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

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(54) **CHARGING APPARATUS**

(71) Applicants: **Mikko Aresalo**, Hollola (FI); **Petteri Jokinen**, Lahti (FI)

(72) Inventors: **Mikko Aresalo**, Hollola (FI); **Petteri Jokinen**, Lahti (FI)

(73) Assignee: **KEMPOWER OY**, Lahti (FI)

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

(21) Appl. No.: **29/675,687**

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

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

(58) **Field of Classification Search**  
USPC ..... D13/107–110, 118–119, 184; D14/251,  
D14/253, 432, 434  
CPC ..... Y02E 60/12; Y02T 90/14; Y02T 90/122;  
Y02T 90/128; Y02T 90/163; H02J 7/025;  
H02J 7/0042; H02J 7/0044; H02J 7/0045;  
H02J 7/0003; H01F 38/14; H01R  
13/6675; H01M 2/1022; H01M 2/1055;  
H01M 10/44; H01M 10/46; H01M  
10/425; B60L 11/182  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

5,424,588 A \* 6/1995 Cantor ..... G01R 1/203  
307/154  
D429,687 S \* 8/2000 Steiner ..... D13/110  
D511,139 S \* 11/2005 Xiao ..... D13/116

D641,318 S \* 7/2011 Maeda ..... D13/116  
D654,858 S \* 2/2012 Salazar ..... D13/107  
D674,334 S \* 1/2013 Cutter ..... D13/107  
D683,307 S \* 5/2013 Lecoanet ..... D13/107  
D686,996 S \* 7/2013 Seff ..... D13/152  
D711,313 S \* 8/2014 Chin-Ho Kim ..... D13/107  
8,978,631 B2 \* 3/2015 Shudo ..... F01M 13/00  
123/41.86  
D853,327 S \* 7/2019 Tschopp ..... D13/109  
D860,939 S \* 9/2019 Cline ..... D13/110  
D872,687 S \* 1/2020 Mortun ..... D13/107  
2012/0262114 A1 \* 10/2012 Bianco ..... H02J 7/0042  
320/109

\* cited by examiner

*Primary Examiner* — Nathaniel D. Buckner

(74) *Attorney, Agent, or Firm* — Thompson Hine LLP

(57) **CLAIM**

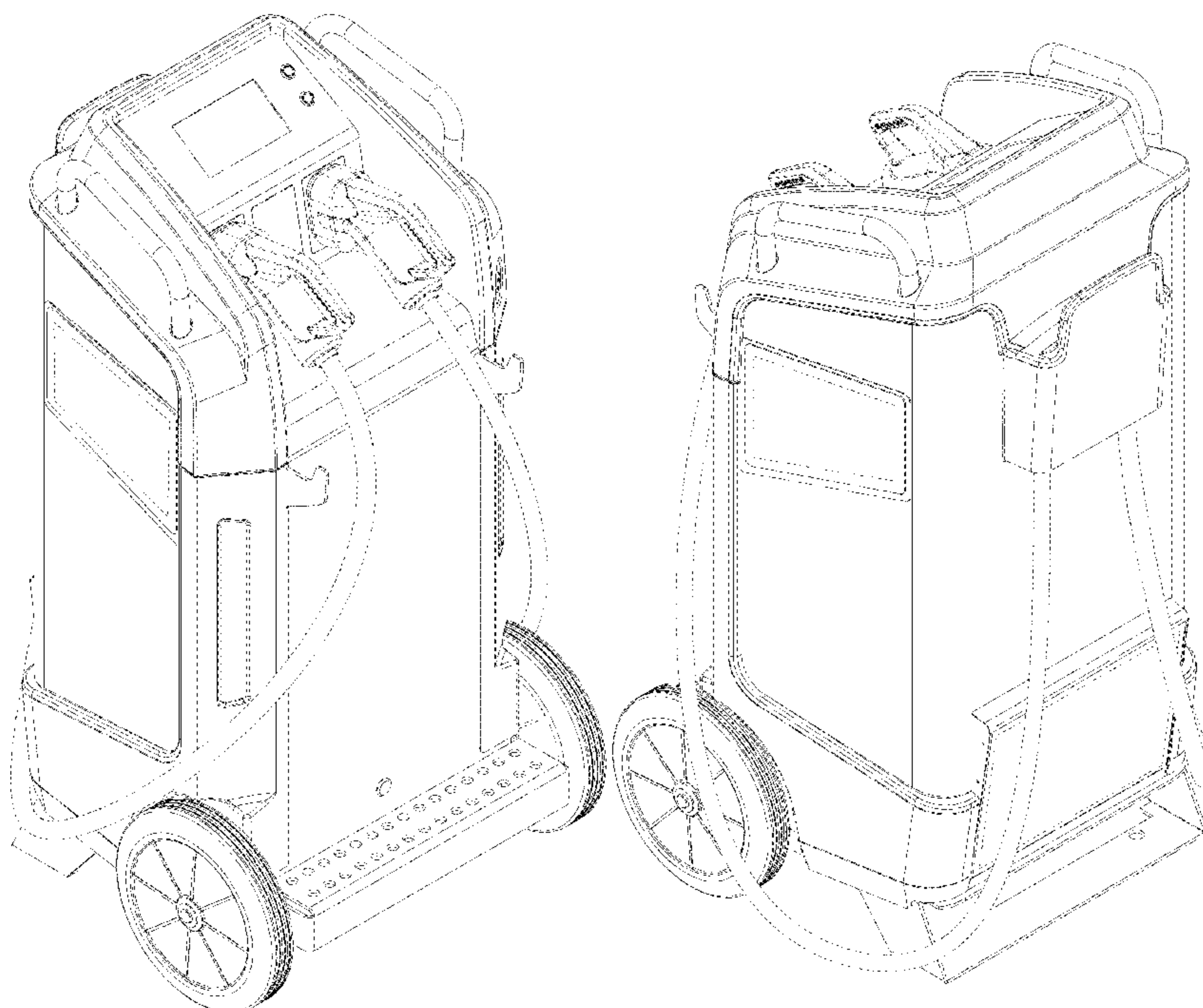
The ornamental design for a charging apparatus, as shown and described.

