



US00D993426S

(12) **United States Design Patent** (10) **Patent No.:** **US D993,426 S**
Goumas et al. (45) **Date of Patent:** **** Jul. 25, 2023**

(54) **BACK BRACE**

- (71) Applicant: **G Force Braces LLC**, Manchester, NH (US)
 (72) Inventors: **Douglas M. Goumas**, Bedford, NH (US); **Michael N. Bordieri, Jr.**, Katonah, NY (US); **Danielle N. Calvello**, Katonah, NY (US)
 (73) Assignee: **G Force Braces, LLC**, Manchester, NH (US)

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

(21) Appl. No.: **29/788,336**

(22) Filed: **May 5, 2021**

(51) **LOC (14) Cl.** **24-02**

(52) **U.S. Cl.**
USPC **D24/190**

(58) **Field of Classification Search**

USPC D24/188-192; D29/100, 101.1, 101.2, D29/101.3

CPC .. A61F 5/026; A61F 5/028; A61F 5/02; A61F 5/0193

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,007,412 A * 4/1991 DeWall A61F 5/028
2/908
5,062,414 A 11/1991 Grim
5,179,942 A 1/1993 Drulias et al.
D358,215 S 5/1995 Reed
D362,926 S * 10/1995 Eriksson D29/101.1
D375,186 S 11/1996 Kim
5,628,721 A 5/1997 Arnold et al.
D443,115 S * 5/2001 Brite D29/100
6,588,020 B1 7/2003 Stewart, III et al.
D496,108 S 9/2004 Machin et al.
D499,806 S * 12/2004 Machin D24/190

(Continued)

OTHER PUBLICATIONS

Aspen Sierra TLSO 464, 4 pages, [retrieved from the Internet], <URL:https://www.aspenmp.com/aspen-sierra-tlso-464.html>, retrieved on Jun. 14, 2021.

(Continued)

