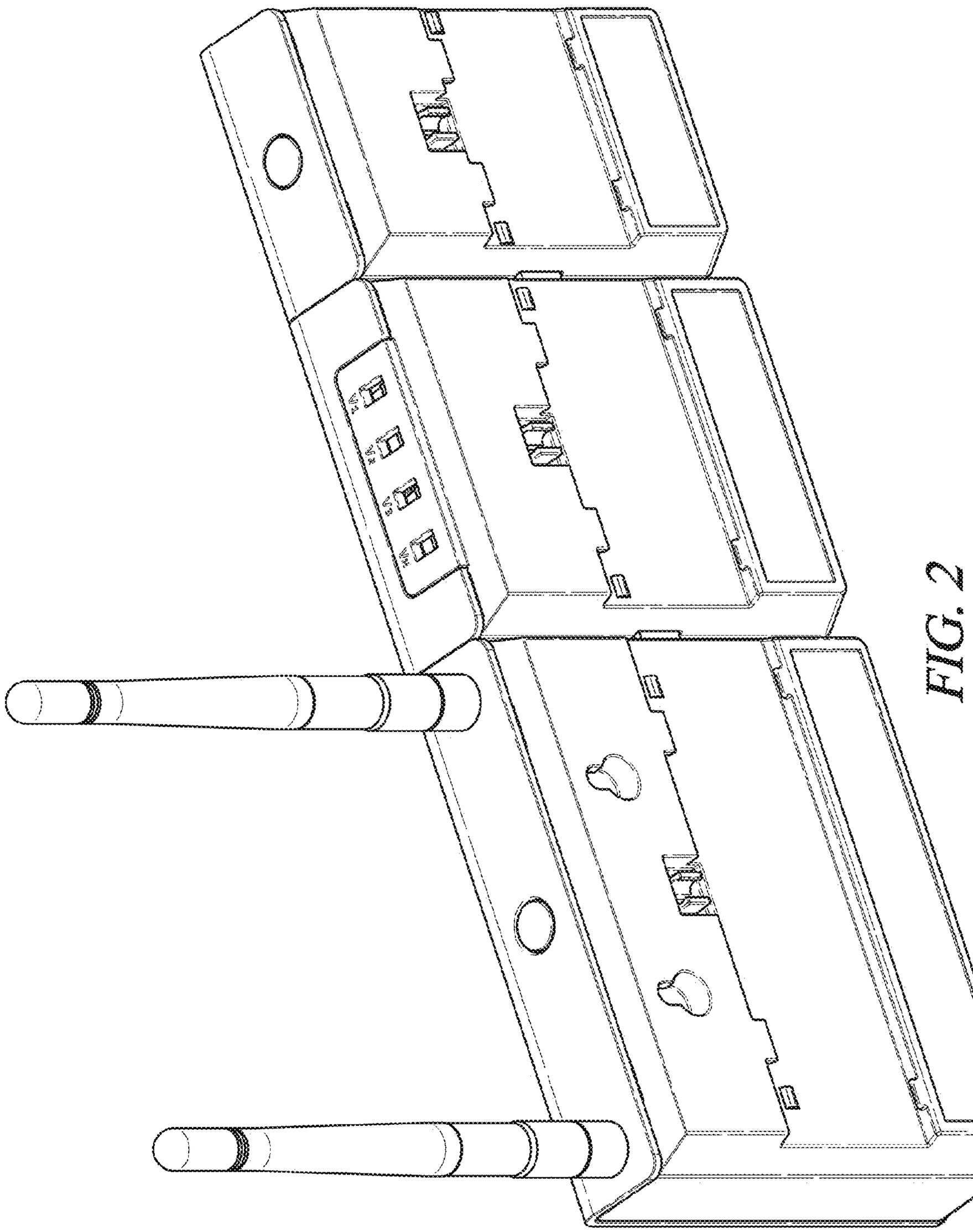
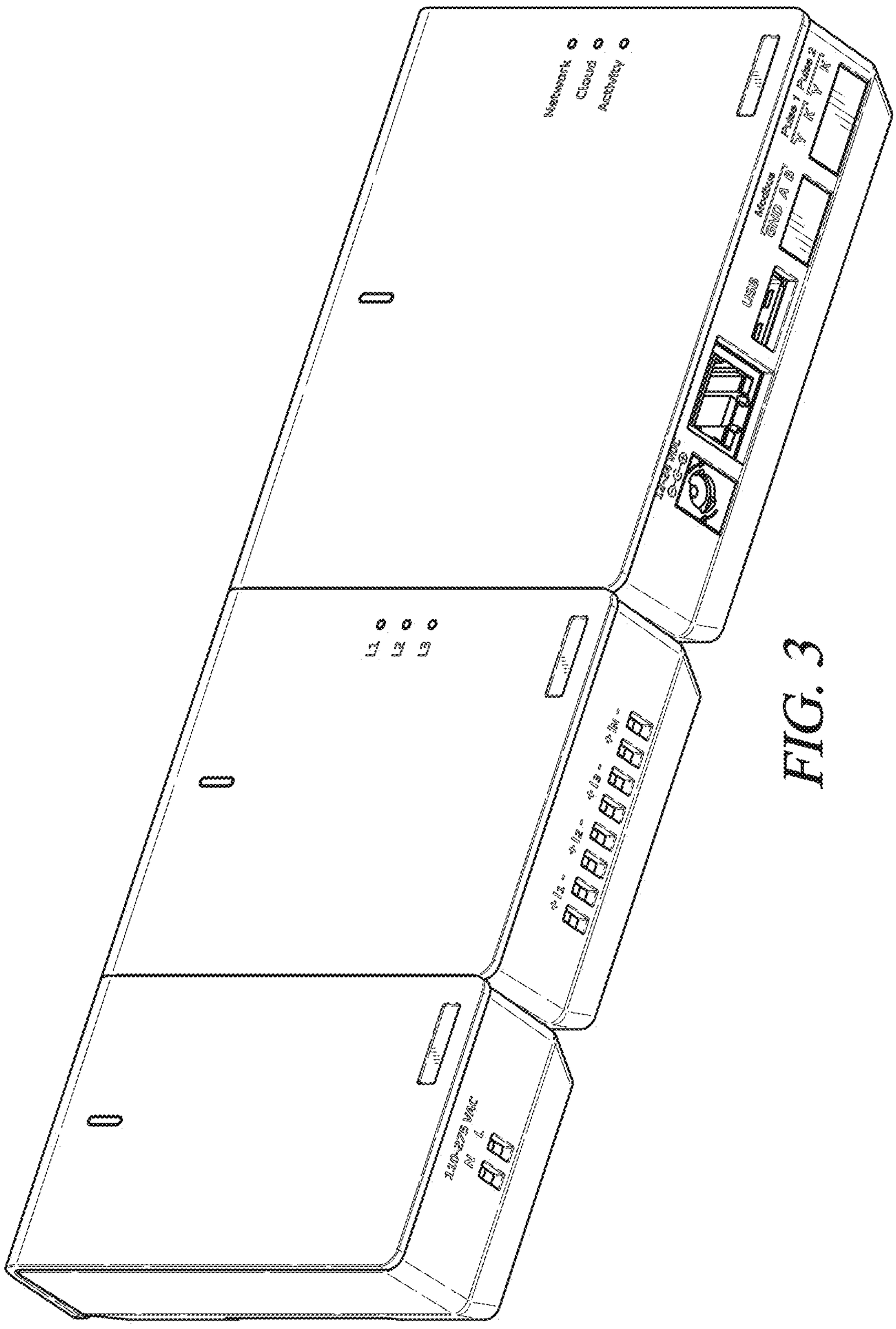