**DESCRIPTION**

FIG. 1 is a front elevation view of a charging apparatus showing our new design;  
FIG. 2 is a first side view of the design of FIG. 1;  
FIG. 3 is a back view of the design of FIG. 1;  
FIG. 4 is a second side view of the design of FIG. 1;  
FIG. 5 is a rear perspective view of the design of FIG. 1;  
FIG. 6 is a side perspective view of the design of FIG. 1;  
FIG. 7 is a top view of the design of FIG. 1; and,  
FIG. 8 is a back inclined angle view of the design of FIG. 1.

The broken lines in the figures depict portions of the article which form no part of the claimed design.

**1 Claim, 8 Drawing Sheets**



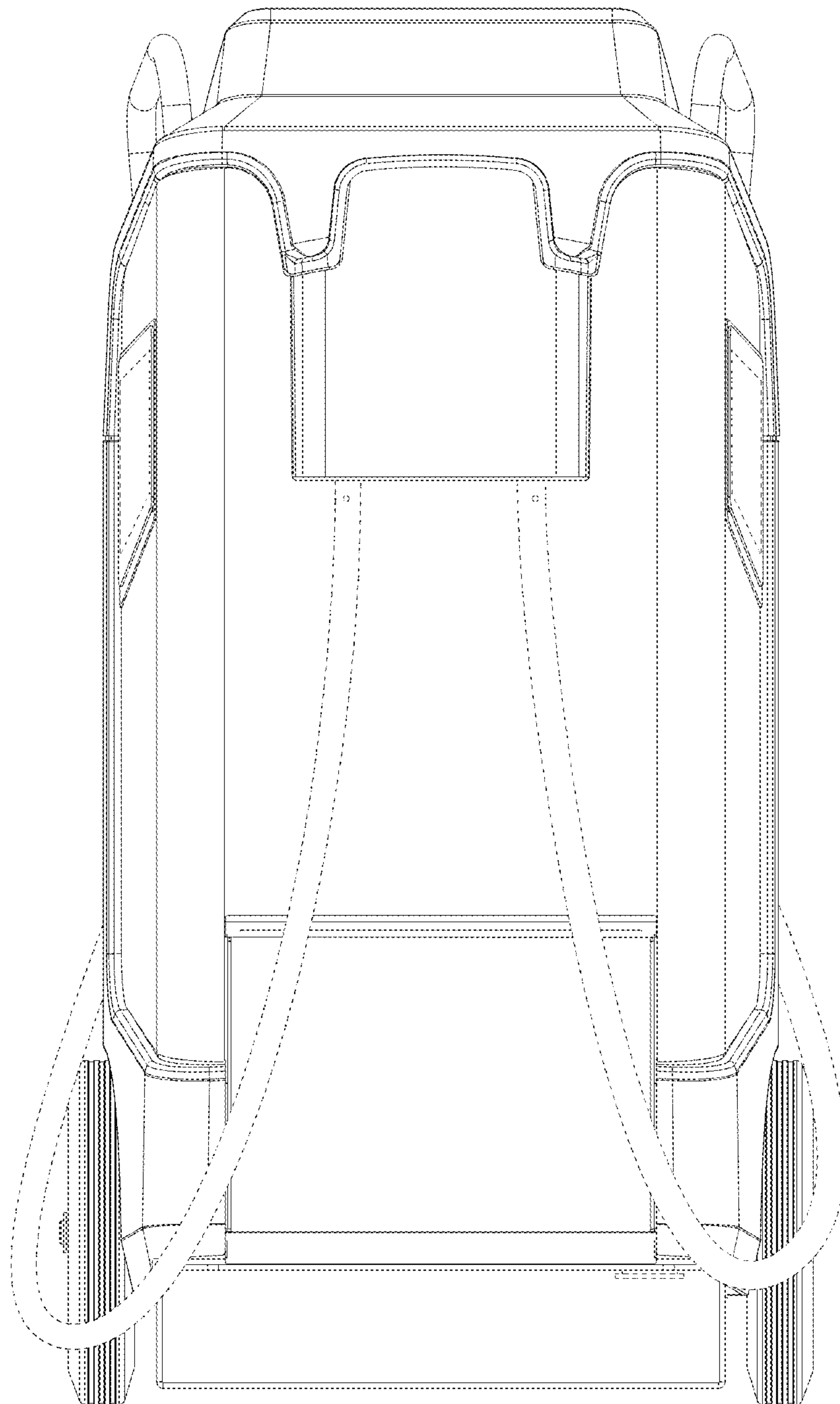


FIG. 1

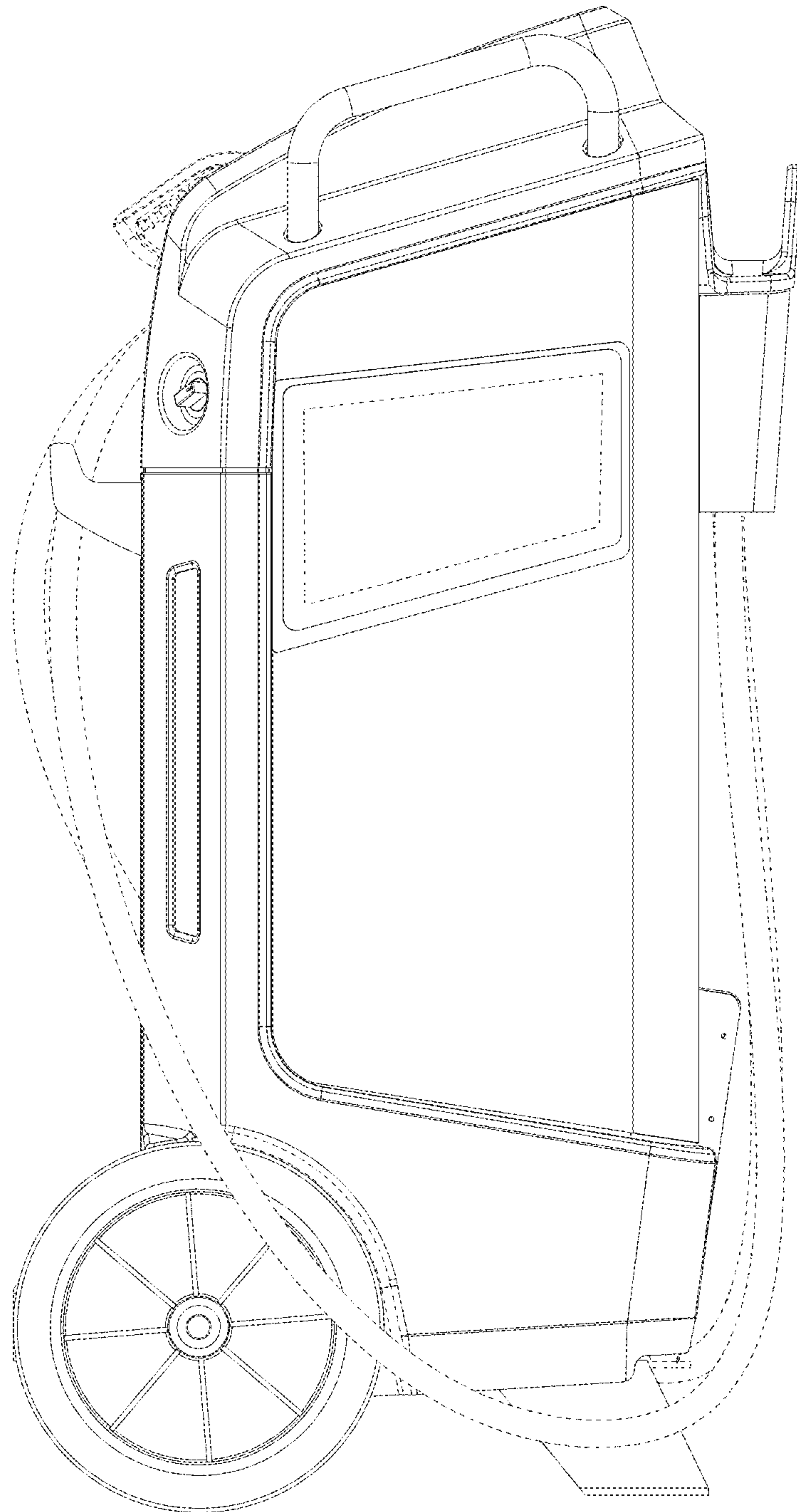


FIG. 2