Primary Examiner — T Chase Nelson

Assistant Examiner — Kelly L Gross

(74) *Attorney, Agent, or Firm* — Lipsitz & McAllister, LLC

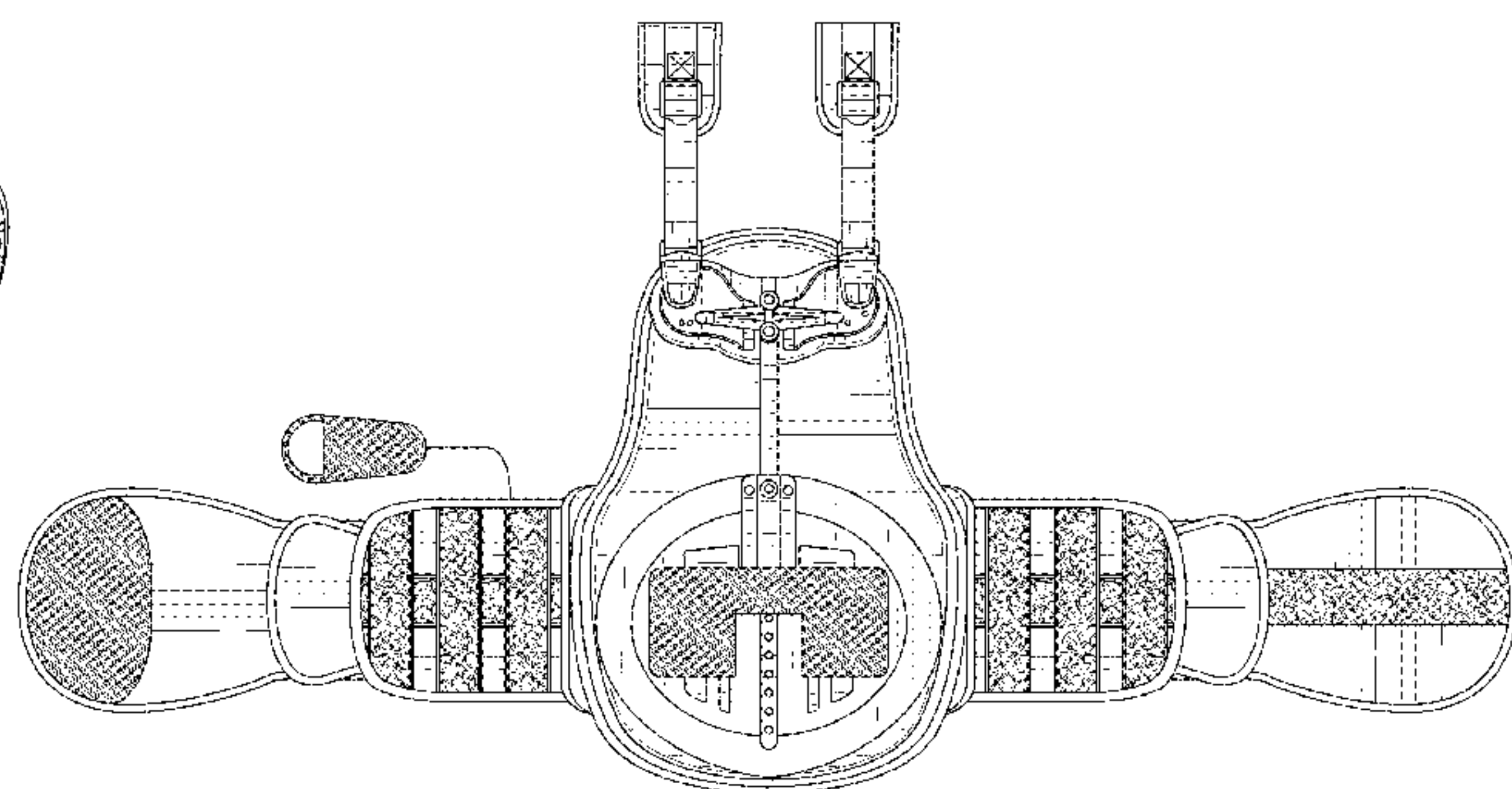
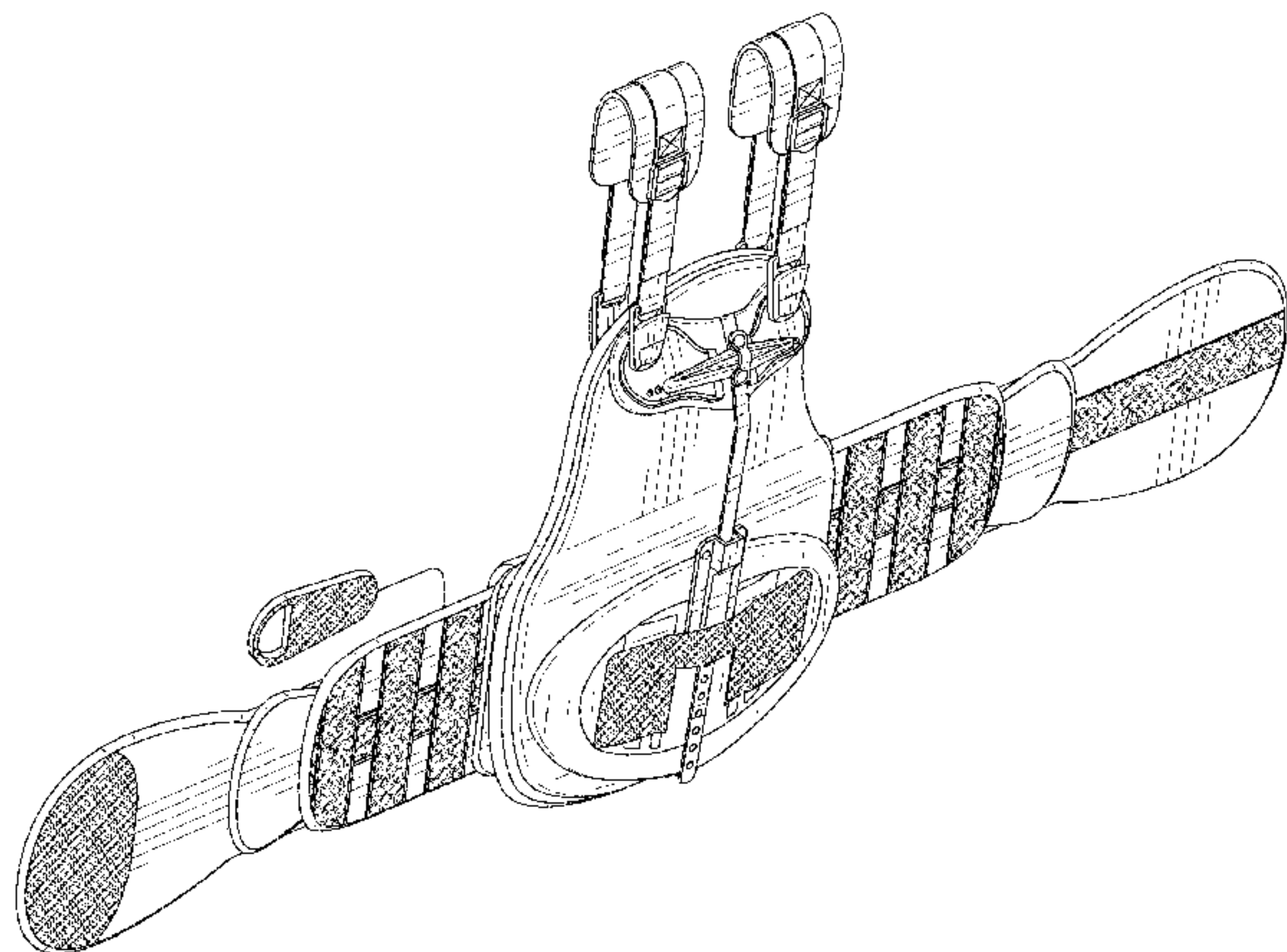
(57) **CLAIM**