FIG. 2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Cloud
Activity
Pulse 1
Pulse 2
Modbus
GND A B
USB
110-275 VAC
N
L

FIG. 3

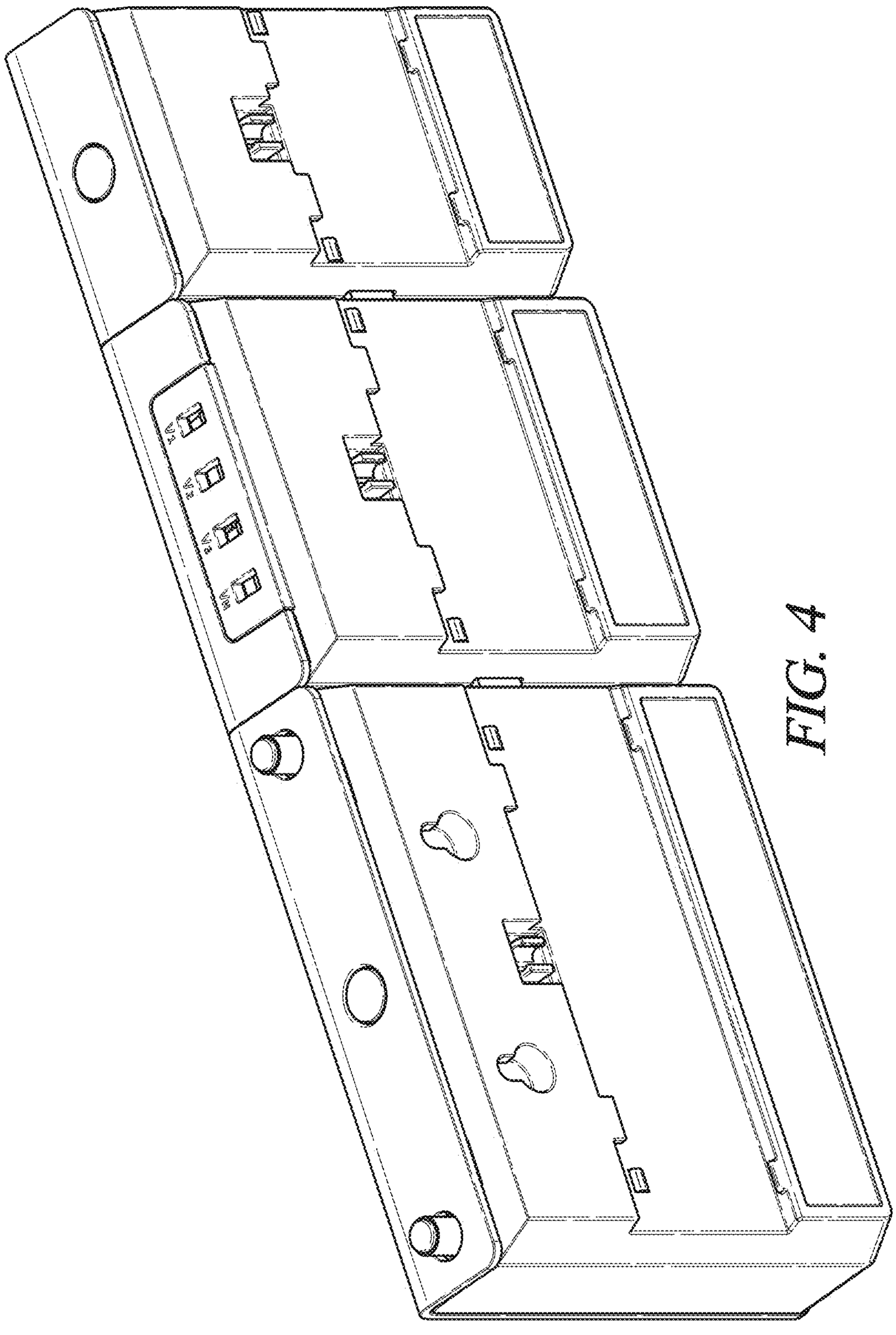


