



US00D988990S

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

(10) **Patent No.:** **US D988,990 S**

(45) **Date of Patent:** **** Jun. 13, 2023**

(54) **BATTERY CHARGER**

Y02T 10/7005; Y02T 10/705; Y02T
10/7088; B60L 11/182

See application file for complete search history.

(71) Applicant: **THE NOCO COMPANY**, Glenwillow,
OH (US)

(56) **References Cited**

(72) Inventors: **Derek Michael Underhill**, Tempe, AZ
(US); **Jonathan Lewis Nook**, Gates
Mills, OH (US)

U.S. PATENT DOCUMENTS

(73) Assignee: **The Noco Company**, Glenwillow, OH
(US)

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

(21) Appl. No.: **29/761,841**

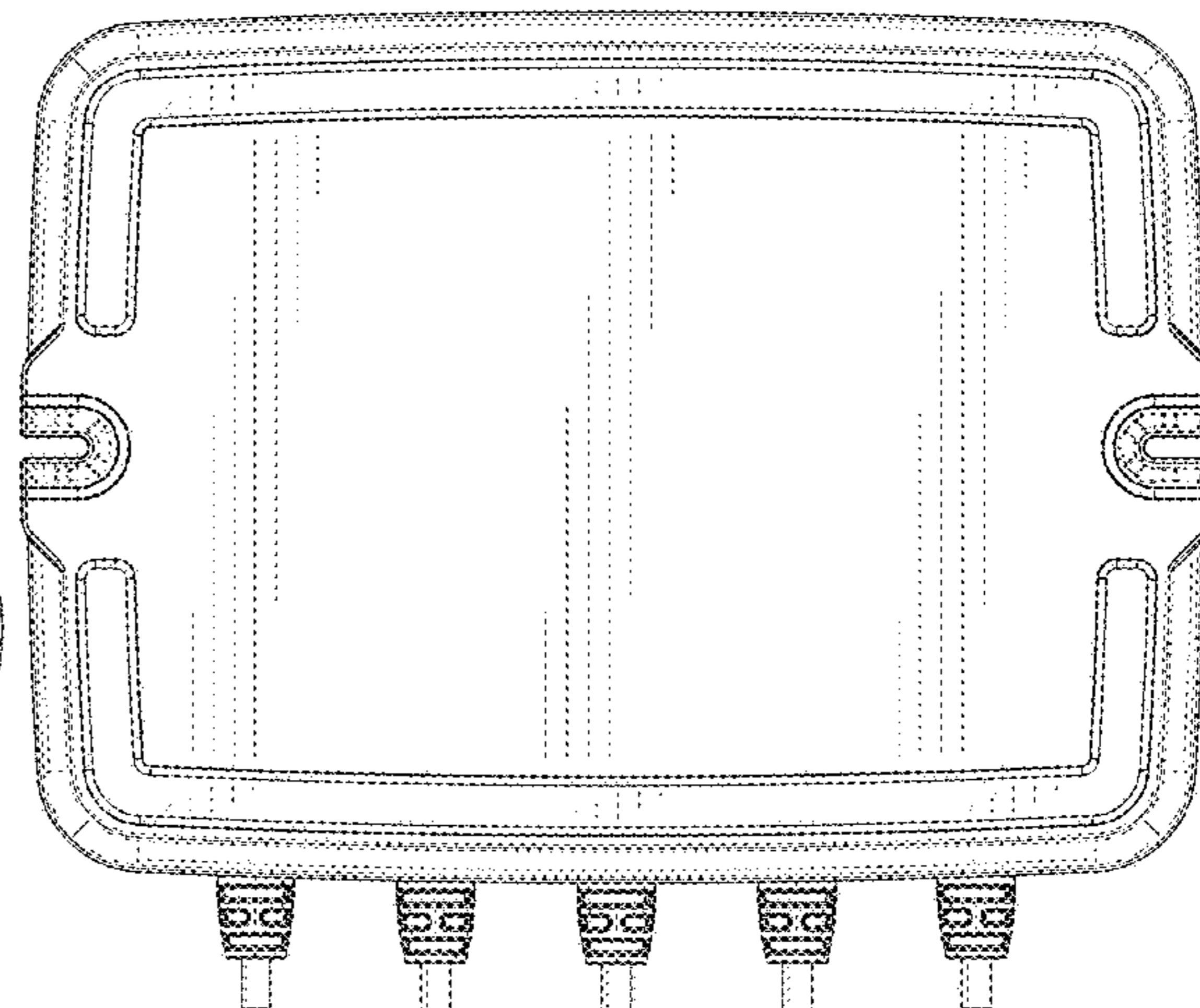
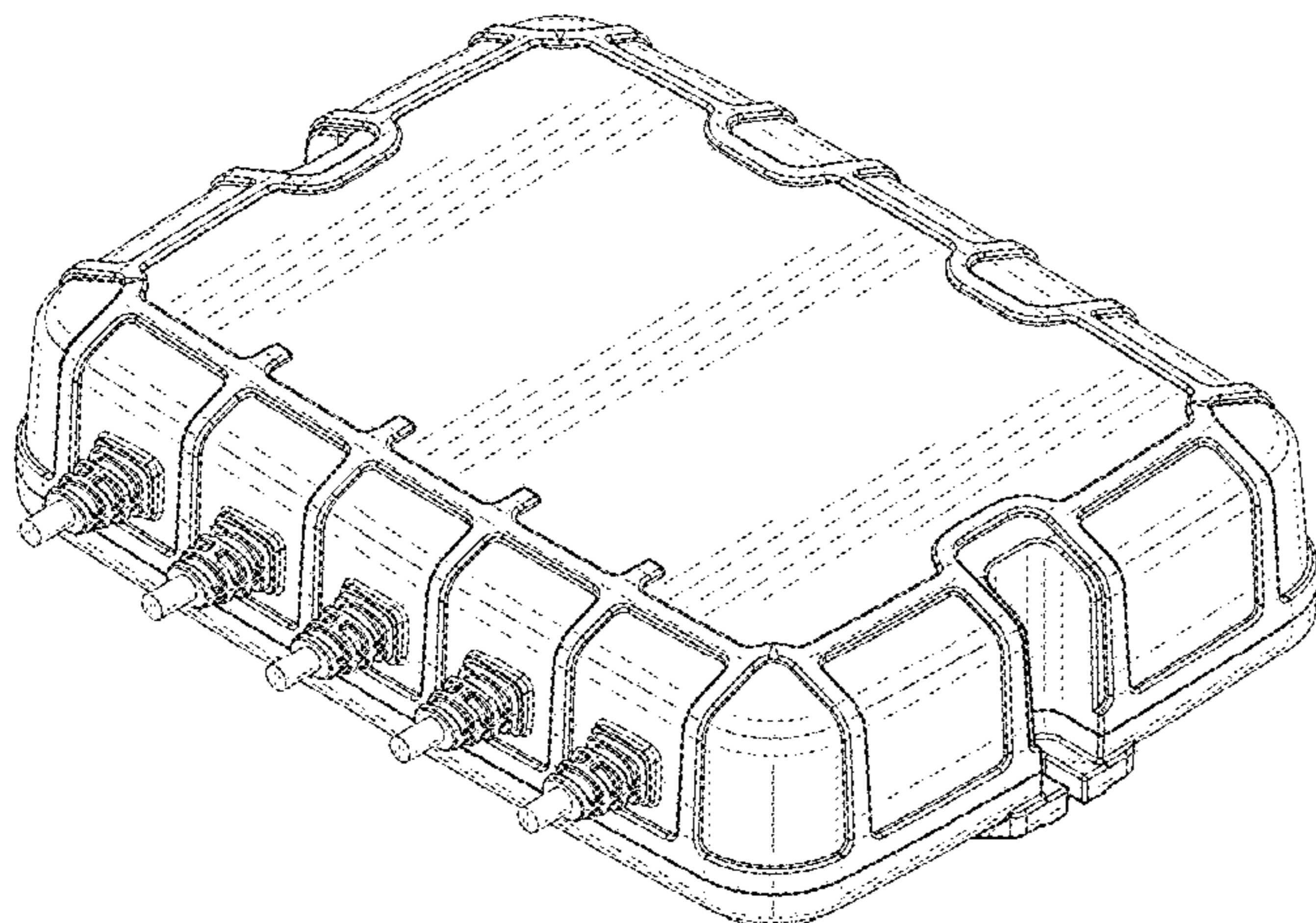
(22) Filed: **Dec. 11, 2020**

