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(12)

United States Design Patent

Kim et al.

(10)

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(45)

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(54) ROBOT FOR HOME USE

FOREIGN PATENT DOCUMENTS

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CN 304394300 * 12/2017

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OTHER PUBLICATIONS

<https://hypebeast.com/2023/12/lg-ai-smart-robot-home-use-preview> (Year: 2023).*

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(**) Term: 15 Years

(21) Appl. No.: 29/858,216

(57) CLAIM

(22) Filed: Oct. 28, 2022

The ornamental design for a robot for home use, as shown and described.

(30) Foreign Application Priority Data

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DESCRIPTION

(51) LOC (14) Cl. 15-99

(52) U.S. Cl.
USPC D15/199

(58) Field of Classification Search
USPC D15/199; D19/59; D21/578; D34/34
CPC B25J 5/007; B25J 9/0003; B25J 9/1697;
B25J 11/008; B62D 57/024; G05D
1/0238; Y10S 901/00; Y10S 901/01;
Y10S 901/08; Y10S 901/46
See application file for complete search history.

FIG. 1 is a front perspective view of the robot for home use showing our new design;
FIG. 2 is a front view thereof;
FIG. 3 is a back view thereof;
FIG. 4 is a left side view thereof;
FIG. 5 is a right side view thereof;
FIG. 6 is a top plan view thereof;
FIG. 7 is a bottom plan view thereof;
FIG. 8 is a front perspective view showing the state of use that the claimed design is sweeping the floor by connecting the cleaning module;
FIG. 9 is a front perspective view showing the state of use that the claimed design is serving the beverages by connecting the serving module; and,
FIG. 10 is a front perspective view showing the state of use that the claimed design is towing the flowerpots by connecting the traction module.
The portions of FIGS. 8, 9 and 10 drawn in broken lines show environmental structure only and form no part of the claimed design.

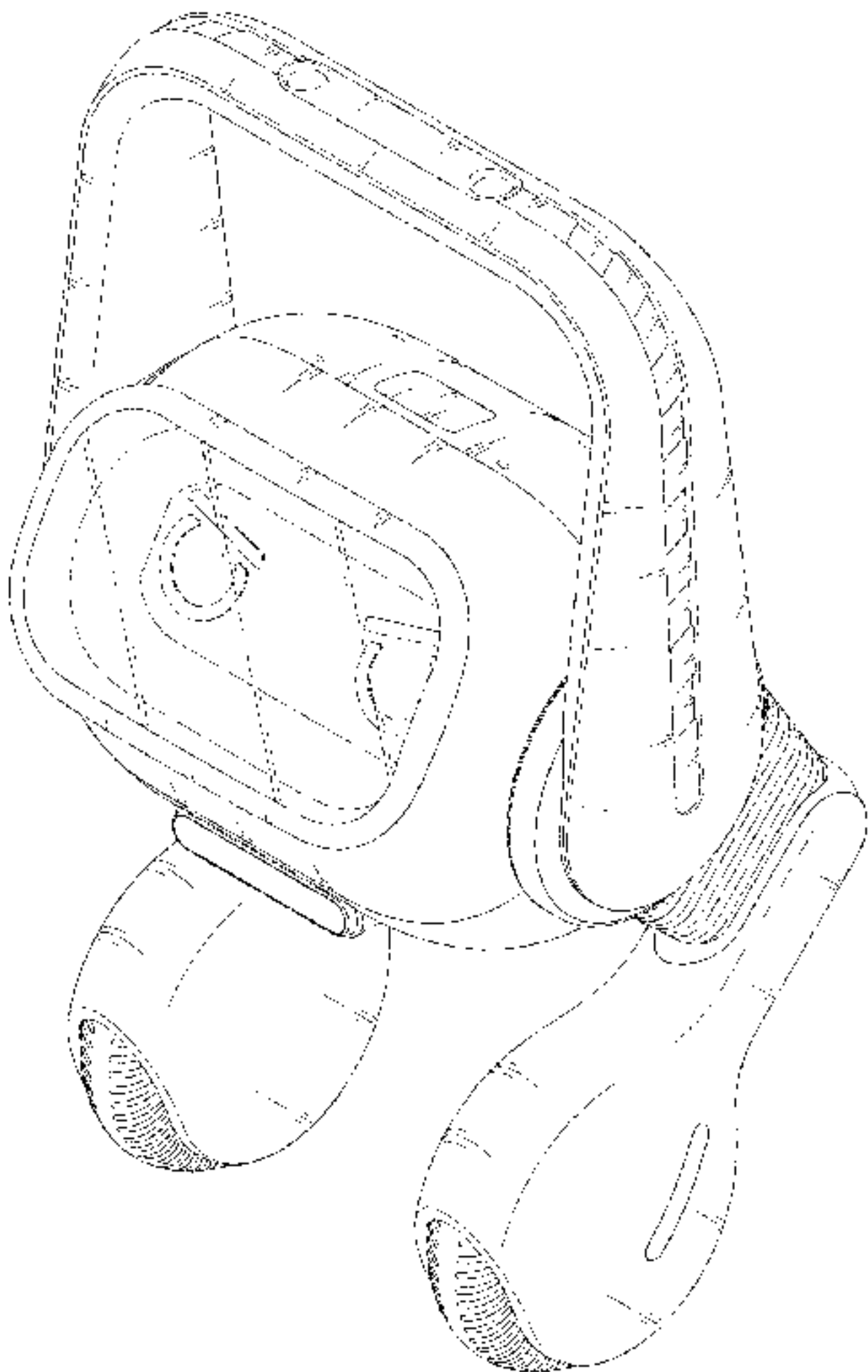
(56) References Cited

U.S. PATENT DOCUMENTS

D333,136 S * 2/1993 Yu D14/165
D439,115 S * 3/2001 Bidwell D7/606
D458,318 S * 6/2002 Christianson D21/578
7,766,716 B2 * 8/2010 Fong A63H 3/16
446/99
D624,610 S * 9/2010 Wu D21/578
D639,353 S * 6/2011 Stibolt D21/578
D685,438 S * 7/2013 Fan D15/199
D695,345 S * 12/2013 Park D21/578