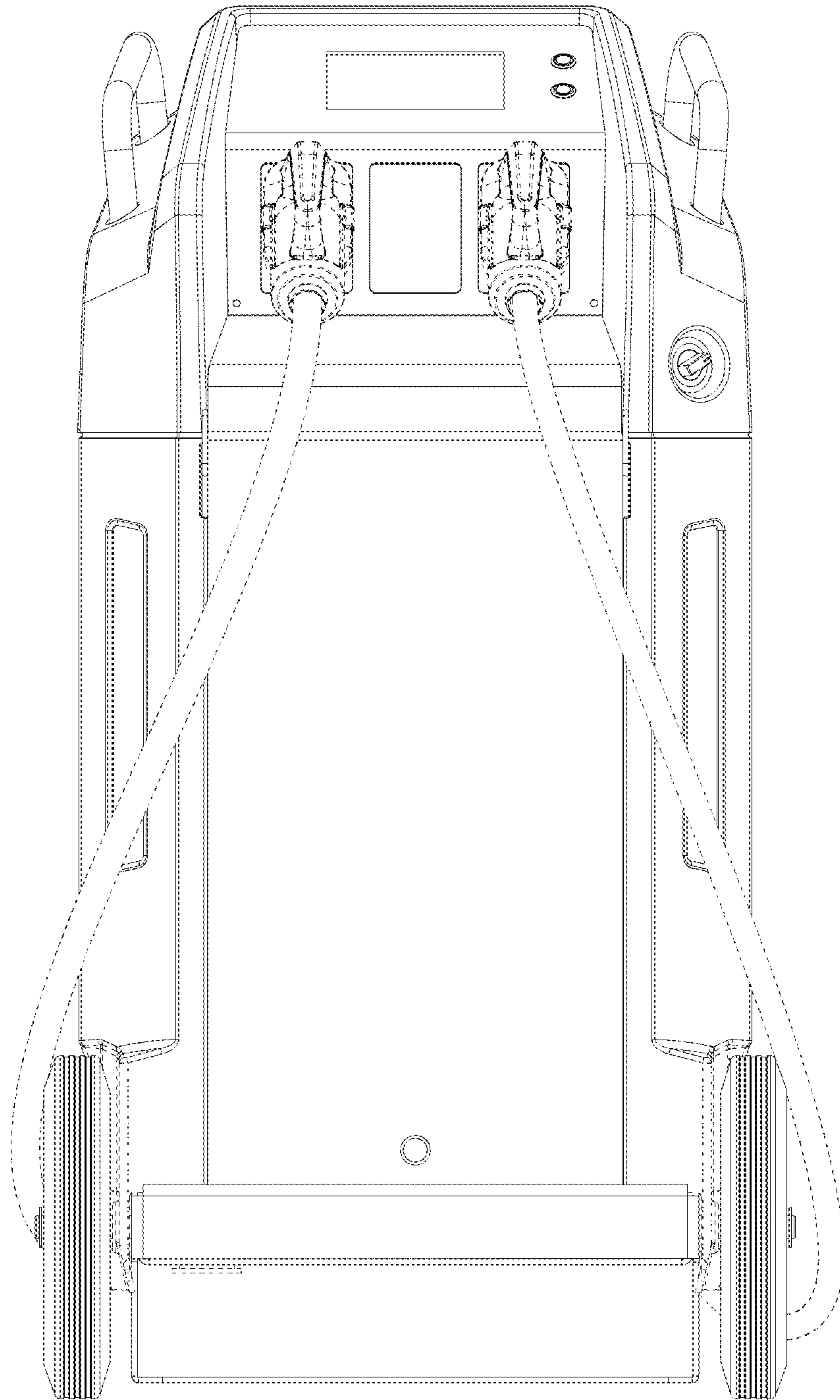


FIG. 3

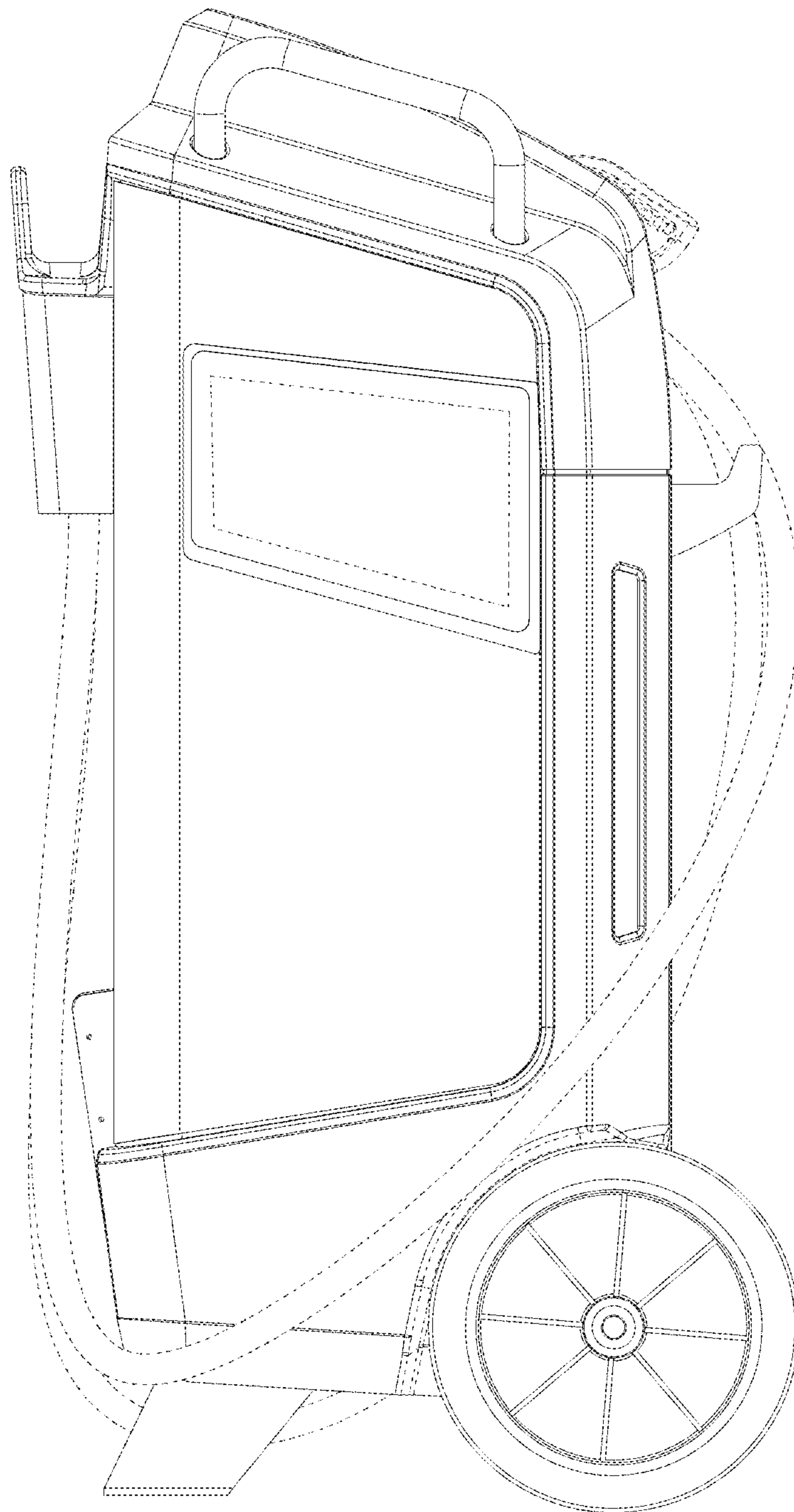


FIG. 4

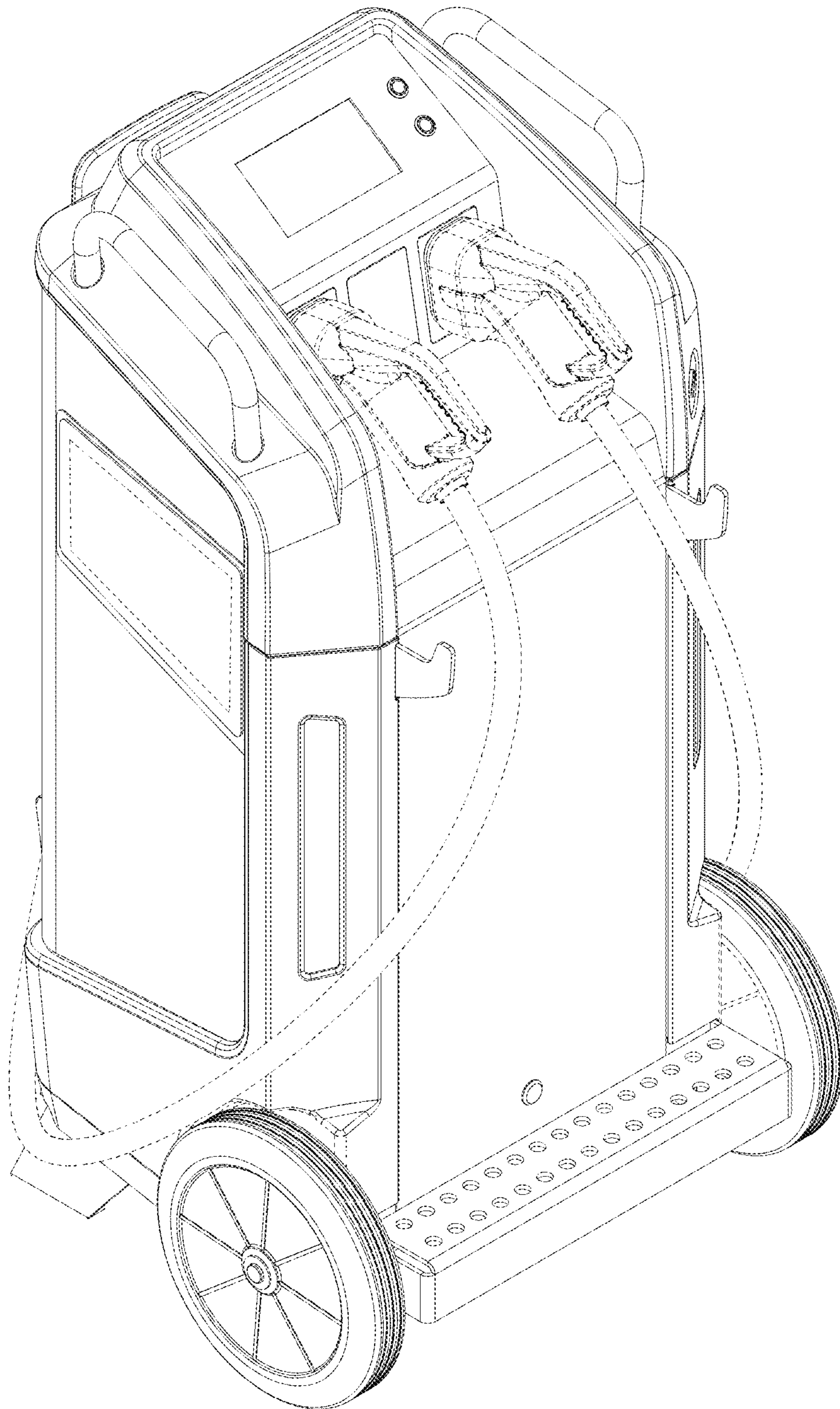


FIG. 5