The ornamental design for a back brace, as shown and described.

DESCRIPTION

FIG. 1 is a front perspective view of a back brace showing the new design;
 FIG. 2 is a rear perspective view thereof;
 FIG. 3 is a front elevational view thereof;
 FIG. 4 is a rear elevational view thereof;
 FIG. 5 is a left side elevational view thereof;
 FIG. 6 is a right side elevational view thereof;
 FIG. 7 is a top plan view thereof;
 FIG. 8 is a bottom plan view thereof;
 FIG. 9 is an exploded view thereof;
 FIG. 10 is a front perspective view of the back brace with both arms in a shortened position;
 FIG. 11 is a rear perspective view with the back flap in an open position;
 FIG. 12 is a front elevational view of the back brace in a fully extended position; and,
 FIG. 13 is a rear elevational view of the back brace in a fully extended position.
 The dot-dash broken lines in FIG. 9 show an order of assembly of the exploded view, and form no part of the claimed design.

1 Claim, 11 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D501,078 S * 1/2005 Cabana D3/215
 7,001,350 B2 2/2006 Grosso
 7,083,585 B2 8/2006 Latham
 D556,383 S * 11/2007 Petzl D29/101.1
 7,727,172 B2 6/2010 Wang
 D625,019 S 10/2010 Chiang
 D629,115 S 12/2010 Robertson
 D635,682 S 4/2011 Chiang
 D636,494 S 4/2011 Garth et al.
 D636,964 S * 4/2011 Thomas D29/101.1
 D638,949 S 5/2011 Martinez
 8,216,163 B2 7/2012 Edelman
 8,235,925 B2 8/2012 Cavalieri et al.
 8,328,742 B2 12/2012 Bledsoe
 8,372,023 B2 2/2013 Garth et al.
 8,382,693 B1 2/2013 Guldalian
 D677,433 S * 3/2013 Swan D29/100
 8,409,122 B2 4/2013 Cropper et al.
 D695,902 S 12/2013 Daniels et al.
 D699,364 S * 2/2014 Chiang D24/190
 D699,365 S * 2/2014 Pollack D24/190
 8,795,214 B1 8/2014 Conti
 D725,786 S 3/2015 Romo et al.
 D732,241 S * 6/2015 Couzyn D29/101.1
 9,066,792 B2 6/2015 Garth et al.
 D776,287 S * 1/2017 Leonard D29/101.1
 D776,423 S * 1/2017 Zhou D24/190
 D818,132 S * 5/2018 Hille D24/190
 D831,276 S * 10/2018 Pennington, Jr. D29/101.1
 D851,334 S * 6/2019 Green Mullins D29/101.1
 D852,423 S * 6/2019 Pennington, Jr. D29/100
 D895,128 S * 9/2020 Khubani D24/190
 D903,881 S * 12/2020 Ohta D29/101.1
 D911,532 S * 2/2021 Wang D24/190
 D933,302 S * 10/2021 Wilson D29/101.1
 D947,388 S * 3/2022 Katoh D29/100
 D948,061 S * 4/2022 Sun D24/190
 D949,349 S * 4/2022 Reiner D24/190
 D949,482 S * 4/2022 Katoh D29/100
 D950,074 S * 4/2022 Thomas D24/190
 D950,075 S * 4/2022 Thomas D24/190
 D950,076 S * 4/2022 Katoh D29/100
 D954,976 S * 6/2022 Li D24/190
 D958,374 S * 7/2022 Katoh D29/100
 D960,381 S * 8/2022 Kobayashi D24/190
 D967,968 S * 10/2022 Fried A61F 5/0102
 D24/190
 D968,623 S * 11/2022 Arai A61F 5/026
 D29/100
 2008/0045873 A1 * 2/2008 Zours A61F 5/028
 602/19
 2009/0138064 A1 5/2009 Horn
 2009/0163841 A1 6/2009 Garth
 2010/0204630 A1 * 8/2010 Sandifer A61F 5/026
 602/19
 2015/0328034 A1 * 11/2015 Ingimundarson A61F 5/0102
 602/16
 2016/0051392 A1 2/2016 Dudkiewicz et al.
 2020/0268543 A1 * 8/2020 Santaniello A61F 5/028