FIG. 4

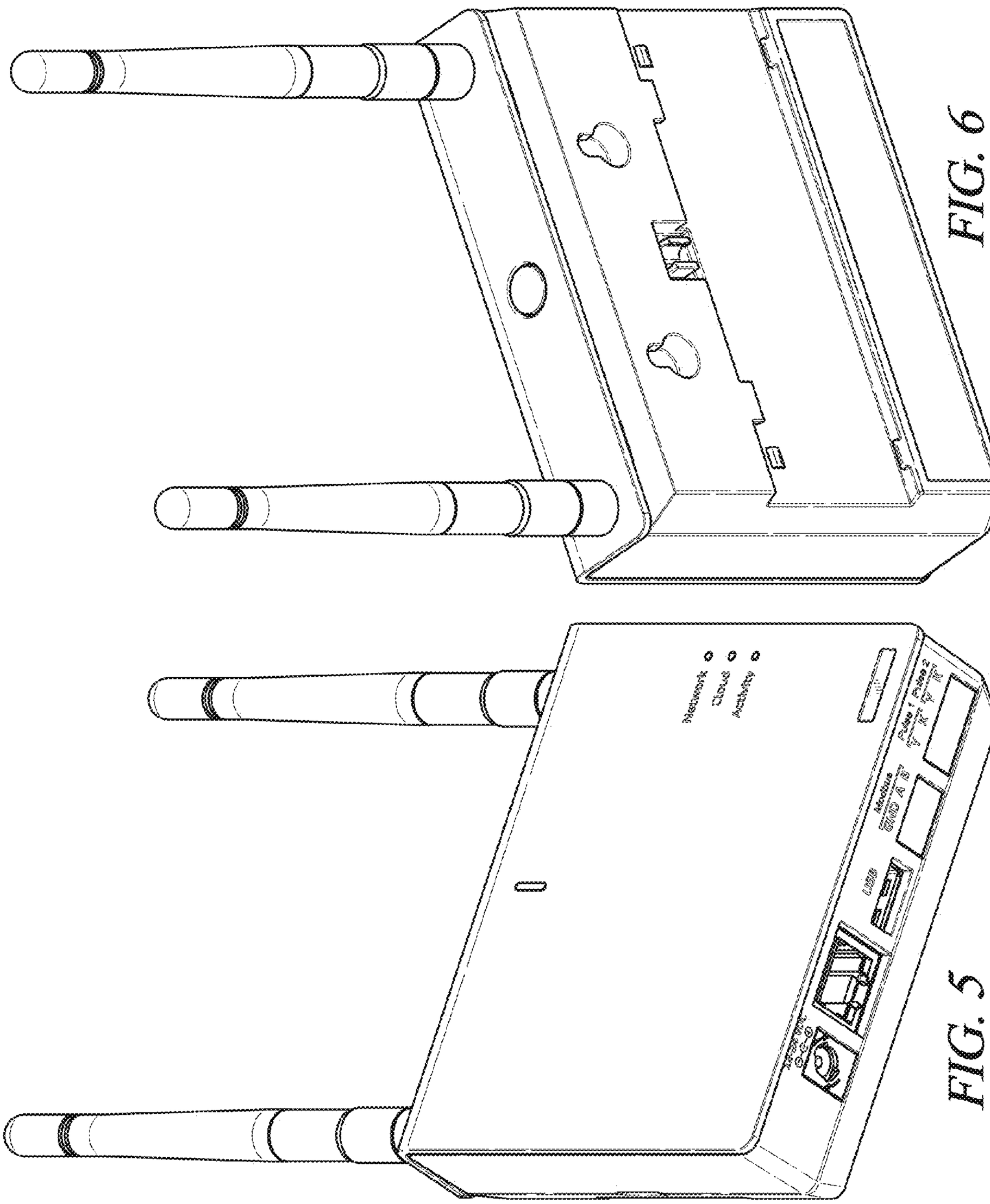


FIG. 5

FIG. 6

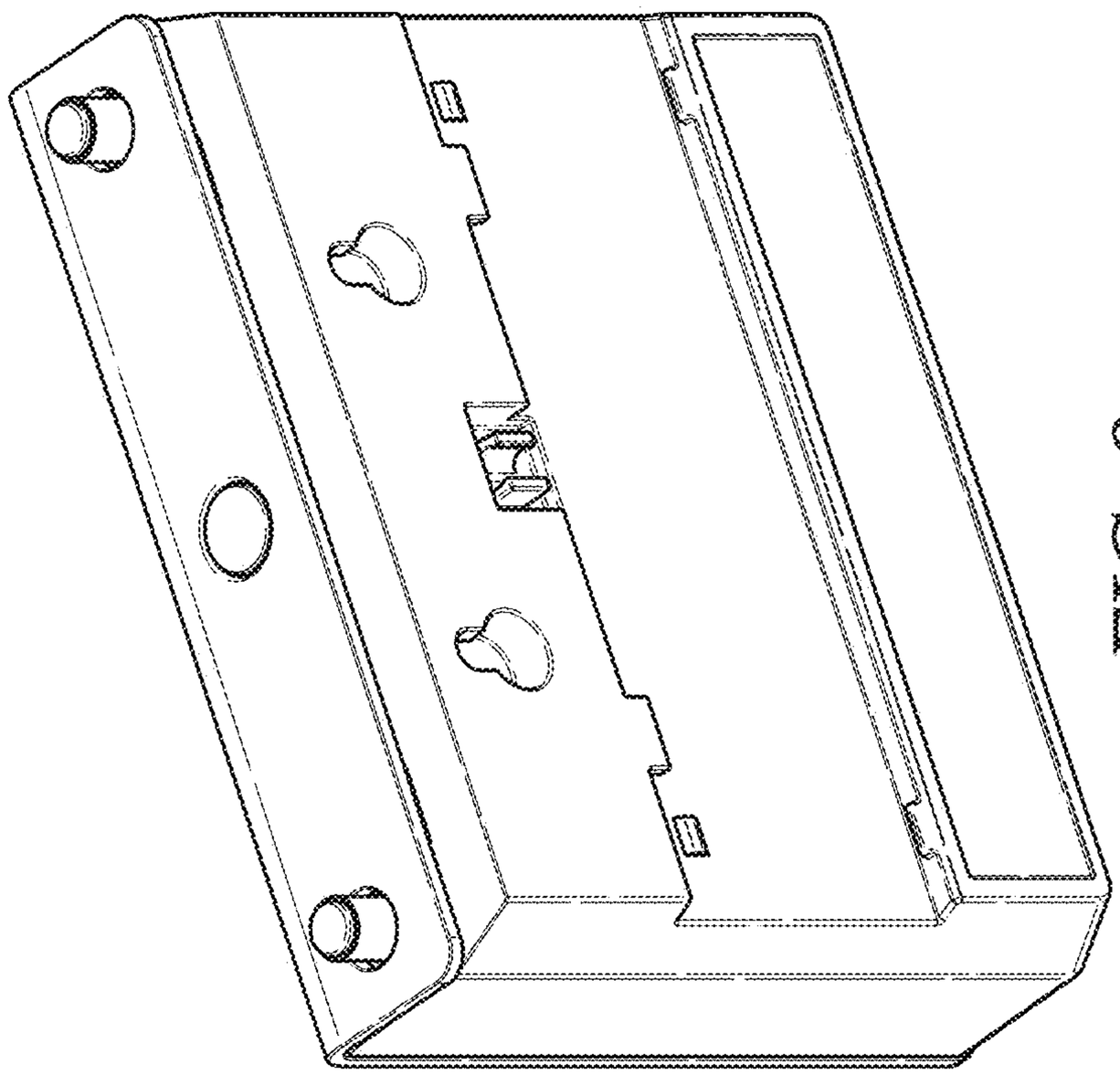
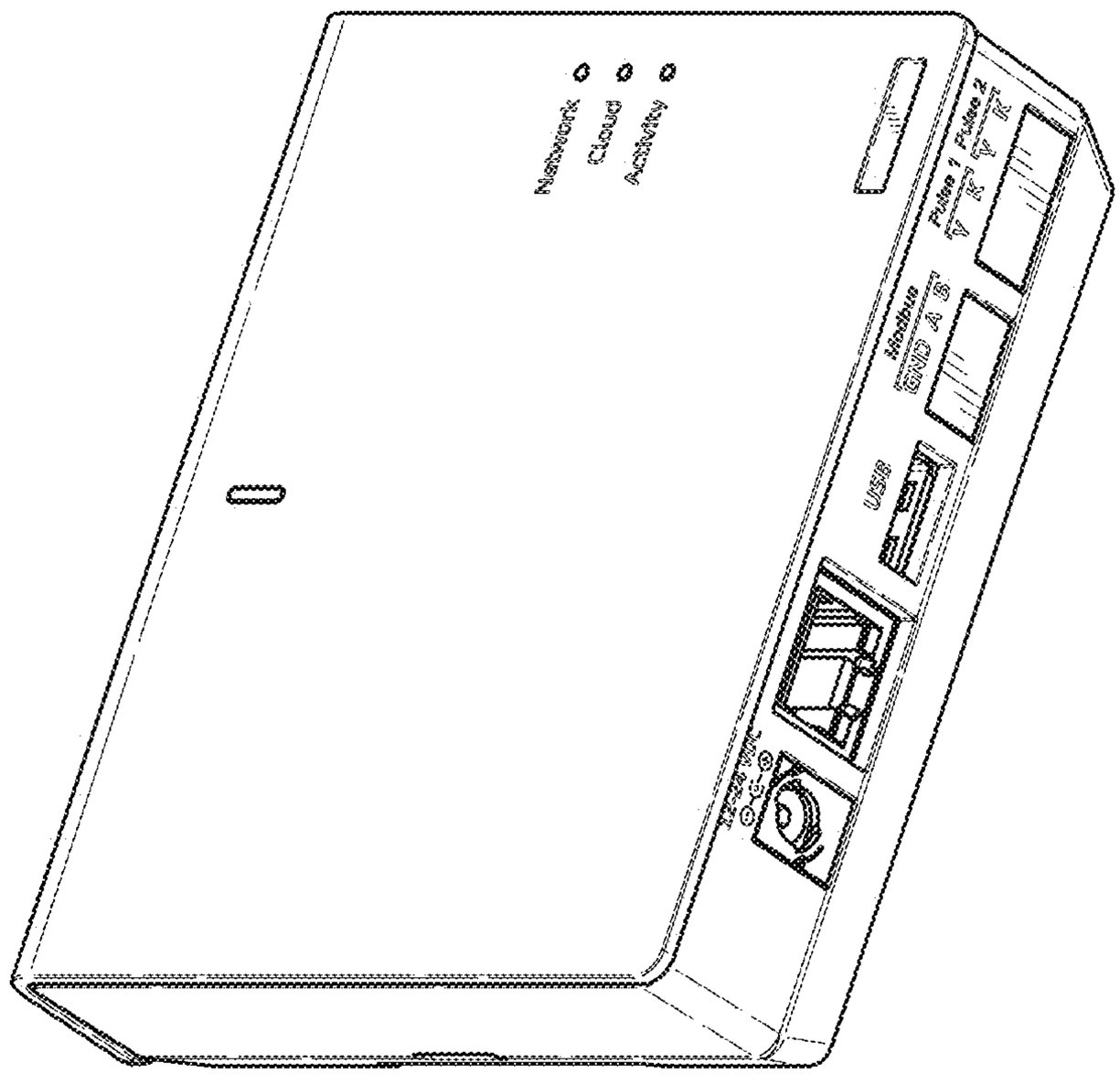