(51) **LOC (14) Cl.** **13-02**

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

(58) **Field of Classification Search**
USPC D13/102-110, 118, 119, 153, 154, 184,
D13/199, 107, 108, 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;

| | | | |
|--------------|-----------|-----------------------|--|
| 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 | |



US D988,990 S

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 D13/107
D786,790 S 5/2017 Miller
D787,443 S 5/2017 Chiang
D793,955 S * 8/2017 Yang D13/107
D797,044 S 9/2017 Miller
D803,151 S 11/2017 Zhou
D808,653 S * 1/2018 Rayeski D3/273
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 D14/240
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 D13/107
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 Finocchiaro
D913,931 S * 3/2021 Nook D13/120
D916,012 S * 4/2021 Finocchiaro D13/107
D916,015 S 4/2021 Li
D918,830 S 5/2021 Chen
D919,572 S * 5/2021 Lei D13/110
D922,945 S 6/2021 Sun
D923,564 S 6/2021 Liao
D924,132 S 7/2021 Turksu
D926,123 S * 7/2021 Zhu D13/107
D926,124 S * 7/2021 Zhu D13/107
D930,578 S 9/2021 Zheng
D934,793 S * 11/2021 Shu D13/107
D937,197 S 11/2021 Hao
D937,762 S 12/2021 Chung
D937,763 S * 12/2021 Wang D13/107
D939,435 S 12/2021 Feng
D942,931 S * 2/2022 Fang D13/110
D943,516 S * 2/2022 Wang D13/107
D944,191 S * 2/2022 Wang D13/107
D960,090 S * 8/2022 Underhill D13/107
D967,013 S * 10/2022 Underhill 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 F02N 11/12
2018/0342891 A1 * 11/2018 Nook H01R 11/24
2019/0222042 A1 * 7/2019 Nook H02J 7/0034
2020/0227937 A1 7/2020 Lu
2021/0075235 A1 * 3/2021 Nook H01M 10/4207
2021/0094428 A1 * 4/2021 Nook H02J 7/0047
2021/0296913 A1 * 9/2021 Nook H02J 7/0045

OTHER PUBLICATIONS

U.S. Appl. No. 86/030,590, filed Aug. 6, 2013, including drawing and sample.
“Amazon Basics Battery Charger” Found online Mar. 8, 2022 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_B084BWGWYHY (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/1ec8ff6116e1710356e88efedb9dfccdcbe769?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-G8251-Ultrasafe-Commercial-32-Liters/dp/B08V738Z42> (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_i (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=LnBf30-5IyU> (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_i (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-Ultrasafe-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-Ultrasafe-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_i (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_i (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-Automatic-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/807Q5VYPCF?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_15707061-t5-B09HGYMP7D (Year: 2020).

amazon.com/Automotive-Battery-Automatic-Motorcycle-YONHAN/dp/B089VRXB2W/ref=psdc_15707061-t5-B09HGYMP7D (Year: 2020).

* cited by examiner

Primary Examiner — Christy Nemeth
(74) *Attorney, Agent, or Firm* — Jones Day

(57)

CLAIM

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

DESCRIPTION

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

FIG. 2 is a front elevational view thereof;

FIG. 3 is a rear elevational view thereof;

FIG. 4 is a left side elevational view thereof;

FIG. 5 is a right side elevational view thereof;