OTHER PUBLICATIONS

Aspen Active P-TLSO, 4 pages, [retrieved from the Internet], <URL:https://www.aspenmp.com/aspenn-active-p-tlso.html>, retrieved on Jun. 14, 2021.
 Aspen TLSO, 4 pages, [retrieved from the Internet], <URL:https://www.aspenmp.com/aspenn-tlso.html>, retrieved on Jun. 14, 2021.
 Evergreen 456 TLSO, 4 pages, [retrieved from the Internet], <URL:https://www.aspenmp.com/evergreentm-456-tlso.html>, retrieved on Jun. 14, 2021.
 Summit 456 TLSO, 5 pages, [retrieved from the Internet], <URL:https://www.aspenmp.com/summittm-456-tlso.html>, retrieved on Jun. 14, 2021.
 Contour TLSO SPK Complete, 5 pages, [retrieved from the Internet], <URL:https://www.aspenmp.com/contourtm-tlso.html>, retrieved on Jun. 14, 2021.
 Horizon 456 TLSO, 5 pages, [retrieved from the Internet], <URL:https://www.aspenmp.com/horizontm-456-tlso.html>, retrieved on Jun. 14, 2021.
 Vista 464 TLSO, 4 pages, [retrieved from the Internet], <URL:https://www.aspenmp.com/vista-464-tlso.html>, retrieved on Jun. 14, 2021.
 Aspen OTS TLSO 457, 4 pages, [retrieved from the Internet], <URL:https://www.aspenmp.com/aspenn-457-tlso.html>, retrieved on Jun. 14, 2021.
 Sleeq Max Universal TLSO, 3 pages, [retrieved from the Internet], <URL:https://www.thuasneusa.com/product/sleeq-max/>, retrieved on Jun. 14, 2021.
 Sleeq Flex Universal TLSO, 3 pages, [retrieved from the Internet], <URL:https://www.thuasneusa.com/product/sleeq-flex/>, retrieved on Jun. 14, 2021.
 OsteoMed Acute Universal Osteoporosis TLSO, 3 pages, [retrieved from the Internet], <URL:https://www.thuasneusa.com/product/osteomed-acute/>, retrieved on Jun. 14, 2021.
 Boa Dual TLSO, 3 pages, [retrieved from the Internet], <URL:https://www.thuasneusa.com/product/boa-dual-tlso/>, retrieved on Jun. 14, 2021.
 Horizon 627 Lumbar, 1 page, [retrieved from the Internet], <URL:http://www.aspenmp.com/products/lower-spine/horizon-627-lumbar/>, retrieved on Apr. 1, 2016.
 Endeavor 37, L0637 Back Brace—Spectrum Medical, 4 pages, [retrieved from the Internet], <URL:http://www.spectrum4med.com/shop/endeavor-lso-l0637-back-brace/>, retrieved on Apr. 1, 2016.
 Breg Aspen Horizon 627 Lumbar Support, Freedom Braces, 4 pages, [retrieved from the Internet], <URL:http://freedombraces.com/breg-horizon-627-lumbar-back-brace.html>, retrieved on Apr. 1, 2016.
 Freedom Spinal LSO back brace, Freedom Spinal LSO, 2 pages, [retrieved from the Internet], <URL:http://www.mmarmedical.com/Freedom-Spinal-LSO-p/f631.htm>, retrieved on Apr. 1, 2016.
 Hybrid HC Lumbar Support Brace, 2 pages, [retrieved from the Internet], <URL:http://www.mmarmedical.com/Hybrid-HC-Lumbar-Support-Brace-p/5000001.htm>, retrieved on Apr. 4, 2016.