(Continued)

1 Claim, 10 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

8,767,996 B1 * 7/2014 Lin H04R 1/1091
381/370
D710,953 S * 8/2014 Katsutani D15/199
D822,740 S * 7/2018 Tsai D15/199
D823,367 S * 7/2018 Tsai D15/199
D823,917 S * 7/2018 Bernazeau D21/578
D837,854 S * 1/2019 Zhou D15/199
D837,855 S * 1/2019 Chen B25J 11/008
D15/199
D838,758 S * 1/2019 Kymm D21/578
D843,498 S * 3/2019 Clerc D15/199
D847,914 S * 5/2019 Hayashi D21/585
D852,861 S * 7/2019 Lee D15/199
D857,809 S * 8/2019 Kataoka D21/578
D866,627 S * 11/2019 Yun D15/199
D868,907 S * 12/2019 Liu D15/199
D877,807 S * 3/2020 Sarrafzadeh D19/59
D882,705 S * 4/2020 Lee D21/578
D896,291 S * 9/2020 Xing D15/199

D907,306 S * 1/2021 Tang D30/122
D909,496 S * 2/2021 Zou D21/578
D910,782 S * 2/2021 Zhou D21/578
D918,979 S * 5/2021 Mullan D21/578
D930,726 S * 9/2021 Vaswani D15/199
D933,728 S * 10/2021 Zhang D21/578
D941,379 S * 1/2022 Koshiishi D15/199
D951,370 S * 5/2022 Zhang D15/199
D952,060 S * 5/2022 Hayashi D21/578
D956,842 S * 7/2022 Lee B25J 9/1694
D15/199
D961,692 S * 8/2022 Pirjanian D21/578
D966,377 S * 10/2022 Uribe D15/199
D966,433 S * 10/2022 Tian D15/199
D971,486 S * 11/2022 Yi D26/99
D975,765 S * 1/2023 Chen D15/199
D984,506 S * 4/2023 Xiao D15/199
D989,833 S * 6/2023 Abreu D15/199
D999,464 S * 9/2023 Qi D30/160
D1,006,853 S * 12/2023 Wu D15/199
D1,016,115 S * 2/2024 Vaswani D15/199
D1,016,871 S * 3/2024 Autorino D15/199

