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(12) **United States Design Patent** (10) **Patent No.:** **US D991,162 S**
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(54) **BATTERY CHARGER**

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(52) **U.S. Cl.**
USPC **D13/107**

(58) **Field of Classification Search**

USPC D13/102–110, 118, 119, 153, 154, 184, D13/199, 120

CPC Y02E 60/10; Y02E 60/12; Y02E 60/122; Y02E 60/124; Y02E 60/50; H01M 2/02; H01M 2/022; H01M 2/0202; H01M 2/0207; H01M 2/0212; H01M 2/1061; H01M 2/1022; H01M 2/1055; H01M 2/1066; H01M 2/105; H01M 2/20; H01M 2/202; H01M 2/204; H01M 2/206; H01M 10/44; H01M 10/46; H01M 10/465; H01M 10/482; H01M 10/4257; H01M 10/0436; H01M 10/48; H01M 2200/30; H01M 2250/30; H01M 2250/40; H02J 7/00; H02J 7/0003; H02J 7/0011; H02J 7/0013; H02J 7/0054; H02J 7/0055; H02J 7/0057; H02J 7/0034; H02J 7/1423; Y02T 10/7005; Y02T 10/705; Y02T 10/7088; B60L 11/182

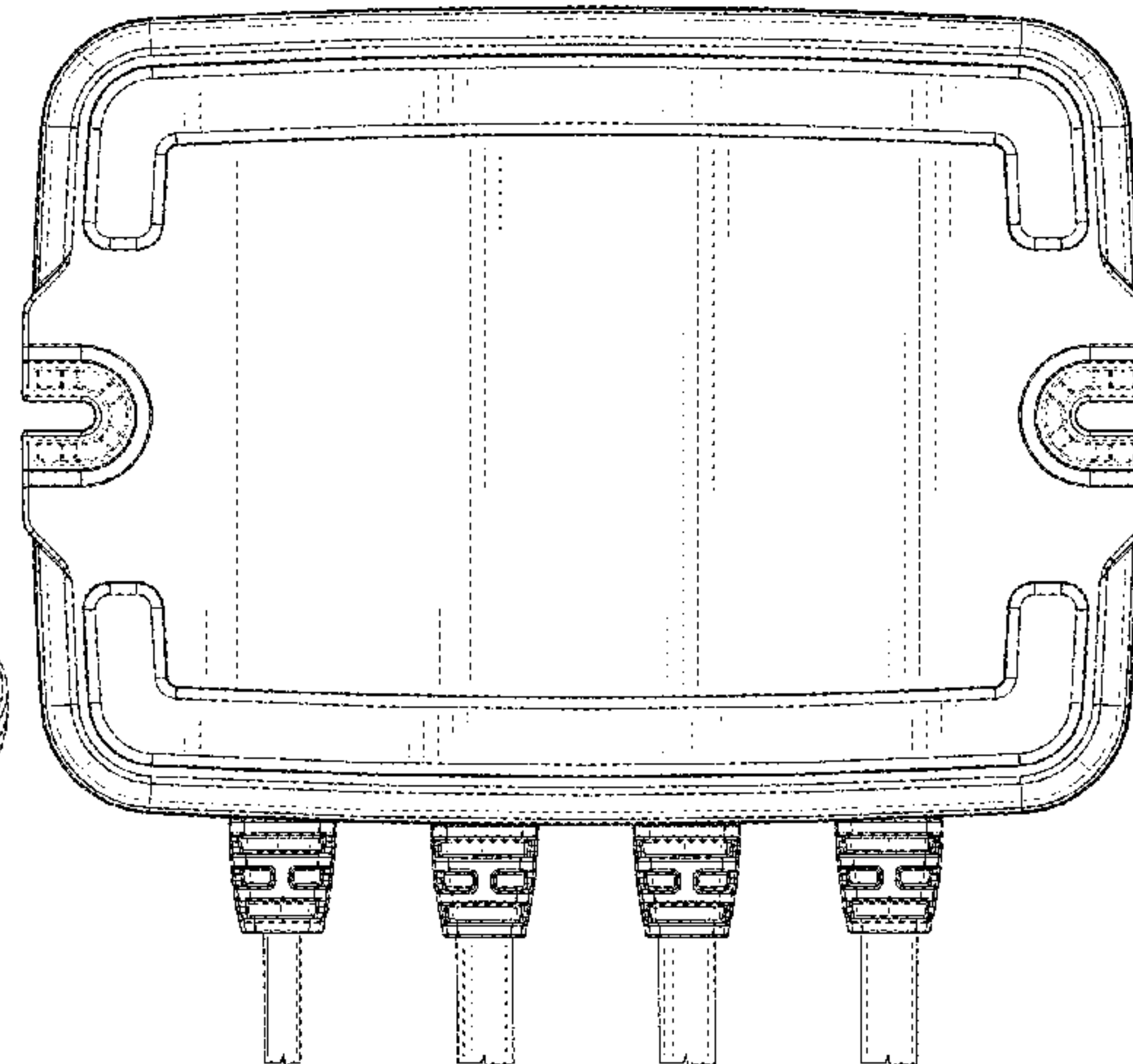
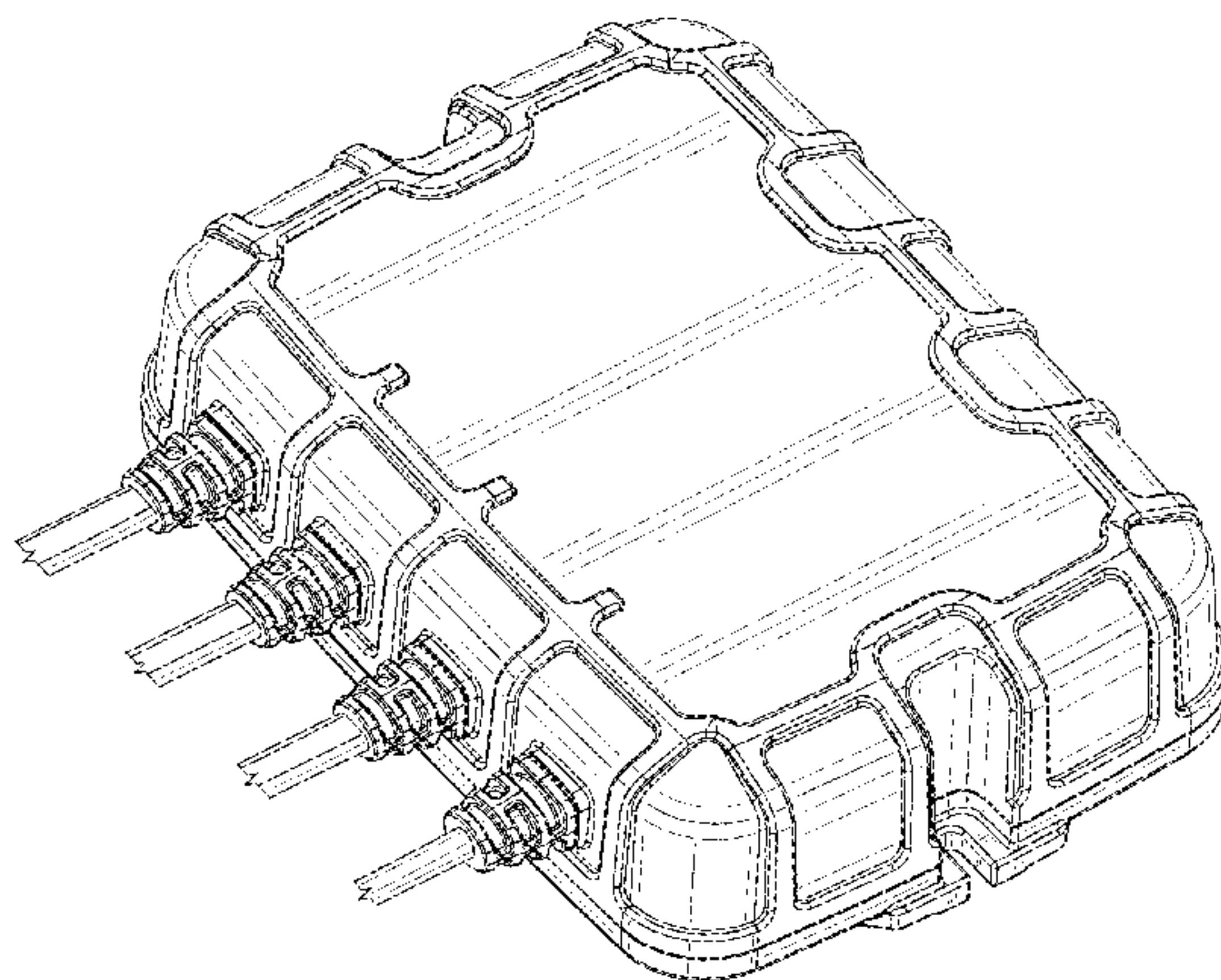
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,057,313 A 11/1977 Polizzano
D307,579 S 5/1990 Layne
5,019,767 A 5/1991 Shirai et al.