* cited by examiner

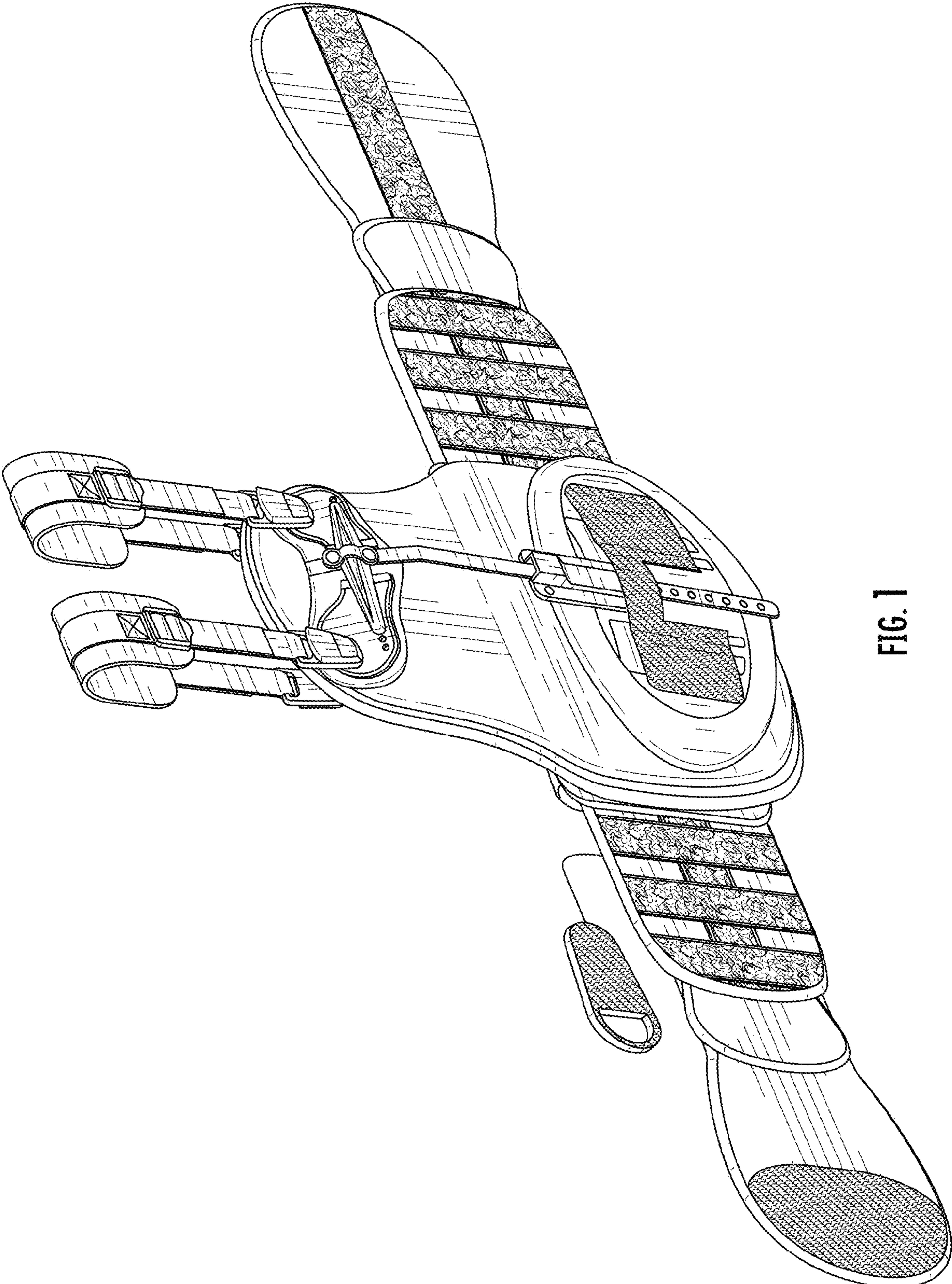


FIG. 1