* cited by examiner

FIG. 1

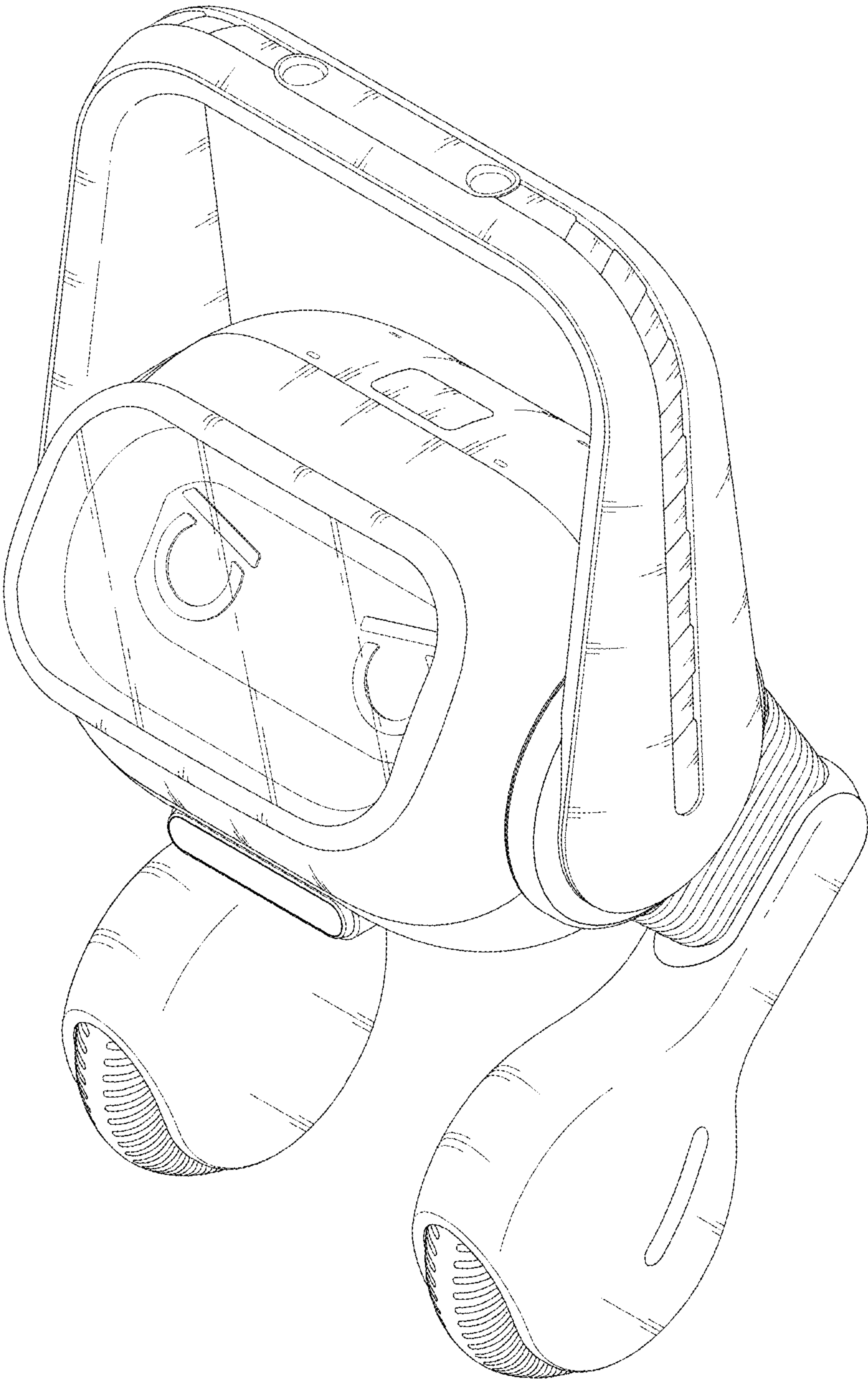


FIG. 2