D336,281 S	6/1993	Nakamura	
5,585,992 A	12/1996	Wu	
5,795,182 A	8/1998	Jacob	
5,820,407 A	10/1998	Morse	
5,833,493 A	11/1998	Hung	
5,847,541 A	12/1998	Hahn	
5,985,481 A	11/1999	Champagne	
6,002,235 A	12/1999	Clore	
6,386,907 B1	5/2002	Ruffa	
6,471,540 B1	10/2002	Fernandez	
D465,764 S	11/2002	Salazar	
D483,721 S	12/2003	Kim	
D485,810 S	1/2004	Fiocchi	
D511,743 S	11/2005	Hriscu	
D524,731 S	7/2006	Navarrez	
D570,772 S	6/2008	Mahaffey	
D575,225 S	8/2008	Ahlgren	
D580,853 S	11/2008	Ahlgren	
D597,029 S	7/2009	Li	
D624,014 S	9/2010	Lingott	
D634,313 S	3/2011	Fitzpatrick et al.	
D654,854 S	2/2012	Inskeep	
D654,855 S	2/2012	Inskeep	
D654,856 S	2/2012	Inskeep	
D654,867 S	2/2012	Huppe	
D661,249 S	6/2012	Smith	
D664,501 S	7/2012	Inskeep	
D681,550 S	5/2013	Corbin	
D684,116 S	6/2013	Inskeep	
D687,768 S	8/2013	Minamikawa	
D694,176 S	11/2013	Buetow et al.	
D694,180 S	* 11/2013	Inskeep	D13/107
D701,490 S	3/2014	Inskeep	
D711,821 S	8/2014	Wang	
D731,422 S	6/2015	Aromin	
D738,825 S	9/2015	Nook	
D742,822 S	11/2015	Ju	
D744,942 S	12/2015	Bates	
D745,455 S	* 12/2015	Nook	D13/103
D746,770 S	* 1/2016	Nook	D13/103
D746,774 S	1/2016	Nook	
D755,121 S	5/2016	Barajas	
D757,650 S	5/2016	Faust	
D758,302 S	6/2016	Walker	
D758,960 S	6/2016	Johansson	
D760,164 S	6/2016	Aida	
D769,188 S	10/2016	Miller	
D775,587 S	1/2017	Barajas	
D785,563 S	5/2017	Yang	
D786,192 S	5/2017	Liu	
D786,790 S	5/2017	Miller	
D787,443 S	5/2017	Chiang	
D793,955 S	* 8/2017	Yang	D13/107