FIG. 6 is a top plan view thereof; and,

FIG. 7 is a bottom plan 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

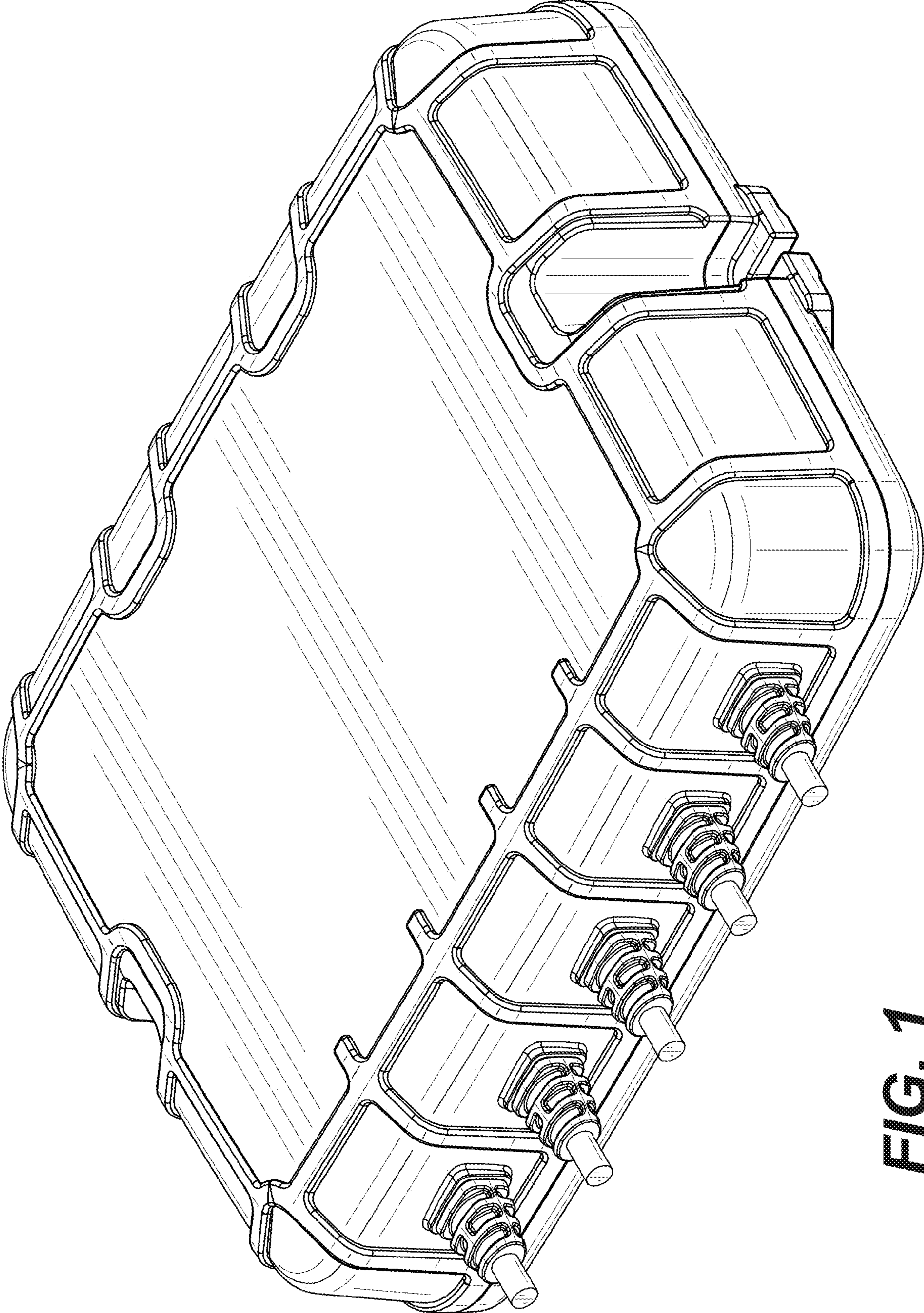


FIG. 1