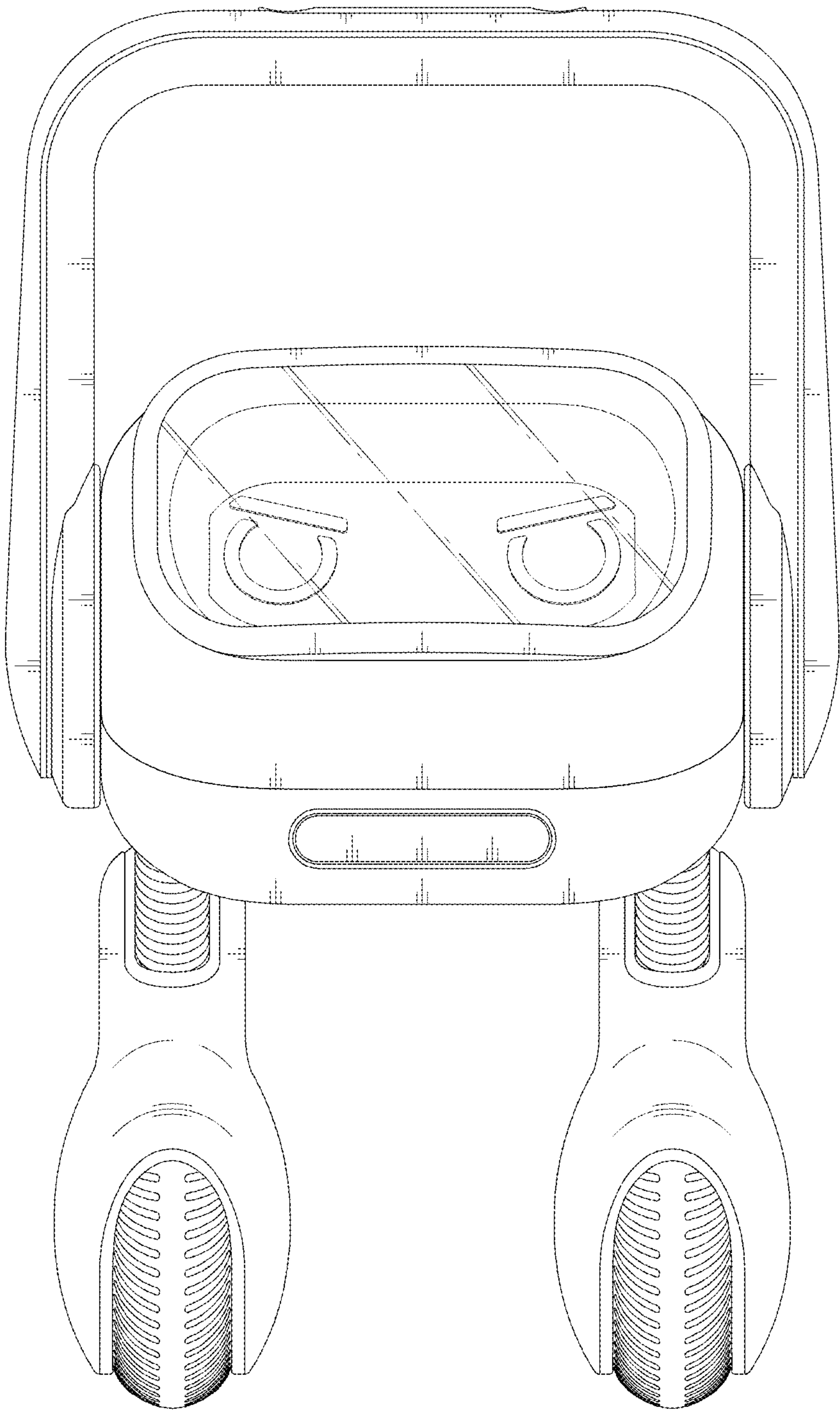


FIG. 3

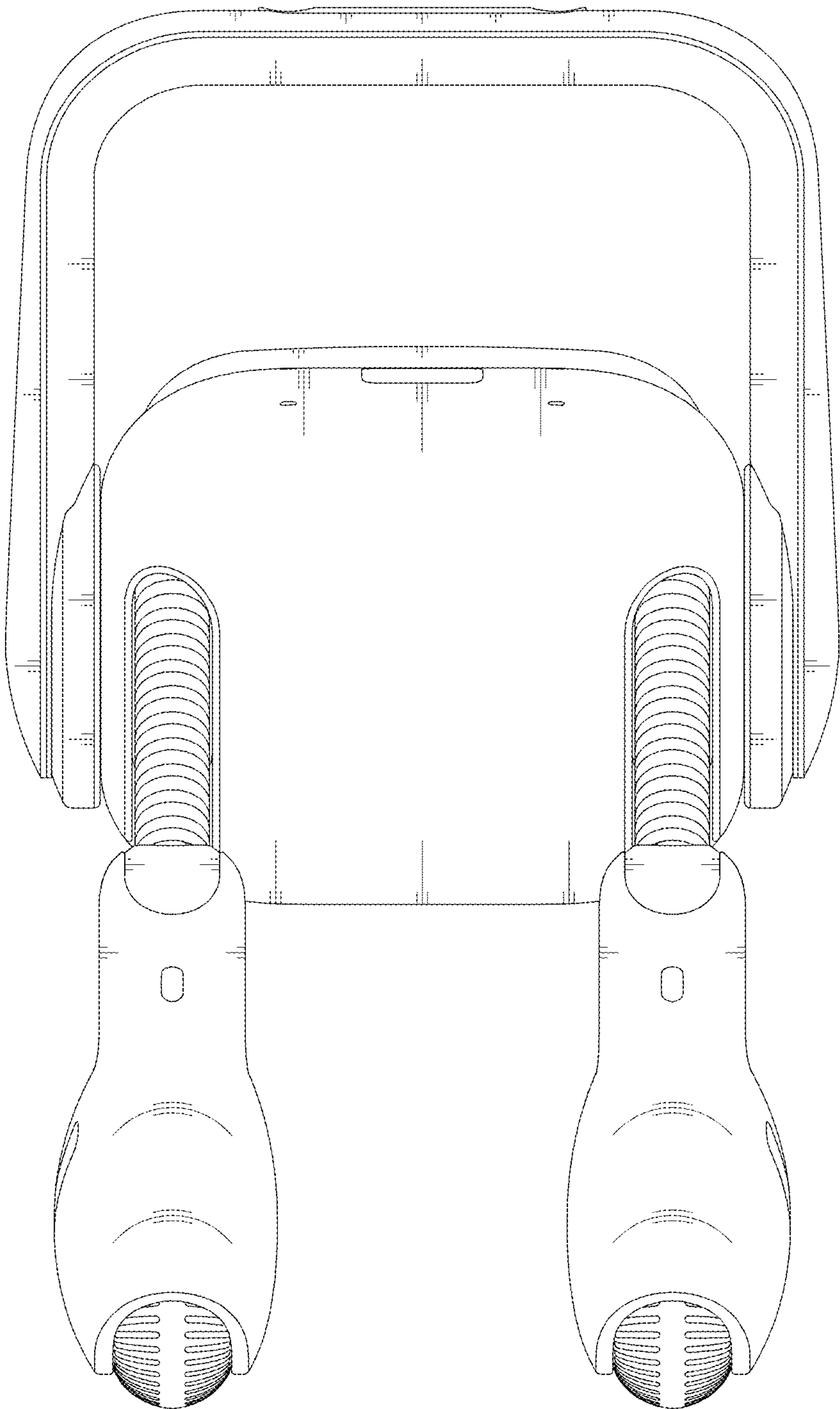