FIG. 8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Cloud
Activity
Pulse 1
Pulse 2
Modbus
GND A B
USB
Type-C

FIG. 7

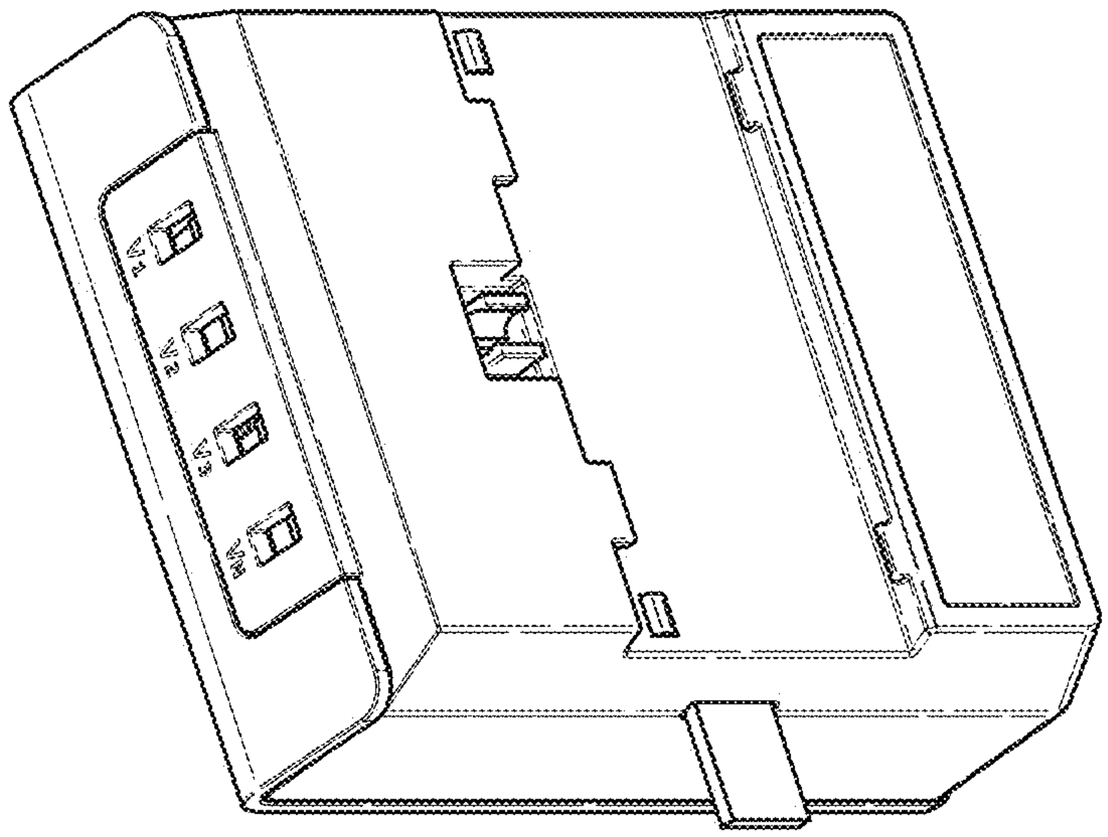

FIG. 10

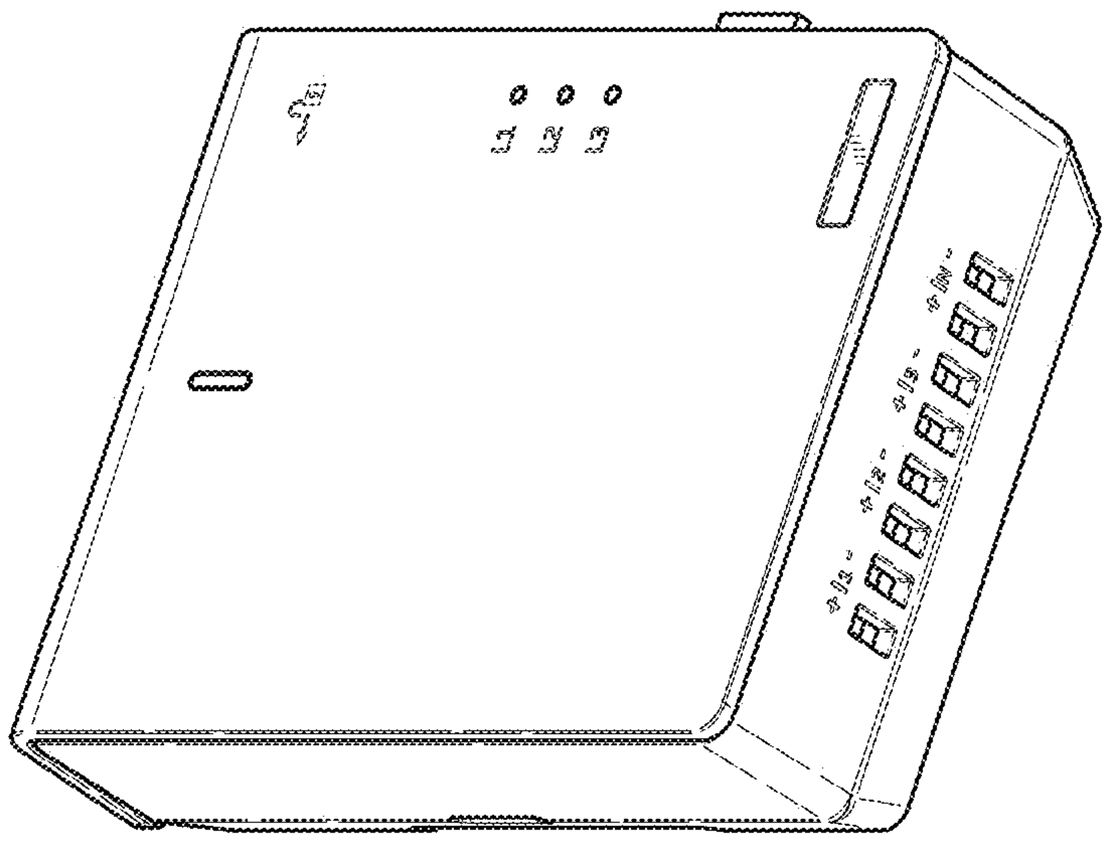

FIG. 9

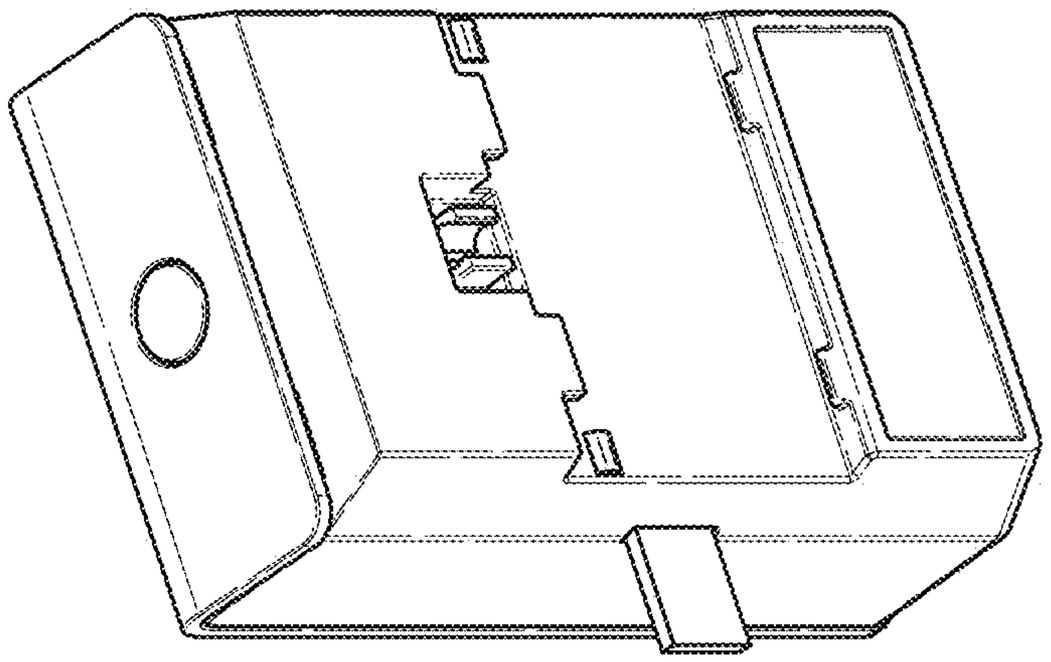