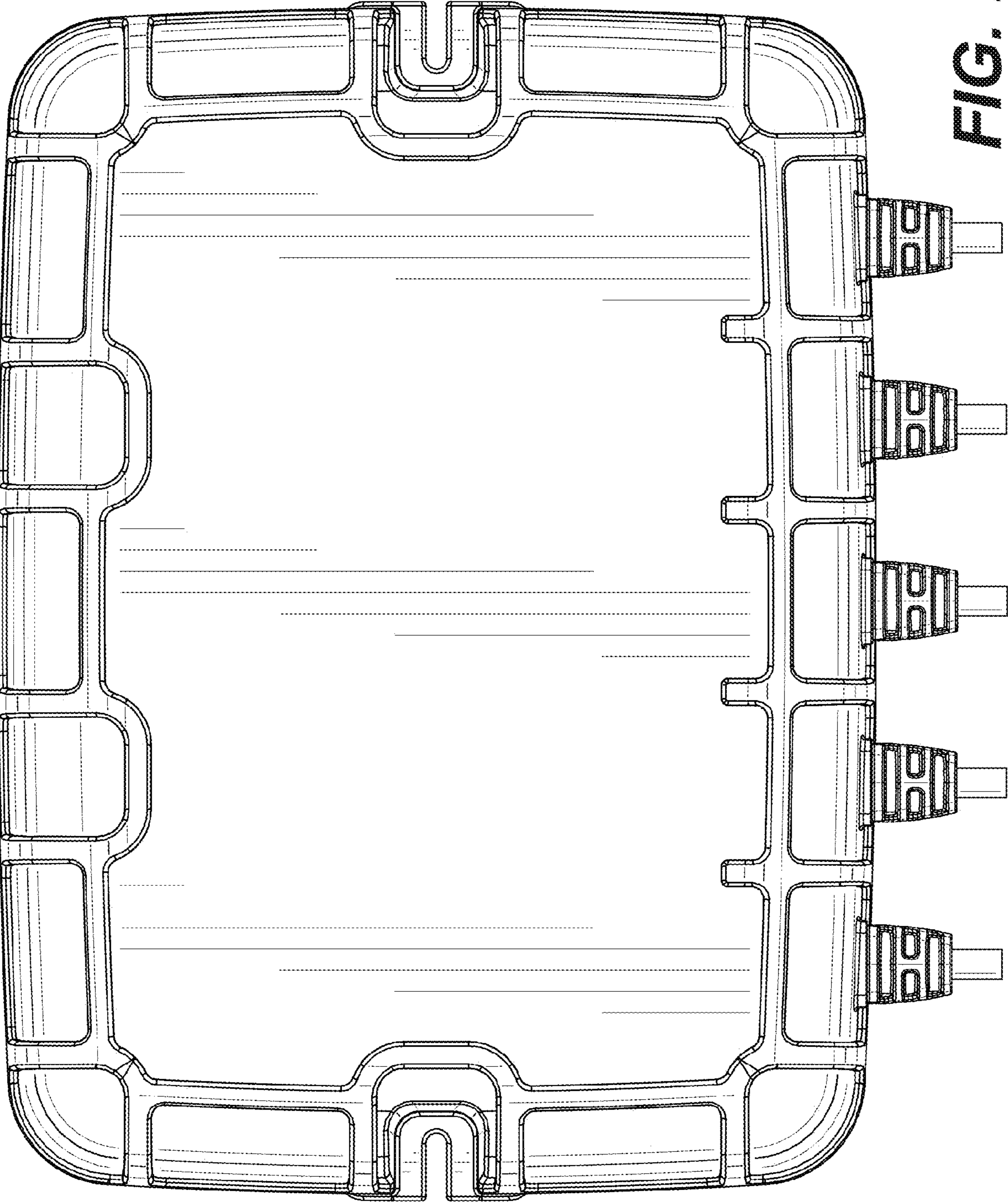


FIG. 2

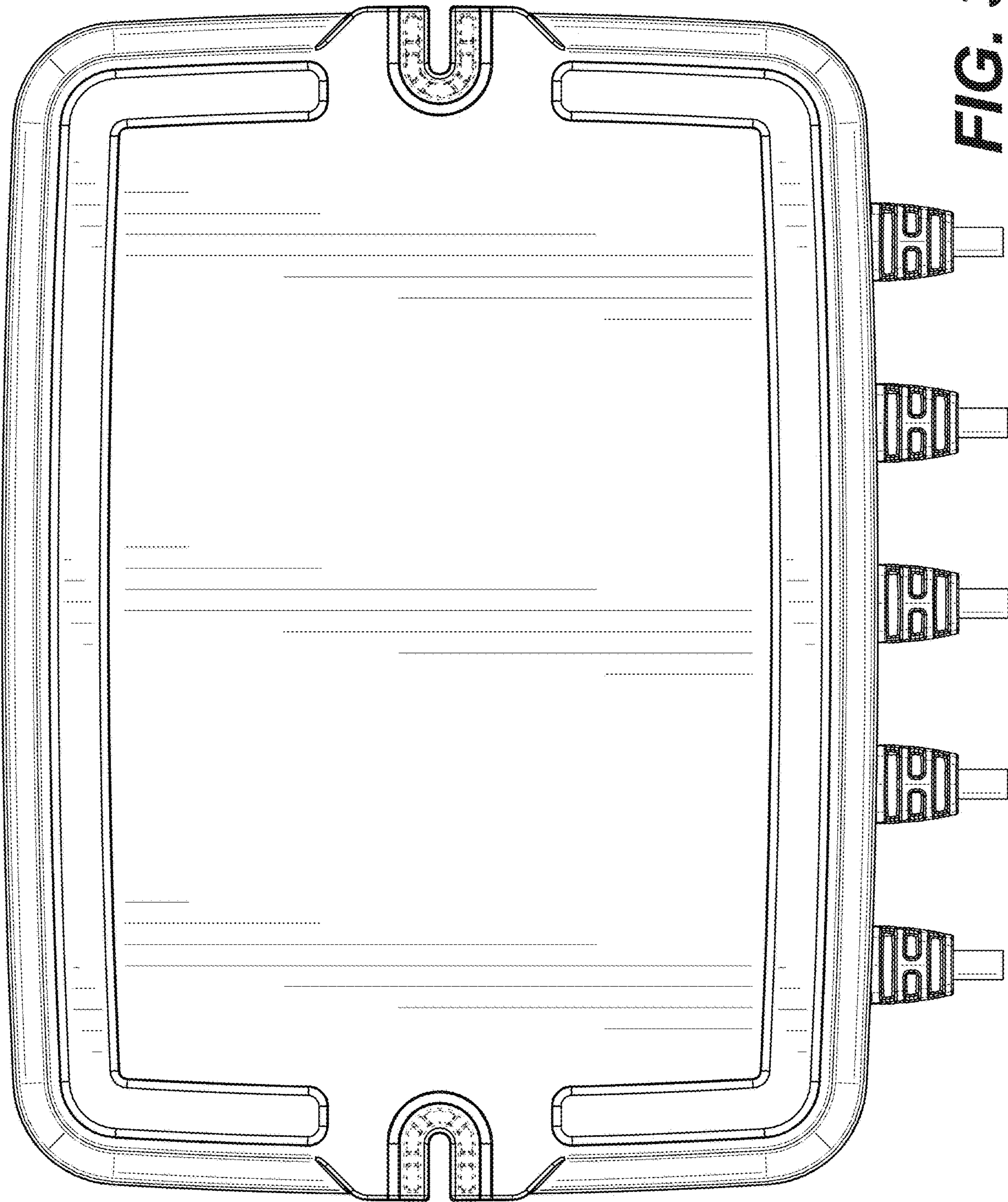


FIG. 3