FIG. 4

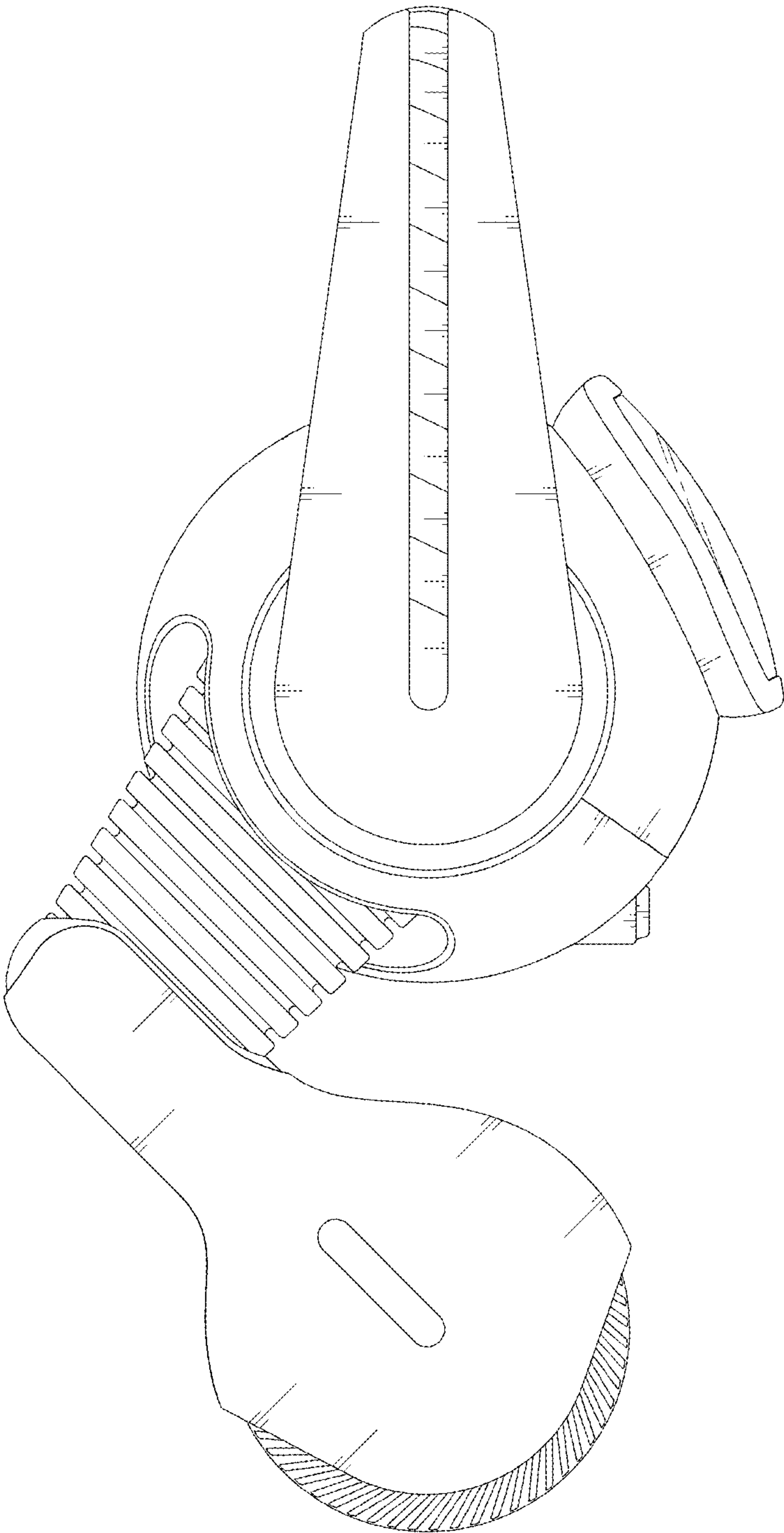


FIG. 5