US D991,162 S

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D797,044 S	9/2017	Miller	
D803,151 S	11/2017	Zhou	
D808,653 S	1/2018	Rayeski	
D809,454 S	2/2018	Zhou	
D813,162 S	3/2018	Krantz	
D814,406 S	* 4/2018	Yang	D13/107
D816,024 S	* 4/2018	Yang	D13/107
D821,306 S	6/2018	Liu	
D828,295 S	9/2018	Li	
D829,647 S	10/2018	Yang	
D832,207 S	10/2018	Gorin	
D832,781 S	* 11/2018	Nook	D13/107
D836,064 S	12/2018	Liu	
D836,067 S	12/2018	Tschopp	
D836,068 S	* 12/2018	Nook	D13/120
D838,669 S	1/2019	Miller	
D840,927 S	2/2019	Inskeep	
D842,238 S	3/2019	Qiu	
D845,230 S	* 4/2019	Nook	D13/107
D845,892 S	4/2019	Shum	
D860,177 S	9/2019	Robins	
D861,597 S	10/2019	Gan	
D866,457 S	11/2019	Liu	
D866,463 S	11/2019	Hui	
D867,985 S	* 11/2019	Nook	D13/107
D870,035 S	12/2019	Yang	
D871,322 S	* 12/2019	Nook	D13/107
D872,011 S	1/2020	Rao	
D872,012 S	1/2020	Rao	
D881,813 S	* 4/2020	Nook	D13/120
D883,925 S	5/2020	Yoon	
D884,605 S	5/2020	Sun	
D884,608 S	5/2020	Gan	
D885,329 S	5/2020	Gan	
D892,726 S	8/2020	Wang	
D892,727 S	8/2020	Gan	
D896,749 S	9/2020	Wu	
D902,851 S	11/2020	Wu	
D903,588 S	12/2020	Shoemake	
D911,286 S	2/2021	Esses	
D911,936 S	3/2021	Miller	
D911,949 S	3/2021	Sun	
D911,950 S	3/2021	Zhang	
D913,917 S	3/2021	Finocchiario	
D913,931 S	* 3/2021	Nook	D13/120
D916,012 S	4/2021	Finocchiario	
D916,015 S	4/2021	Li	
D918,830 S	5/2021	Chen	
D919,572 S	5/2021	Lei	
D922,945 S	6/2021	Sun	
D923,564 S	6/2021	Liao	
D924,132 S	7/2021	Turksu	
D926,123 S	7/2021	Zhu	
D926,124 S	7/2021	Zhu	
D930,578 S	9/2021	Zheng	
D934,793 S	11/2021	Shu	
D937,197 S	11/2021	Hao	
D937,762 S	12/2021	Chung	
D937,763 S	12/2021	Wang	
D939,435 S	12/2021	Feng	
D942,931 S	2/2022	Fang	
D943,516 S	2/2022	Wang	
D944,191 S	* 2/2022	Wang	D13/107
D960,090 S	8/2022	Underhill et al.	
D967,013 S	* 10/2022	Underhill	D13/107
D975,004 S	* 1/2023	Peng	D13/107
2006/0201558 A1	9/2006	Marty et al.	
2008/0213653 A1	9/2008	Marukawa et al.	
2009/0237031 A1	9/2009	McSweyn	
2011/0116861 A1	5/2011	Zhang et al.	
2011/0230081 A1	9/2011	Rinehardt	
2013/0164600 A1	6/2013	Roskamp et al.	
2014/0184898 A1	7/2014	Overliese et al.	
2015/0054336 A1	2/2015	Xinfang	
2015/0099151 A1	4/2015	Lavender	
2016/0072323 A1	3/2016	Miller	
2016/0359352 A1	12/2016	Chiu	
2017/0012448 A1	1/2017	Miller	
2017/0346140 A1	11/2017	Koebler	

2018/0269703 A1	9/2018	Nook	
2018/0342891 A1	11/2018	Nook	
2019/0222042 A1 *	7/2019	Nook	H02J 7/0034
2020/0227937 A1	7/2020	Lu	
2021/0075235 A1	3/2021	Nook	
2021/0094428 A1 *	4/2021	Nook	B60L 3/0046
2021/0296913 A1 *	9/2021	Nook	H02J 7/0045

OTHER PUBLICATIONS

U.S. Trademark Application No. 86/030,590, filed Aug. 6, 2013, including drawing and sample.

“Amazon Basics Battery Charger” Found online 03/08/022 at amazon.com. Reference dated Jan. 18, 2020. Retrieved from https://www.amazon.com/AmazonBasics-Battery-Charger-Volt-800mA/dp/B07TTNV9LZ/ref=psdc_15707061_t1_B00DJ5KEEA?th=1 (Year: 2020).

“Battery Tender Plus Battery Charger” Found online Mar. 8, 2022 at amazon.com. Reference dated Jan. 20, 2007. Retrieved from https://www.amazon.com/dp/B00DJ5KEEA/ref=sspa_dk_detail_8 (Year: 2007).

“BEATIT Jump Starter” Found online May 20, 2021 at amazon.com. Reference dated Dec. 24, 2018. Retrieved from https://www.amazon.com/BEATIT-21000mAh-Portable-Inverter-BP101/dp/B07M9M86JM/ref=psdc_318336011_t5_B084BWGWYH (Year: 2018).

“Durst Battery Charger” Found online Apr. 4, 2022 at durst.com.au. Reference dated Mar. 9, 2010. Retrieved from https://tineye.com/search/1ec8ff6116e1710356e88efedb9dfccdcdbde769?sort=crawl_date&order=asc&page=1 (Year: 2010).

“MOTOPOWER Battery Charger” Found online Mar. 8, 2022 at amazon.com. Reference dated Dec. 2, 2017. Retrieved from https://www.amazon.com/MOTORPOWER-MP00205A-Automatic-Battery-Maintainer/dp/B06XWDZ2KQ/ref=pd_day0fbt_img_2/133-1437029-9147658 (Year: 2017).

“NOCO Boost Max GB251” Found online Mar. 16, 2022 at amazon.com. Reference dated Jan. 27, 2021. Retrieved from <https://www.amazon.com/NOCO-GB251-UltrSAFE-Commercial-32-Liters/dp/B08V73BZ42> (Year: 2021).