FIG. 12

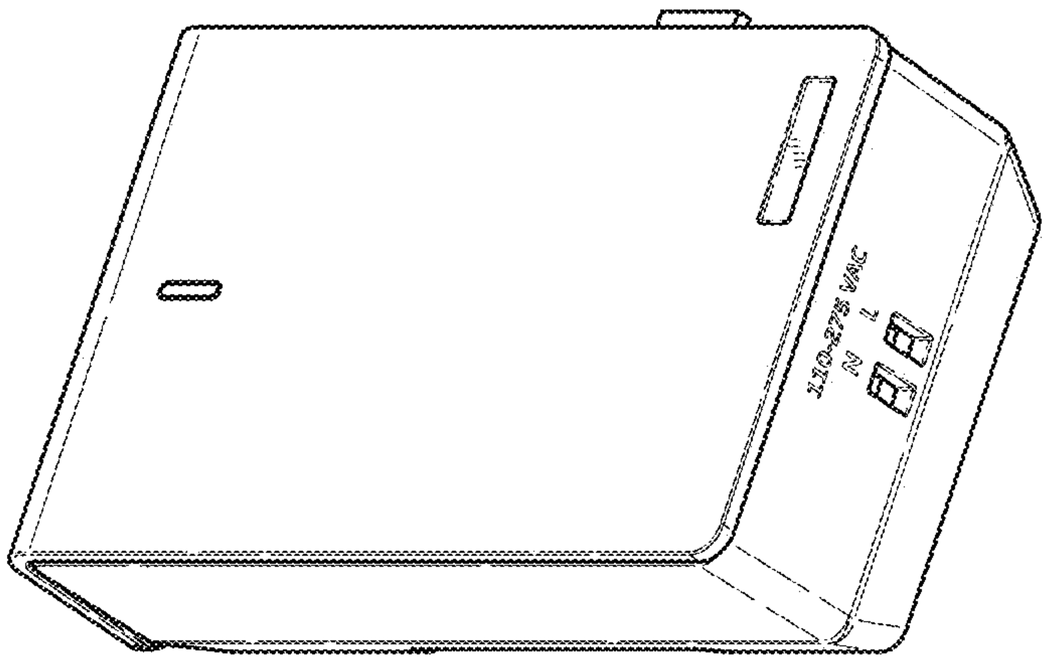

FIG. 11

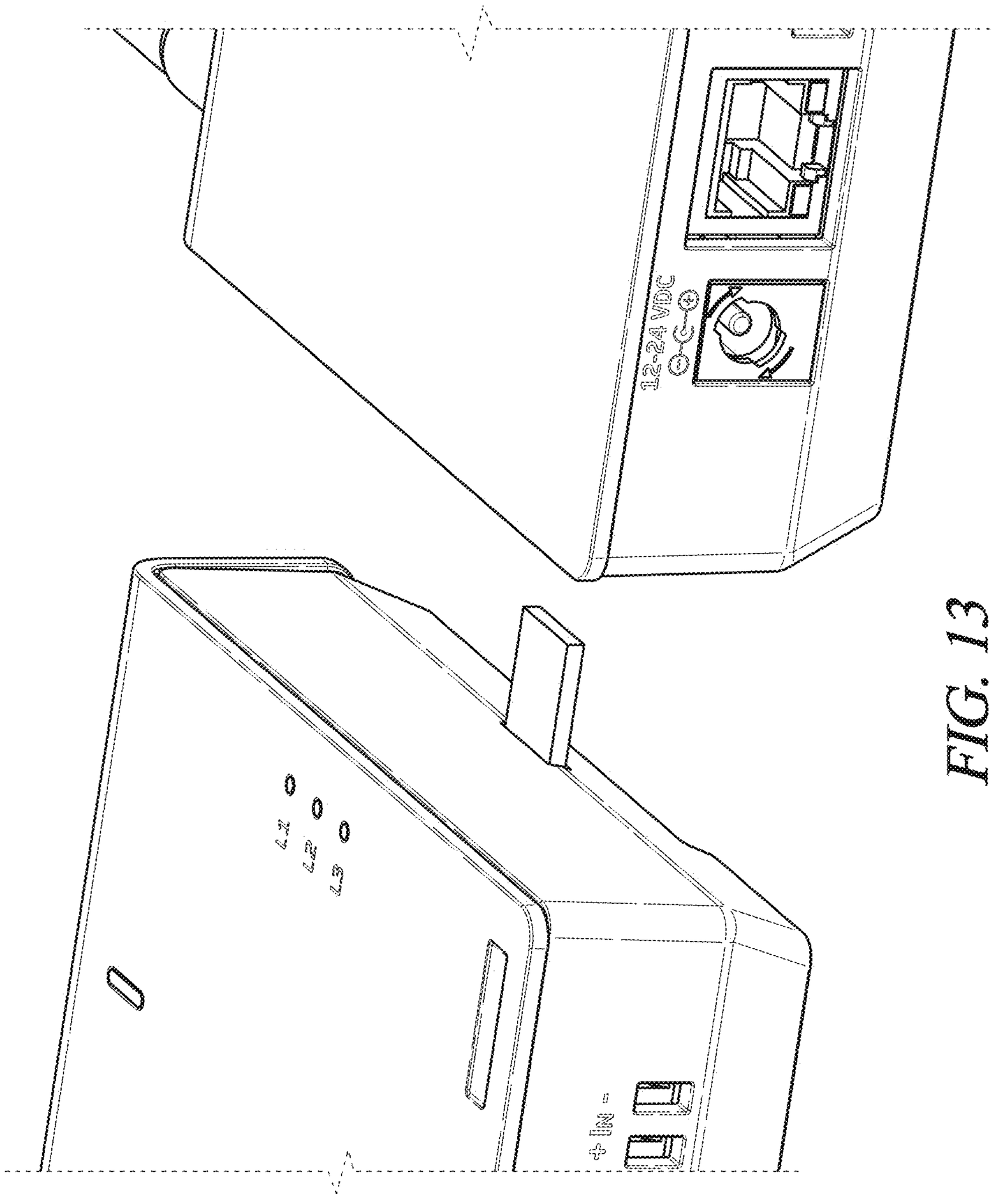

FIG. 13