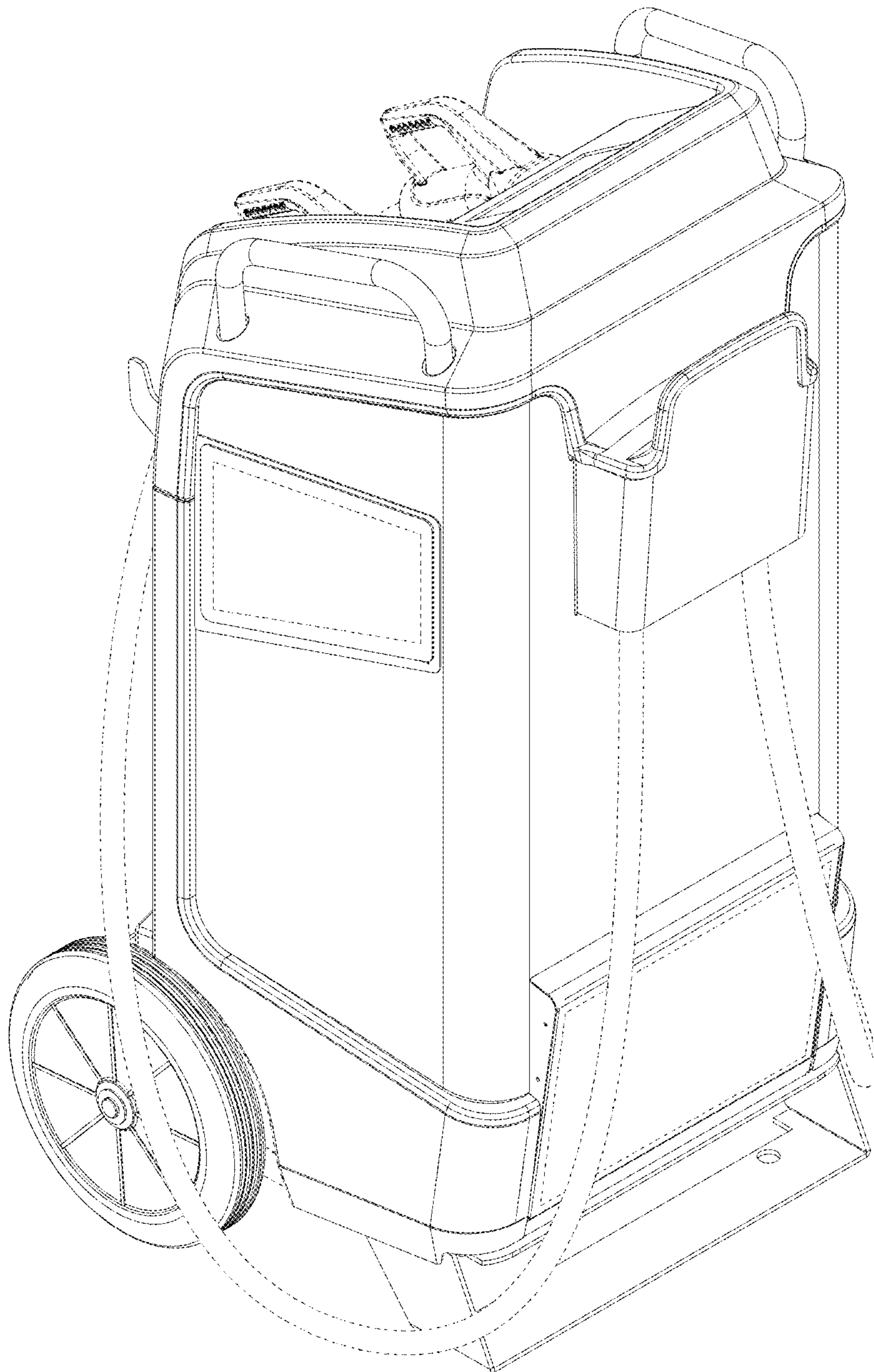


FIG. 6

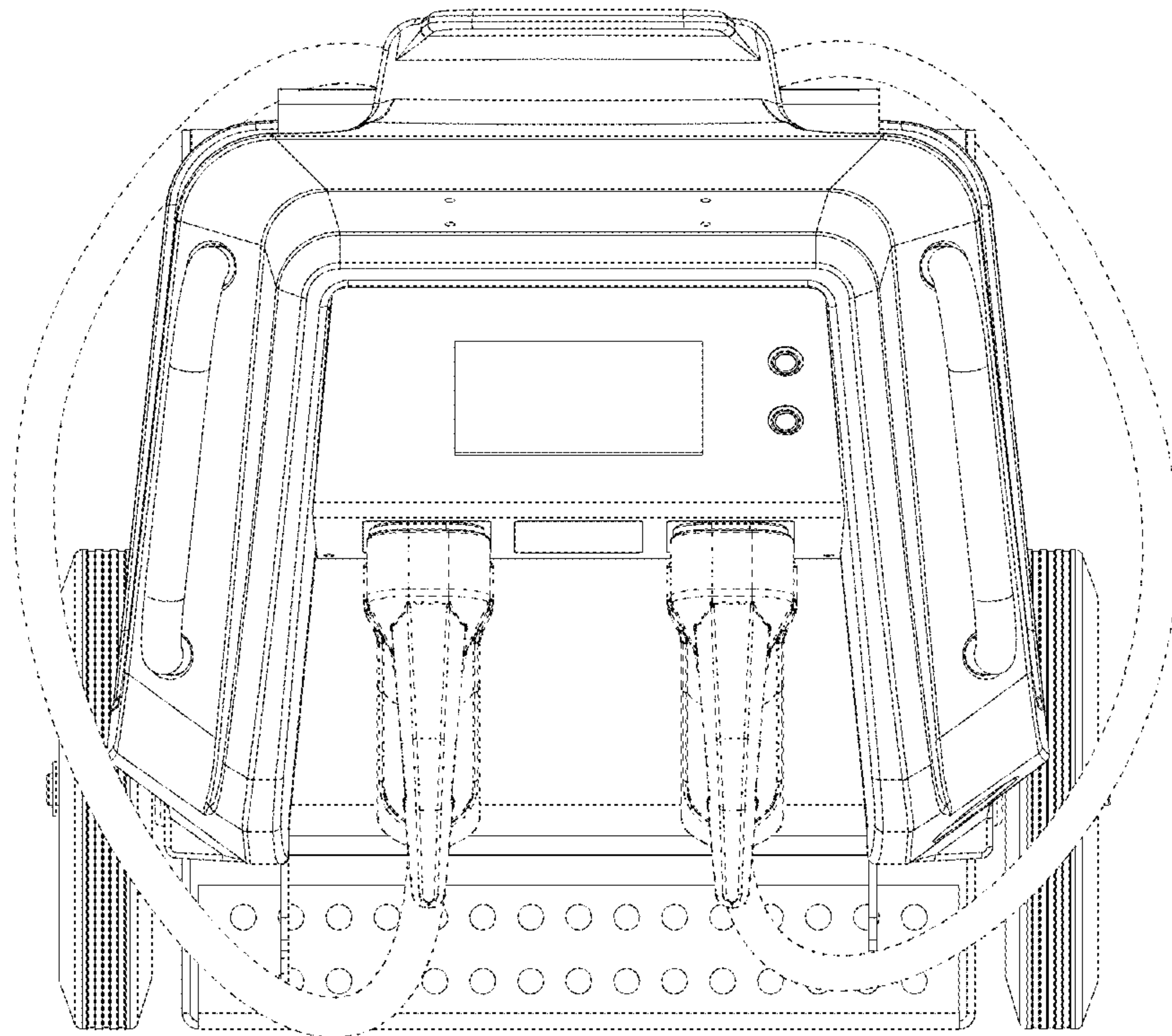


FIG. 7



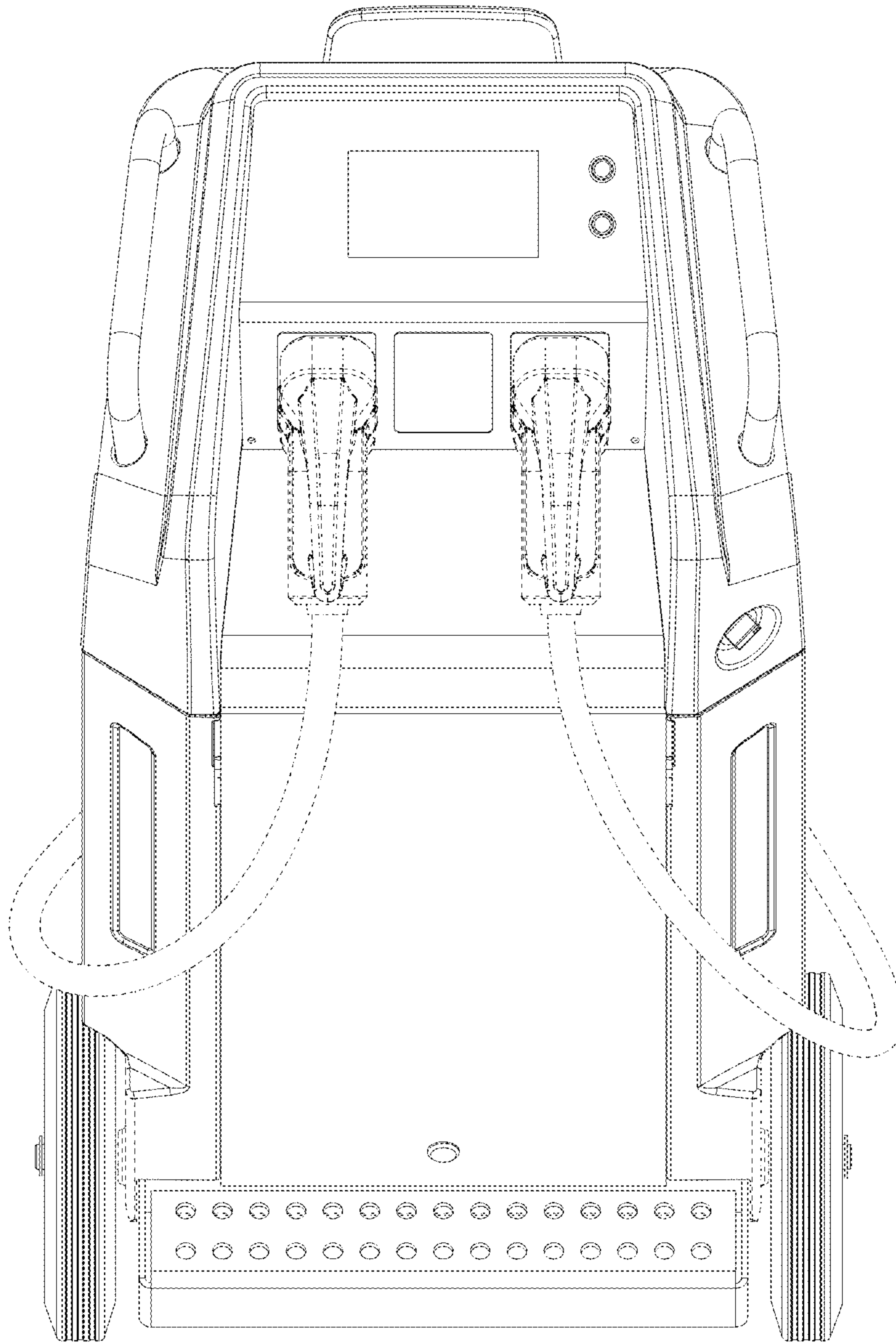


FIG. 8