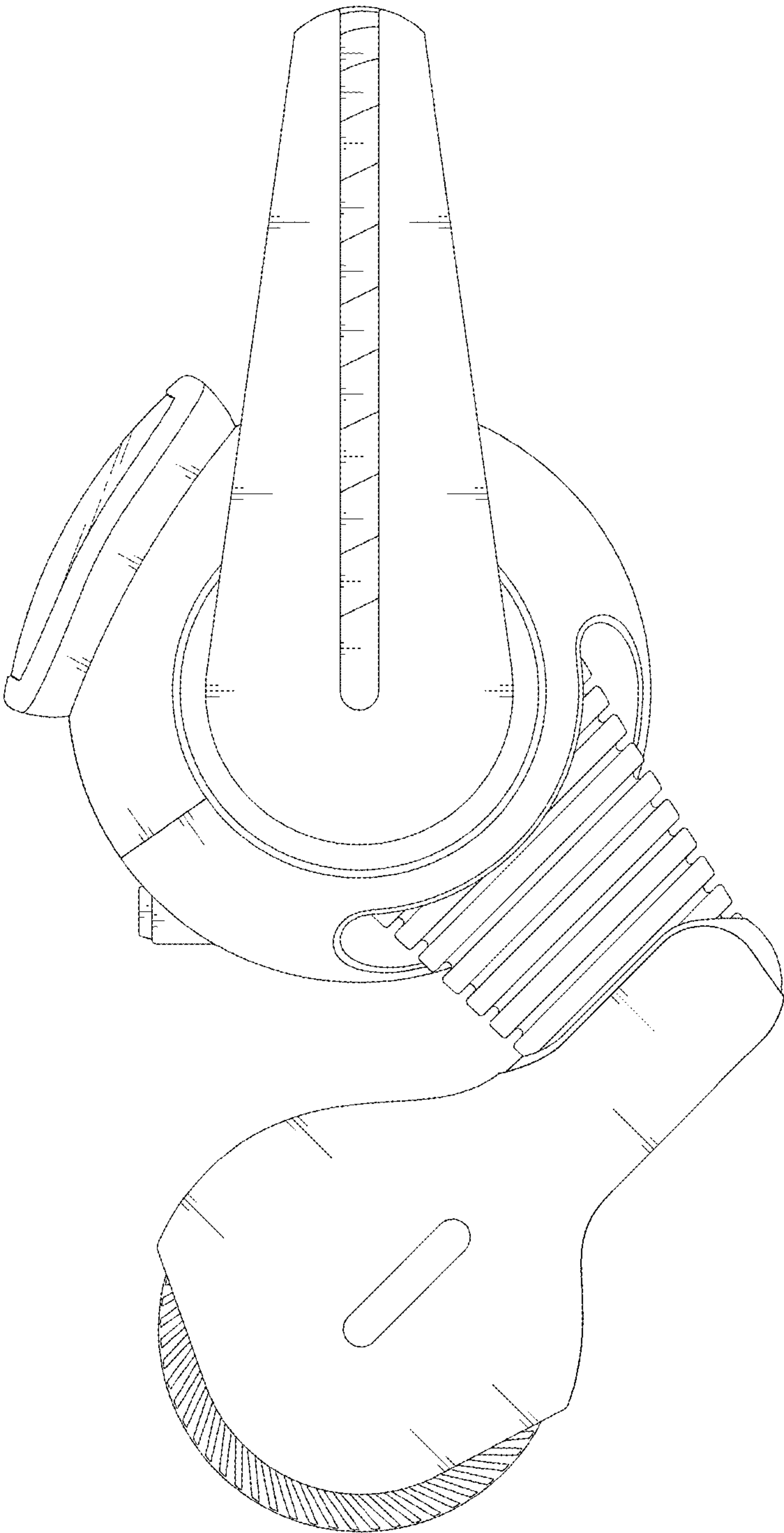


FIG. 6

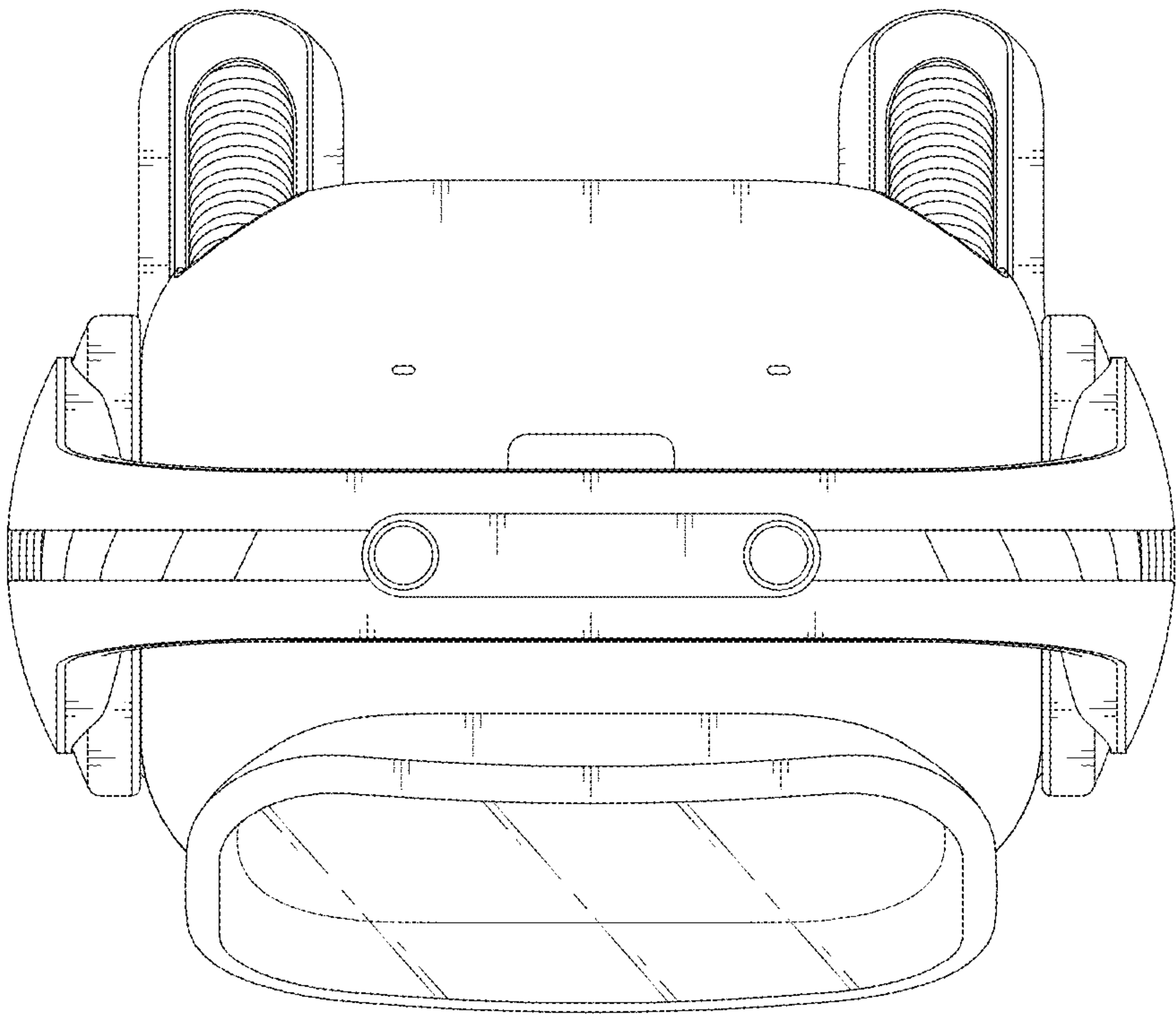