“NOCO Boost GB70 Jump Starter” Found online Mar. 8, 2022 at amazon.com. Reference dated Jan. 1, 2010. Retrieved from https://www.amazon.com/dp/B016UG6PWE?ref=emc_p_m_5_1 (Year: 2010).

“NOCO Genius G750 Battery Charger” Found online Mar. 8, 2022 at youtube.com. Reference dated Jul. 10, 2015. Retrieved from <https://www.youtube.com/watch?v=LnBf30-5lyU> (Year: 2015).

“NOCO Boost Pro GB150 Jump Starter” Found online Mar. 8, 2022 at amazon.com. Reference dated Sep. 1, 2015. Retrieved from https://www.amazon.com/dp/B015TKSSB8?ref=emc_p_m_5_1 (Year: 2015).

“NOCO GBX55 Jump Starter” Found online Mar. 18, 2022 at amazon.com. Reference dated Feb. 22, 2021. Retrieved from <https://www.amazon.com.au/NOCO-GBX55-UltrSAFE-Powerbank-7-5-Liter/dp/B08WZKRHZZ> (Year: 2021).

“NOCO Boost XL GB50 Jump Starter” Found online Mar. 17, 2022 at amazon.com. Reference dated Jan. 16, 2019. Retrieved from <https://www.amazon.com/NOCO-GB50-UltrSAFE-Lithium-Gasoline/dp/B07MVY7K43> (Year: 2019).

“NOCO Genius 2x4 Charger” Found online Apr. 1, 2022 at amazon.com. Reference dated Aug. 15, 2020. Retrieved from <https://www.amazon.com/dp/B08FYS6CL8> (Year: 2020).

“NOCO Genius 2x2 Charger” Found online Mar. 8, 2022 at amazon.com. Reference dated Jul. 31, 2020. Retrieved from https://www.amazon.com/dp/B08F37P7H3?ref=emc_p_m_5_1 (Year: 2020).

“NOCO Genius 10 Charger” Found online Mar. 8, 2022 at amazon.com. Reference dated Nov. 18, 2019. Retrieved from https://www.amazon.com.au/NOCO-GENIUS10-Fully-Automatic-Temperature-Compensation/dp/B07W3QT226/ref=psdc_15707061_t2_B07W8KJH44 (Year: 2019).

“NOCO Genius 5 Smart Charger” Found online Mar. 8, 2022 at amazon.com. Reference dated Nov. 18, 2019. Retrieved from https://www.amazon.com/dp/B07W8KJH44?ref=emc_p_m_5_1 (Year: 2019).

“NOCO Genius 1 Charger” Found online Mar. 8, 2022 at amazon.com. Reference dated Nov. 18, 2019. Retrieved from <https://www.amazon.com/NOCO-GENIUS1-Fully-Automatico-Temperature-Compensation/dp/B07W46BX31> (Year: 2019).

“REDARC Battery Charger” Found online Apr. 4, 2022 at allplant.net.au. Reference dated Nov. 4, 2016. Retrieved from https://tineye.com/search/90925c60e27321fa89cba970b4406754770123af?sort=crawl_date&order=asc&page=1 (Year: 2016).

“Renogy On-Board Battery Charger” Found online Apr. 4, 2022 at amazon.com. Reference dated Apr. 2, 2018. Retrieved from <https://www.amazon.com/Renogy-Battery-Batteries-Multi-stage-Charging/dp/B07Q5VYPCF?th=1> (Year: 2018).

“Victron Energy Charger” Found online Apr. 4, 2022 at amazon.com. Reference dated Sep. 27, 2020. Retrieved from https://www.amazon.com/Orion-Tr-12-30A-Isolated-Charger-Booster/dp/B07ZKG396Y/ref+pd_lpo_2?pd_rd_i=B07ZKG396Y&th=1 (Year: 2020).

“YONHAN Battery Charger” Found online Mar. 8, 2022 at amazon.com. Reference dated Jun. 9, 2020. Retrieved from https://www.amazon.com/Automotive-Battery-Automatic-Motorcycle-YONHAN/dp/B089VRXB2W/ref=psdc_1570761-t5-B09HGYMP7D (Year: 2020).