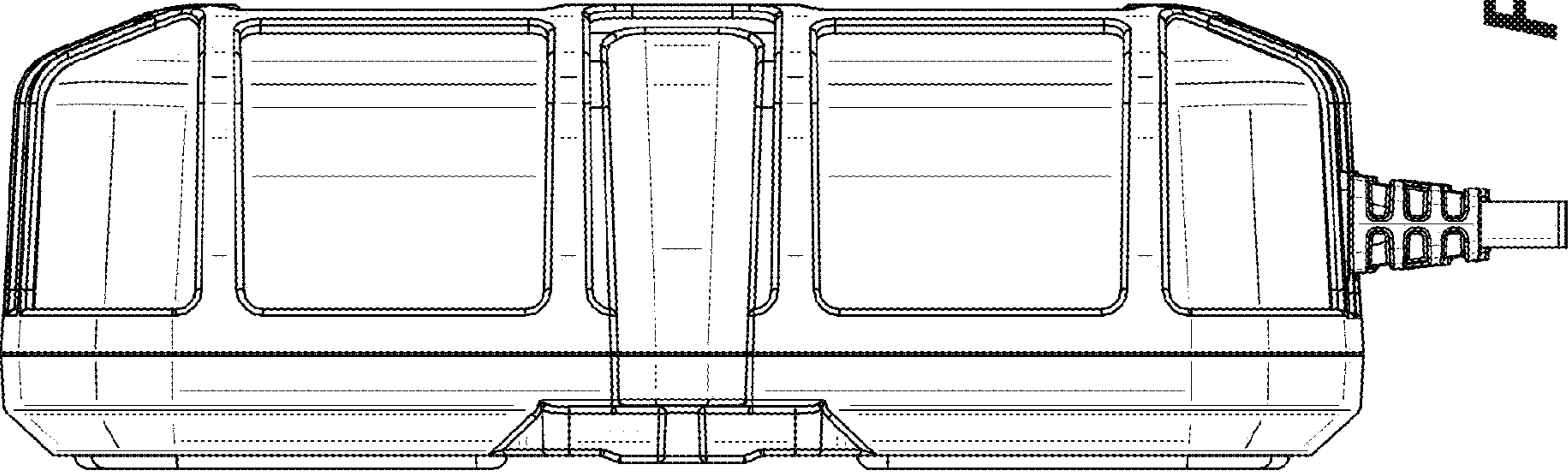


FIG. 4

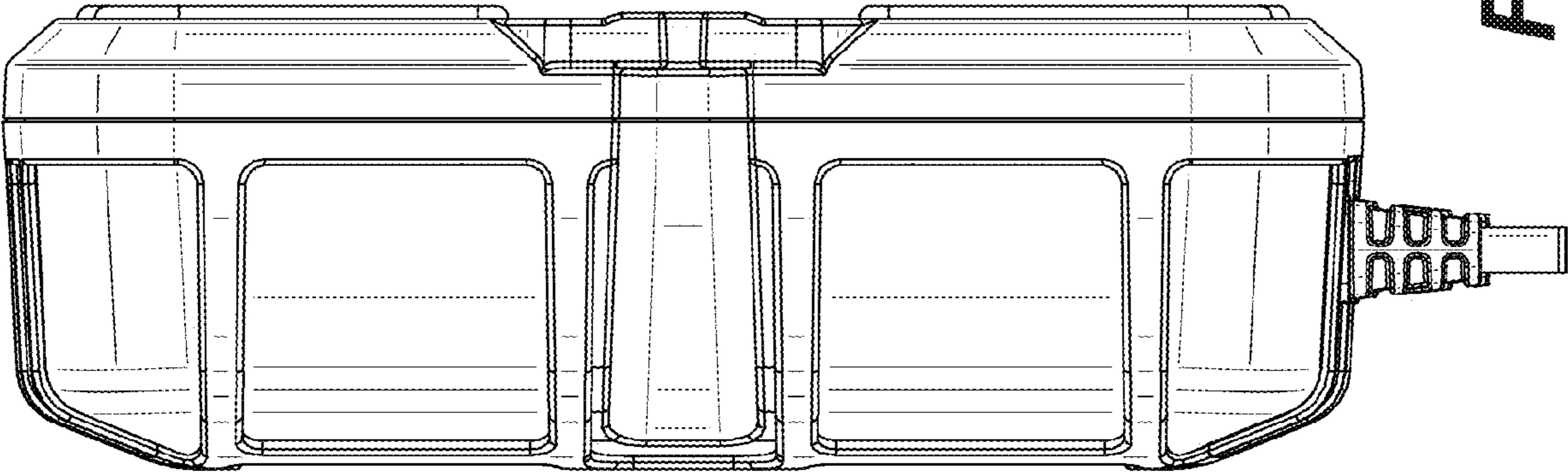


FIG. 5