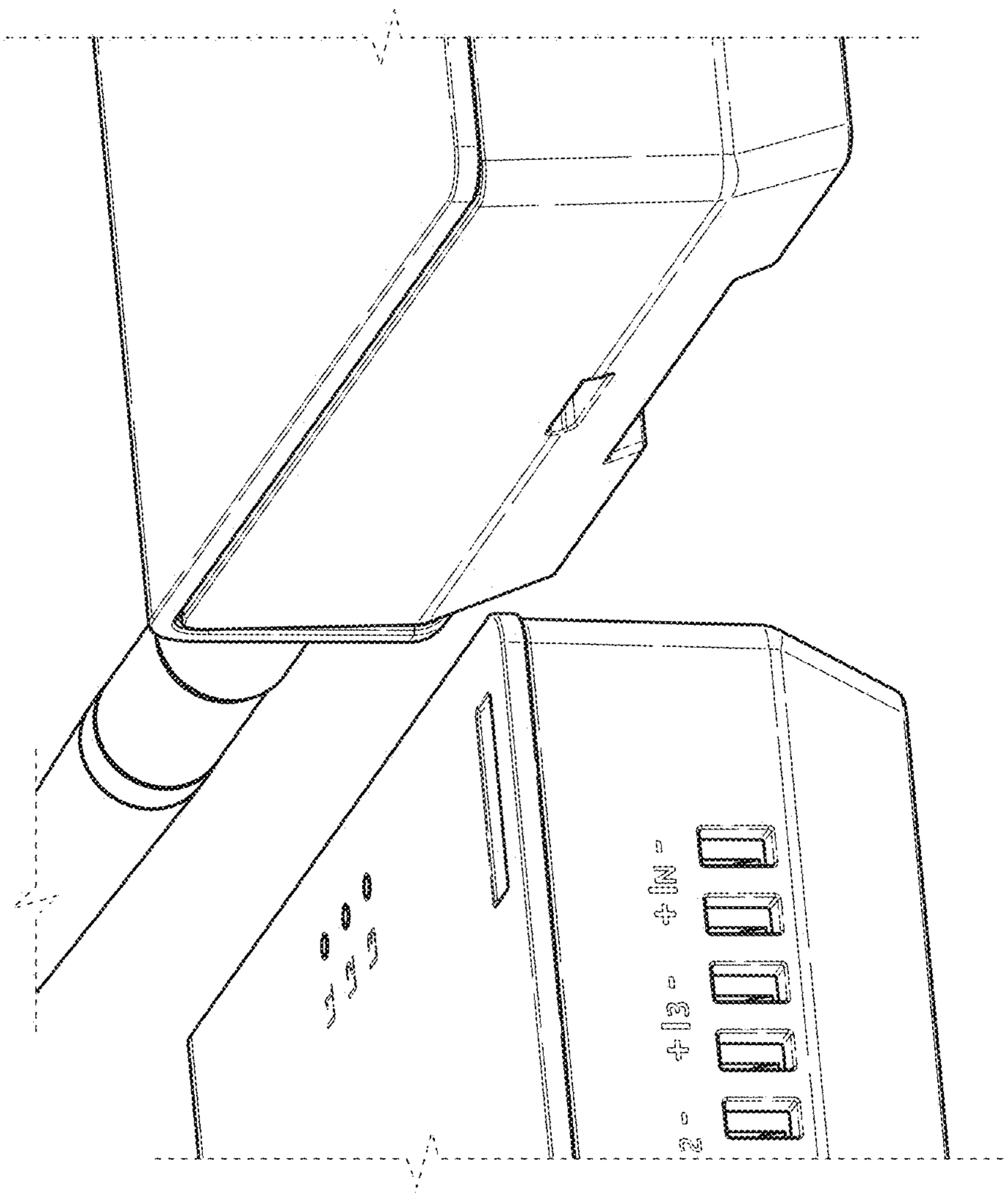

FIG. 14

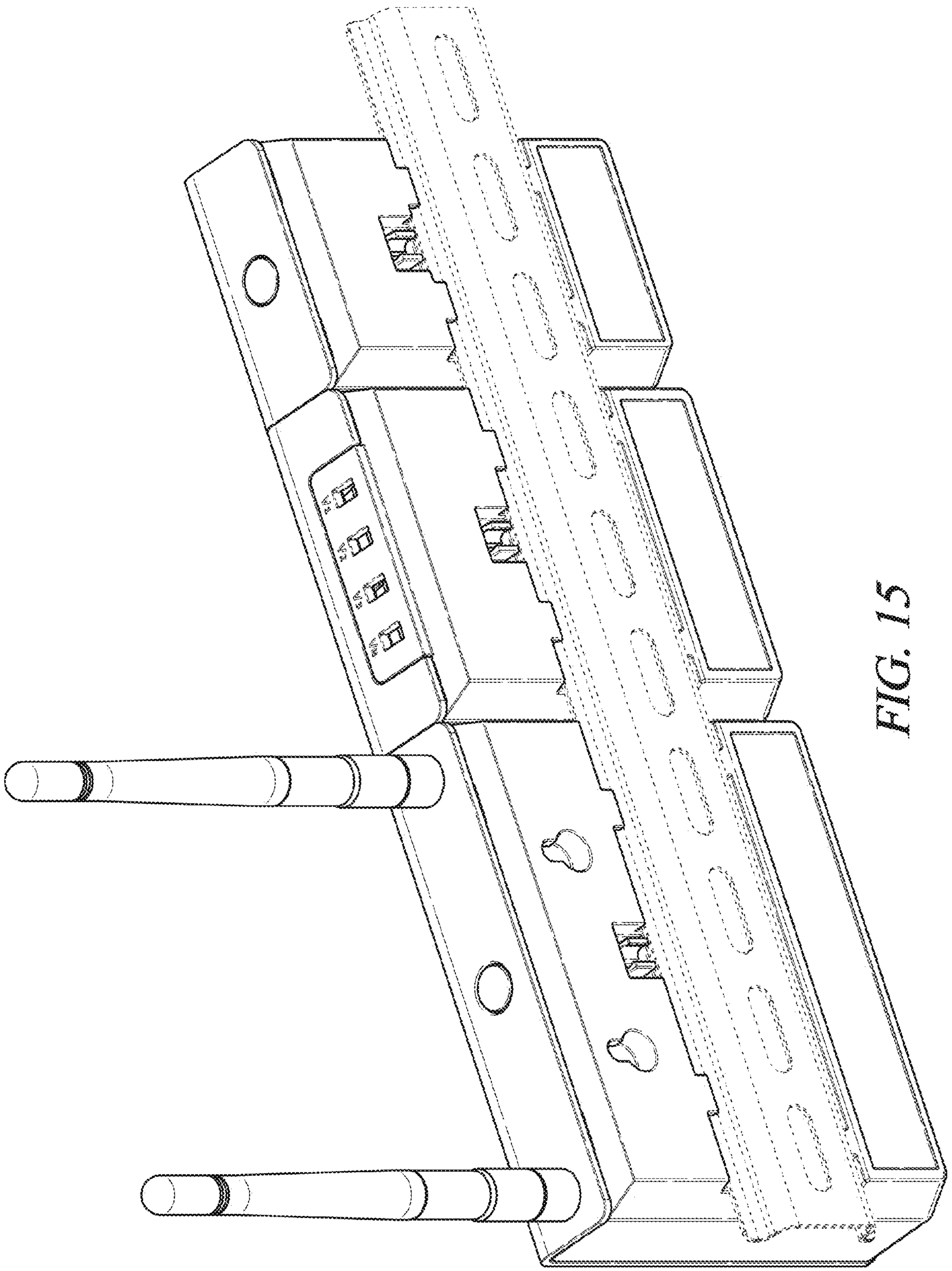

FIG. 15

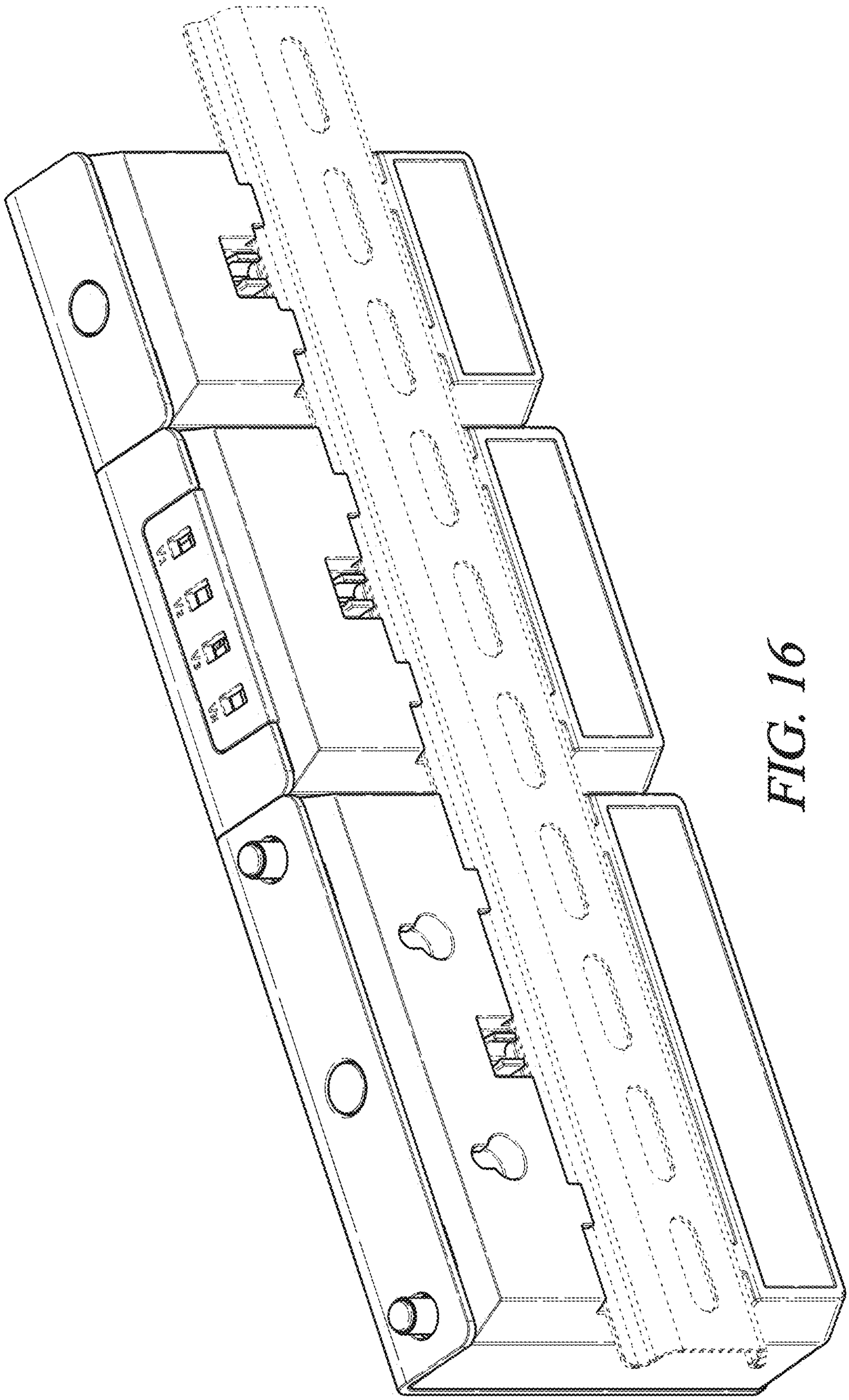