* cited by examiner

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(57)

CLAIM

The ornamental design for a battery charger, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a battery charger of our new design;

FIG. 2 is a bottom plan view thereof;

FIG. 3 is a top plan view thereof;

FIG. 4 is a left side elevational view thereof;

FIG. 5 is a right side elevational view thereof;

FIG. 6 is a front elevational view thereof; and,

FIG. 7 is a rear elevational view thereof.

The broken lines in the drawings are for the purpose of illustrating portions of the battery charger that form no part of the claimed design.

1 Claim, 7 Drawing Sheets

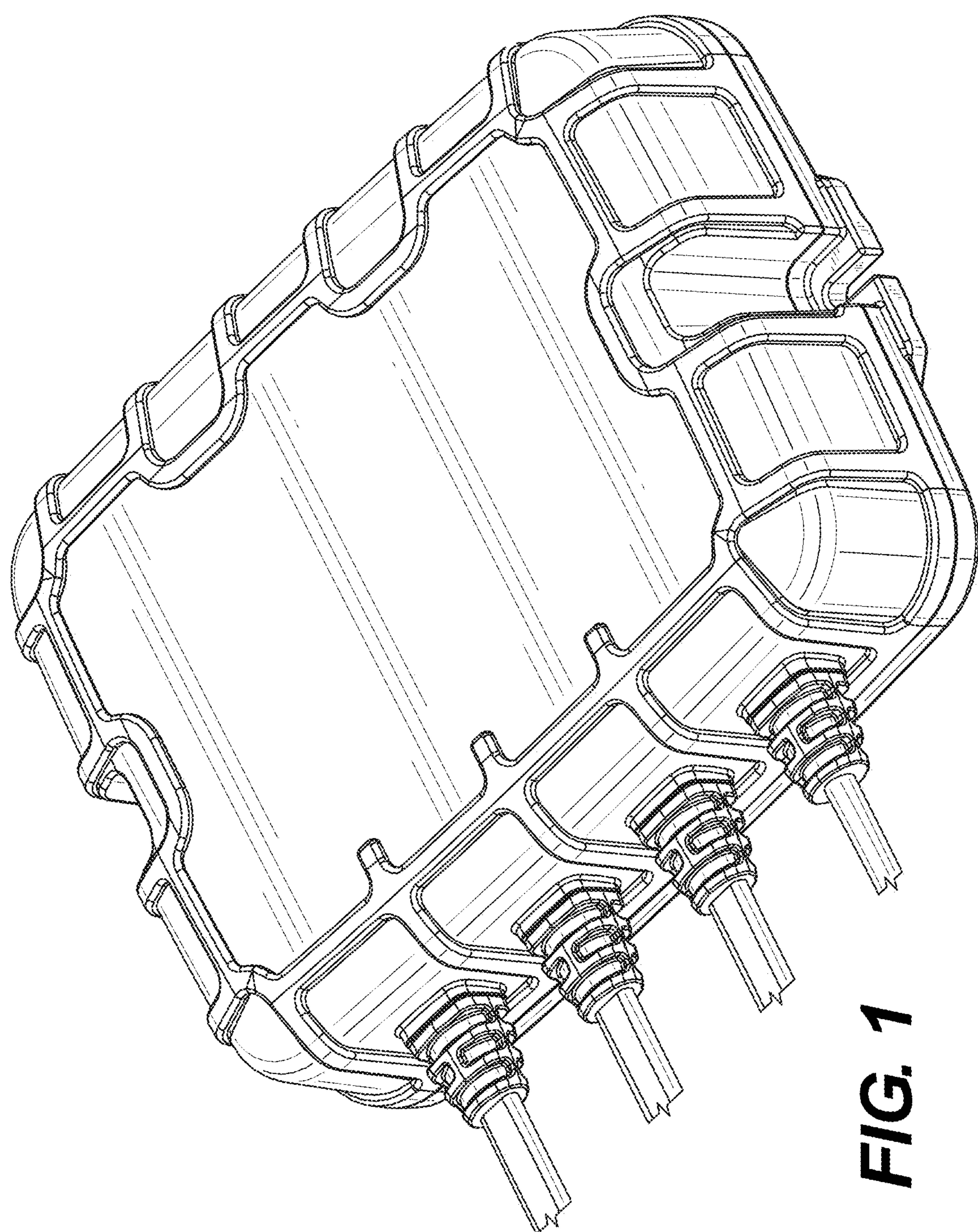


FIG. 1

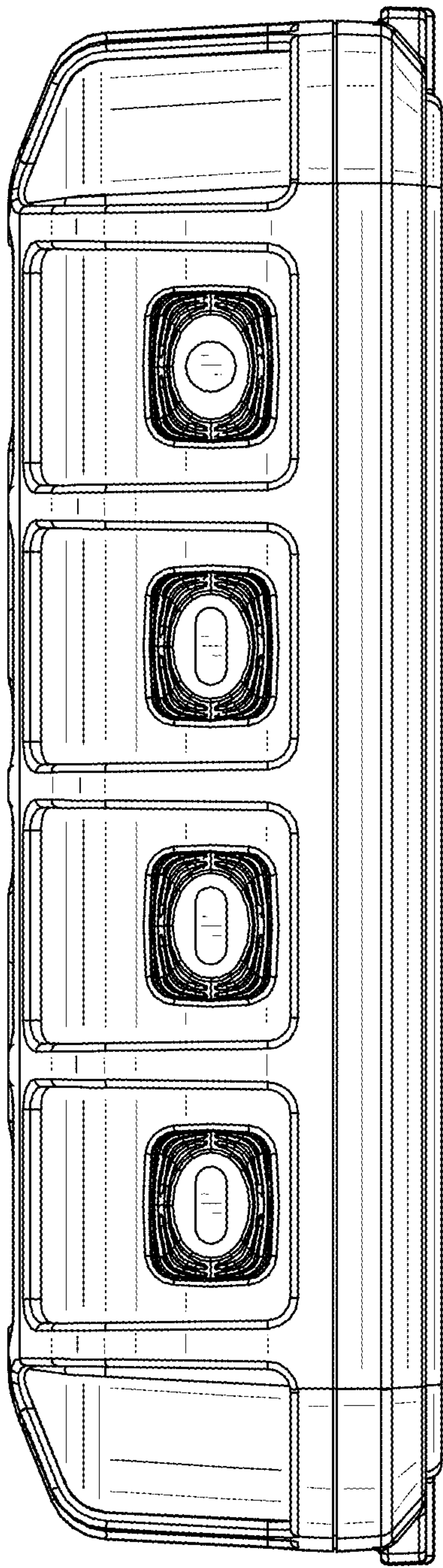


FIG. 2

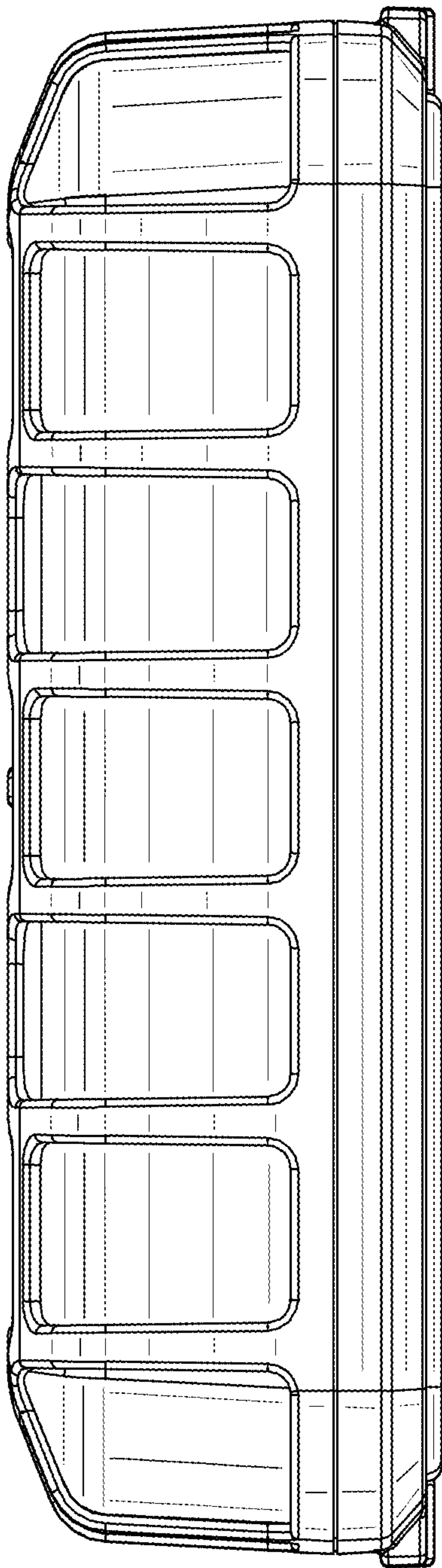


FIG. 3

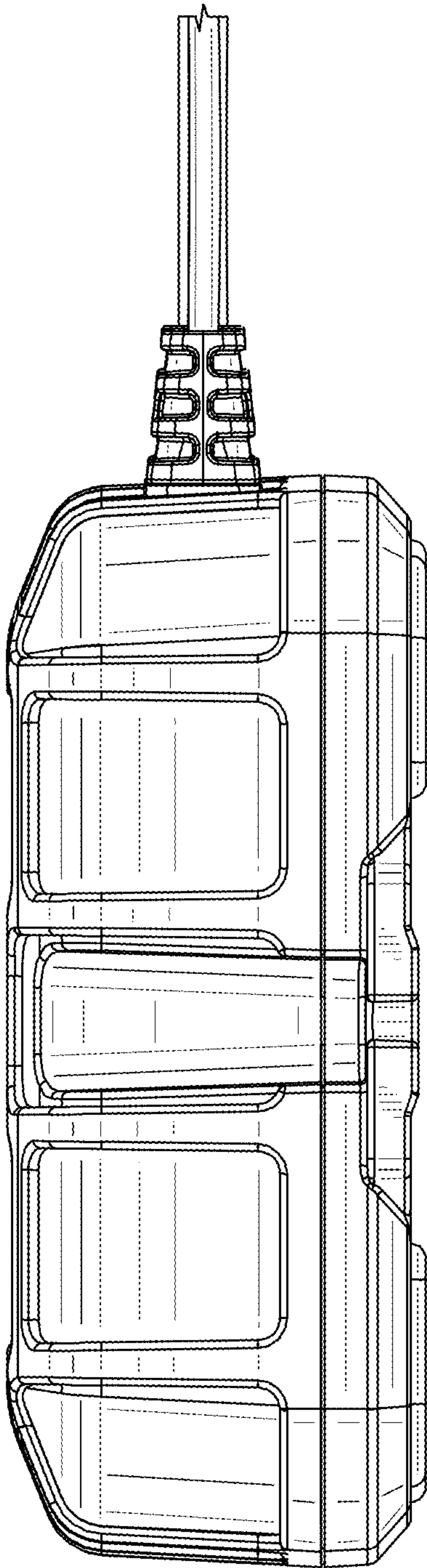


FIG. 4

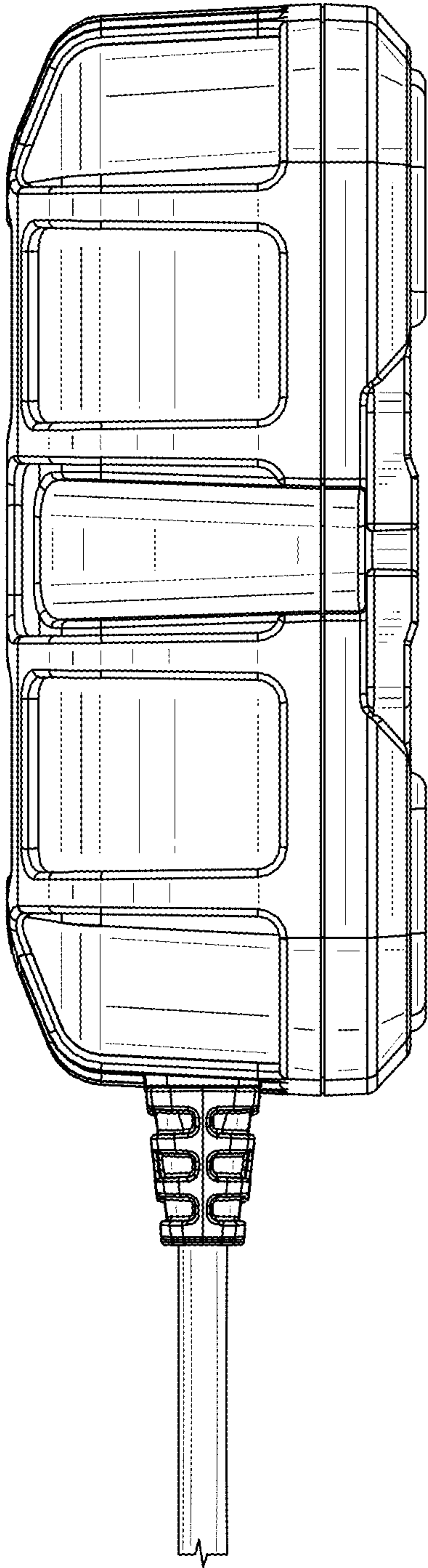


FIG. 5