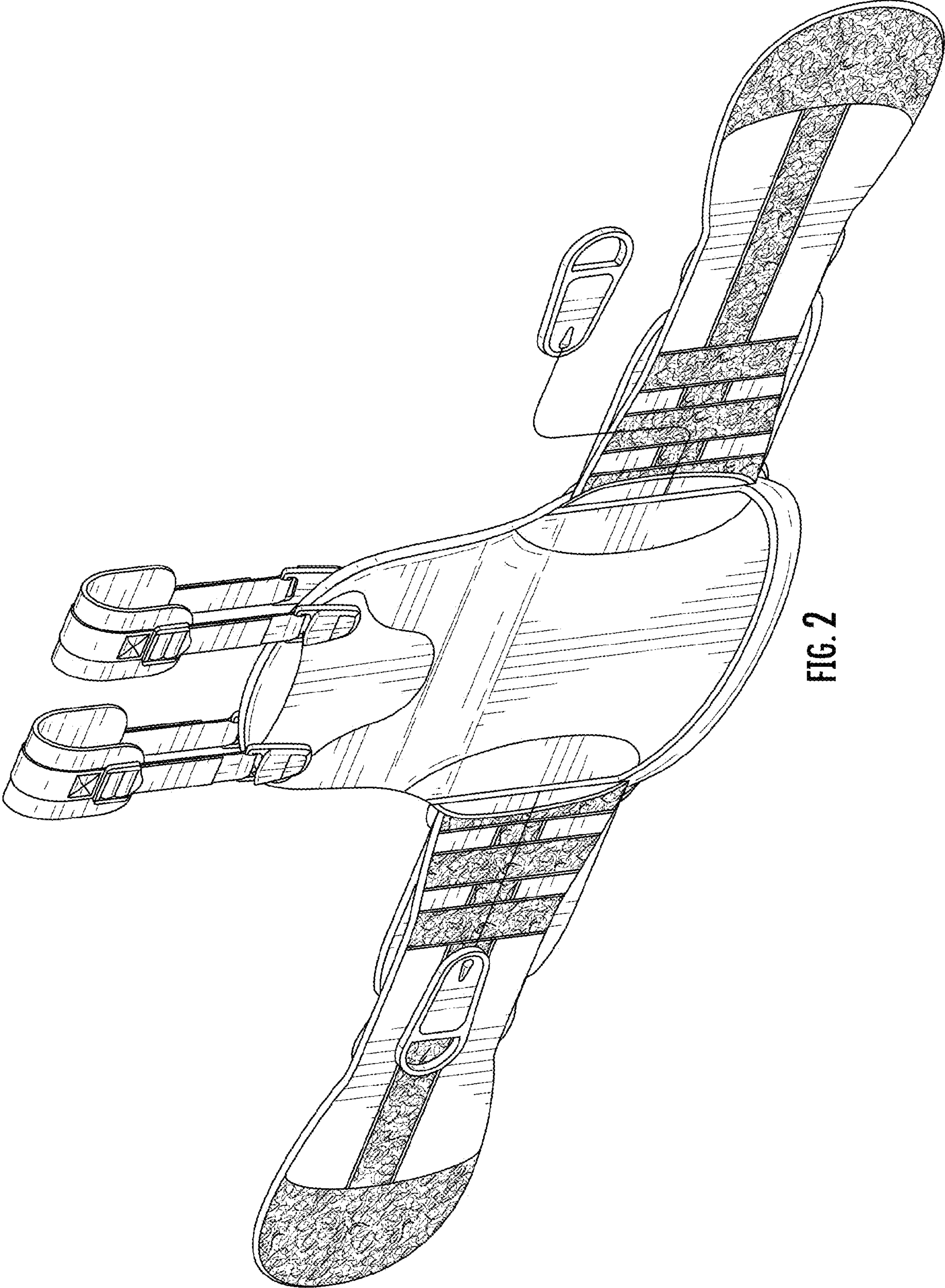


FIG. 2

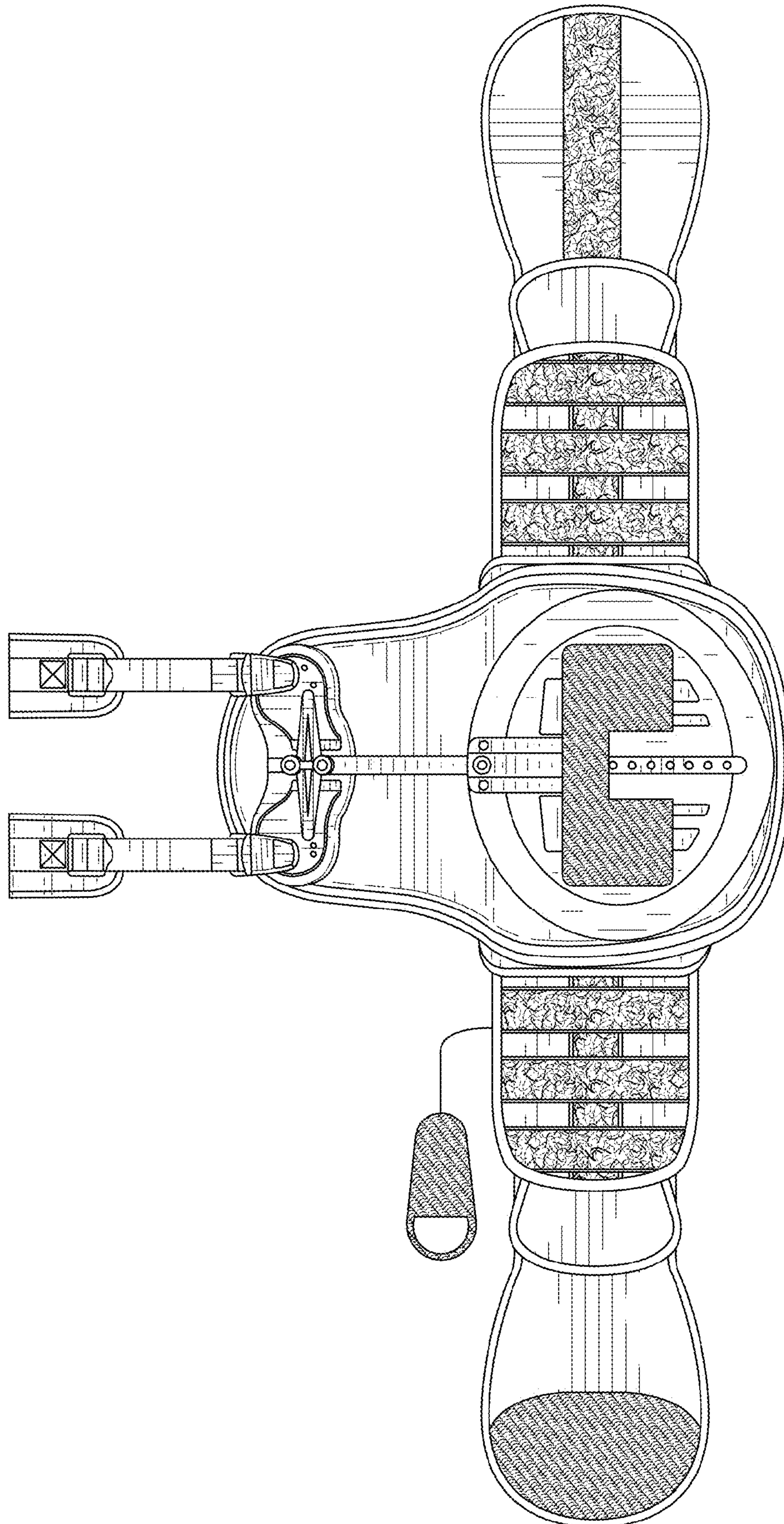