FIG. 16

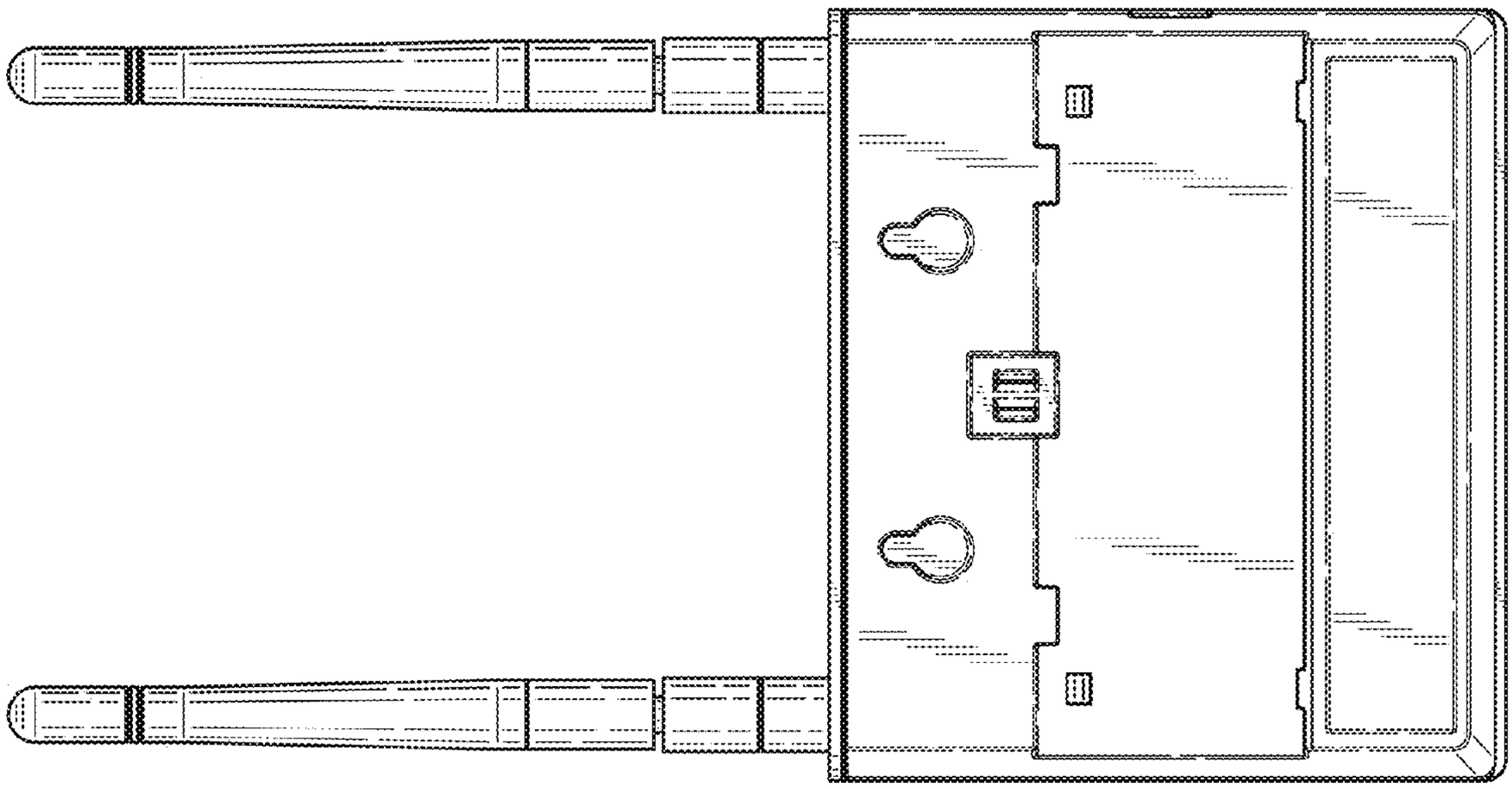

FIG. 18

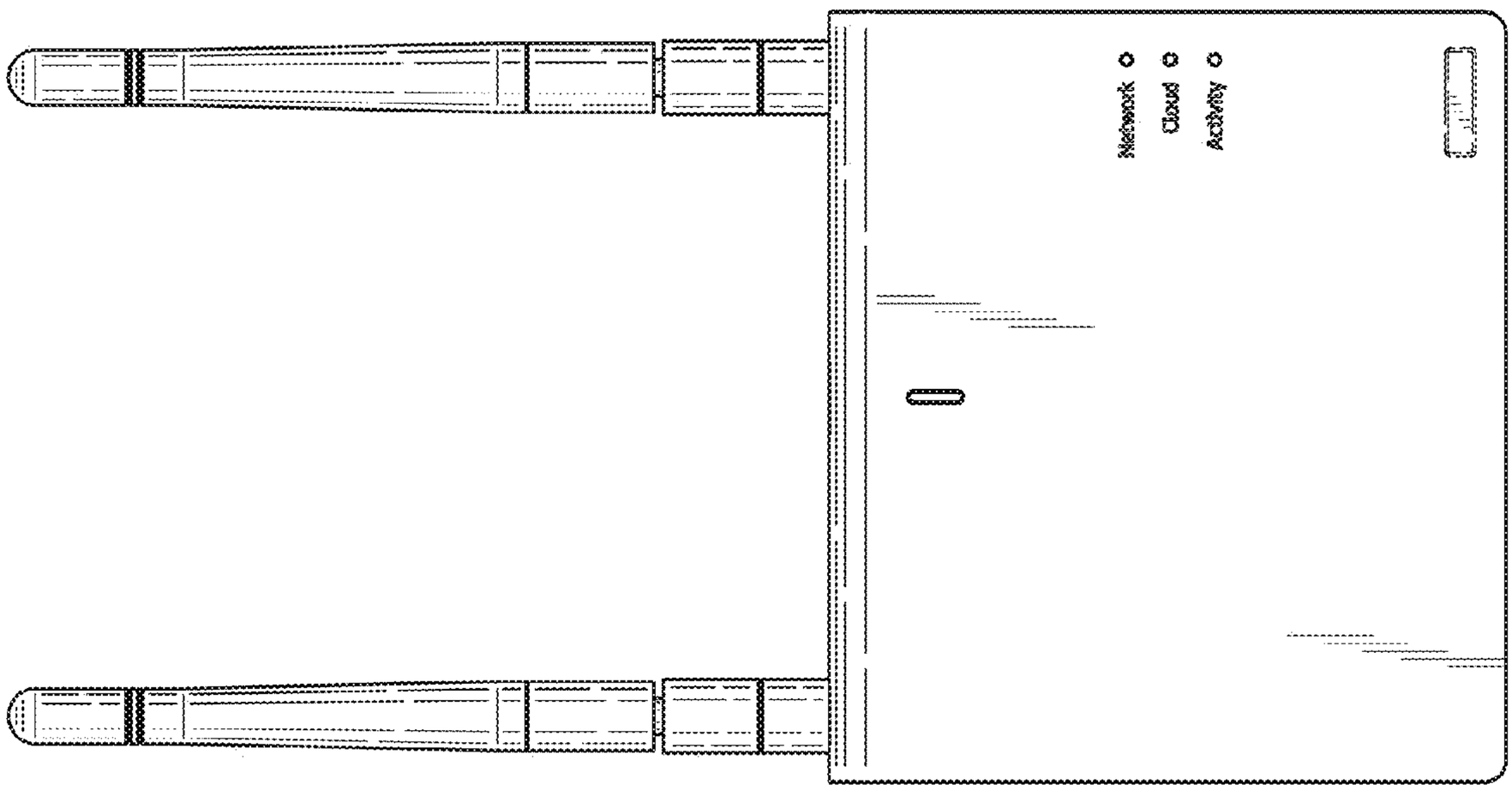

FIG. 17