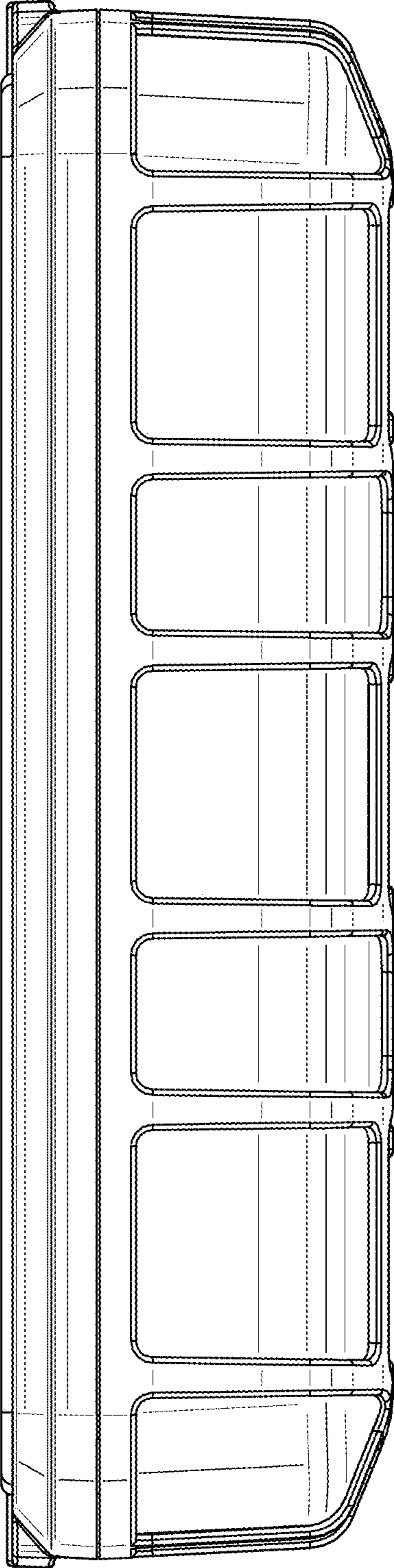


FIG. 6

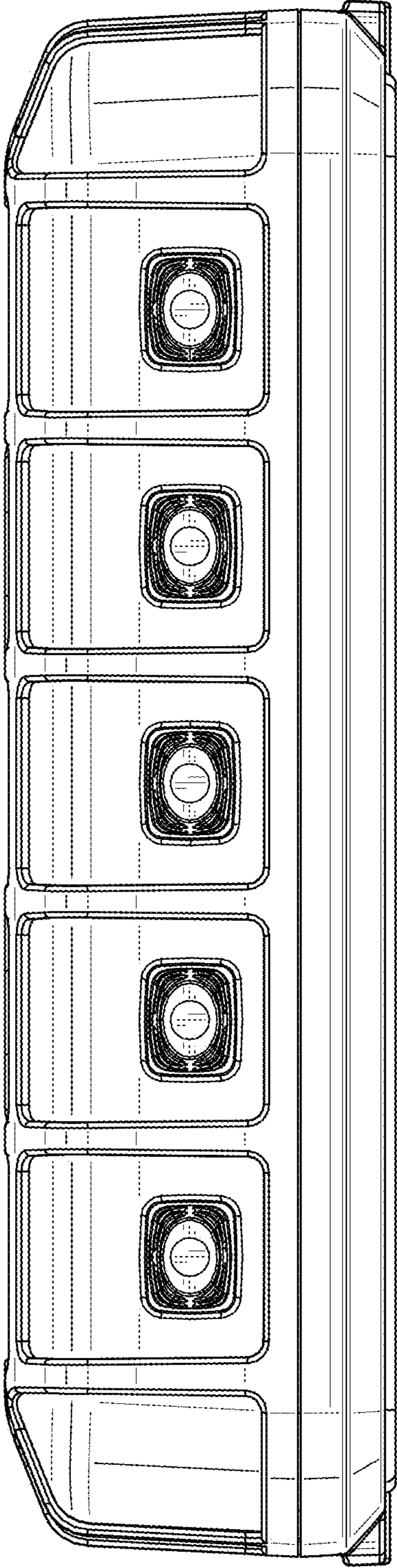


FIG. 7