FIG. 7

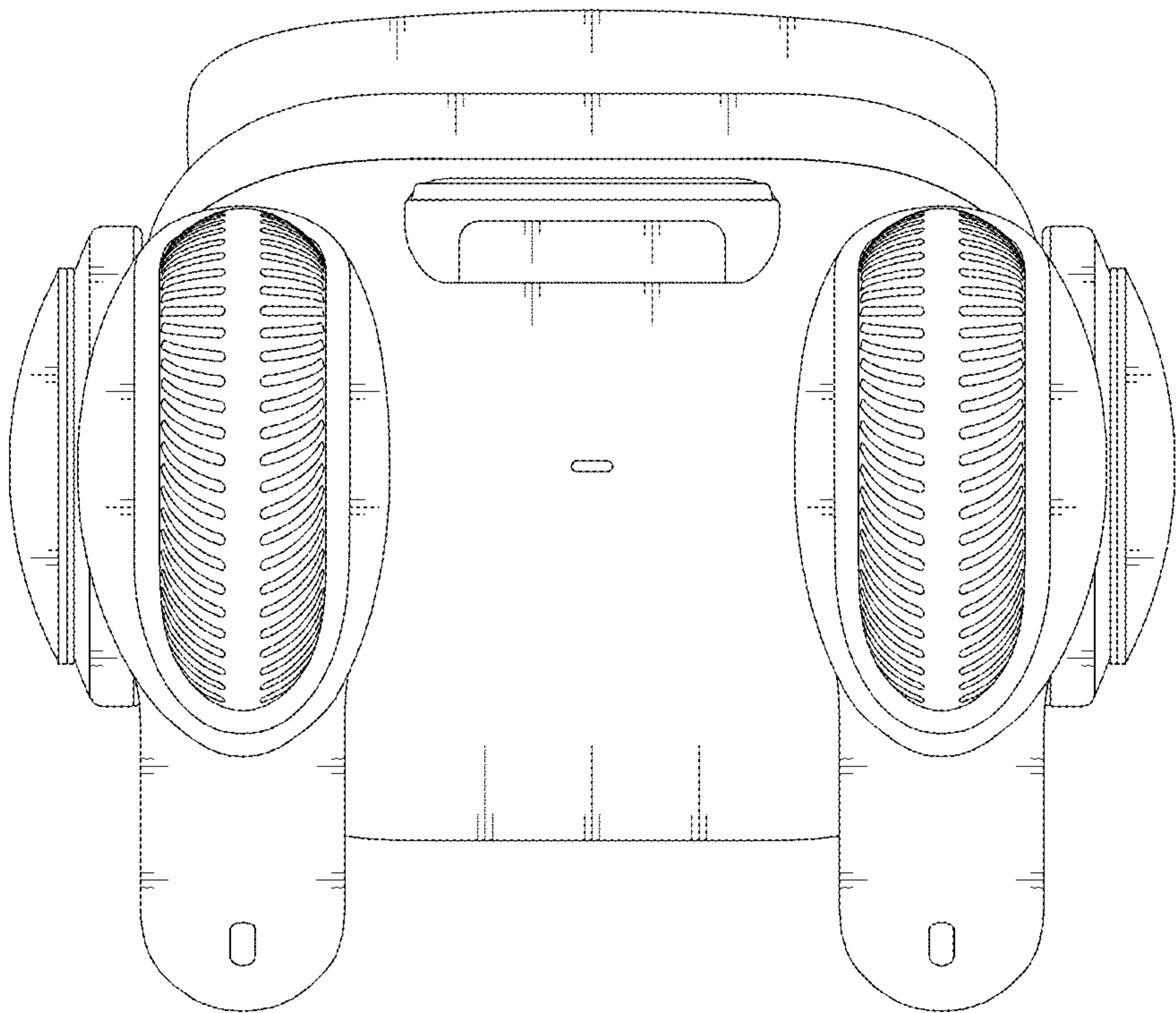


FIG. 8

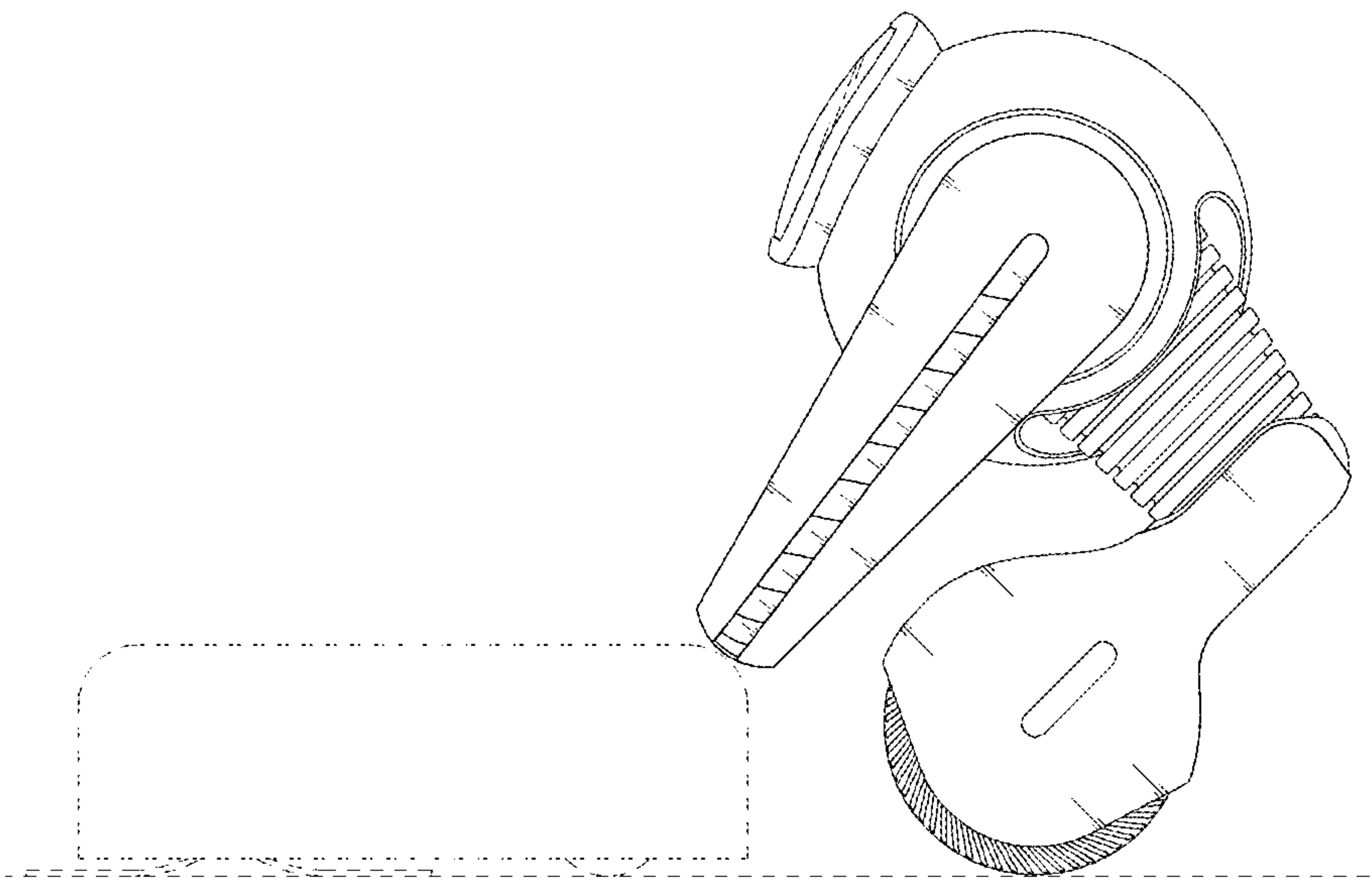


FIG. 9

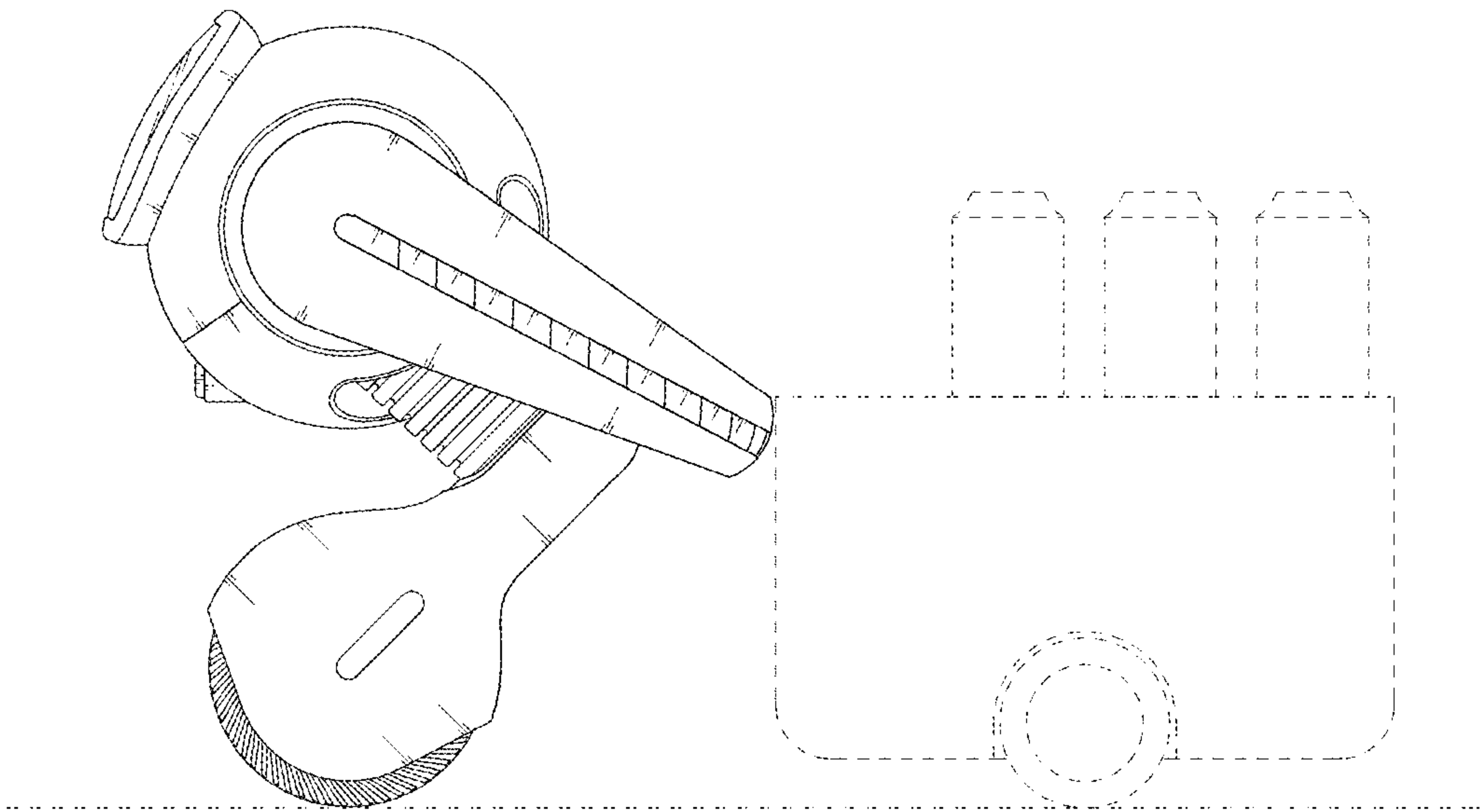


FIG. 10