FIG. 3

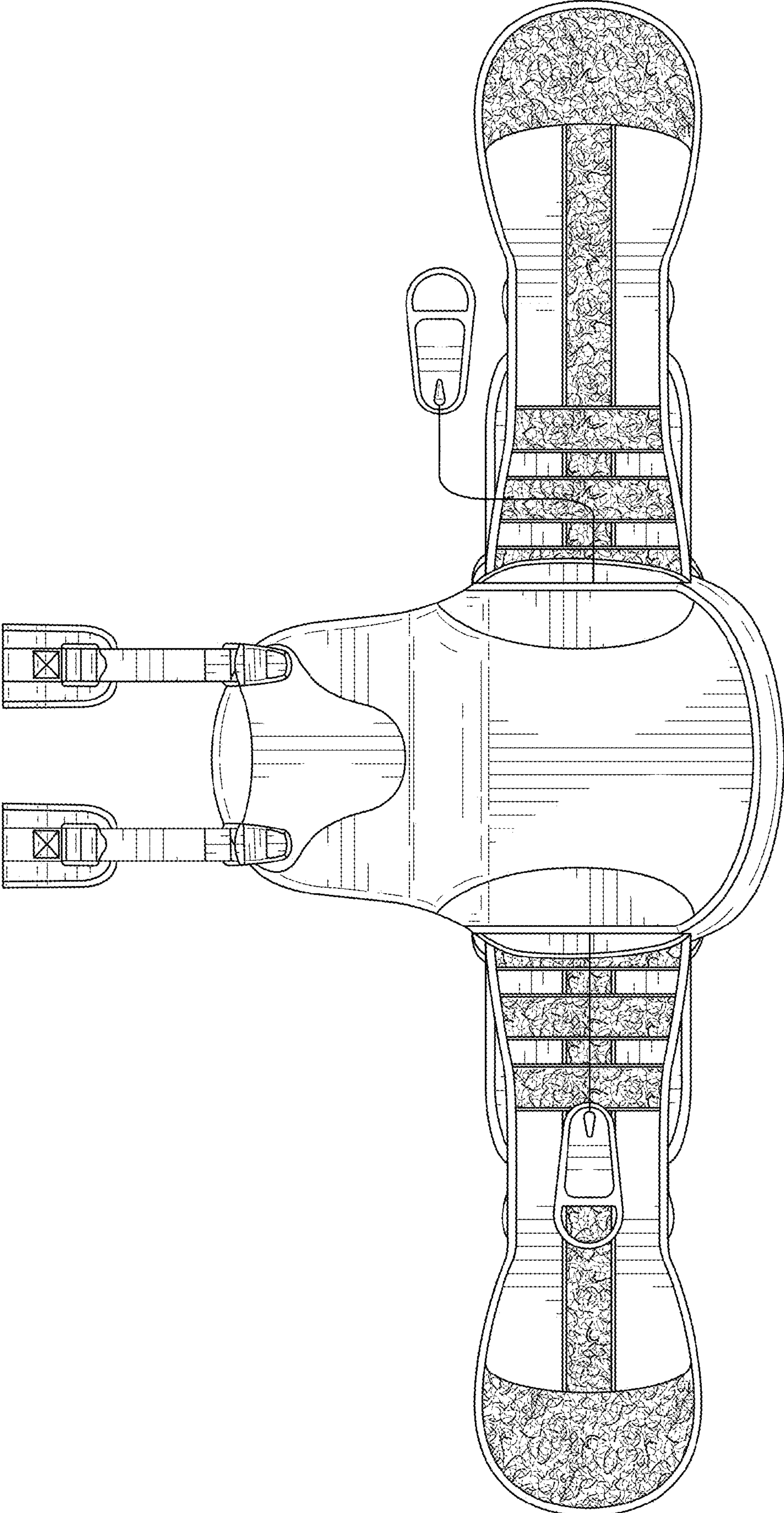


FIG. 4

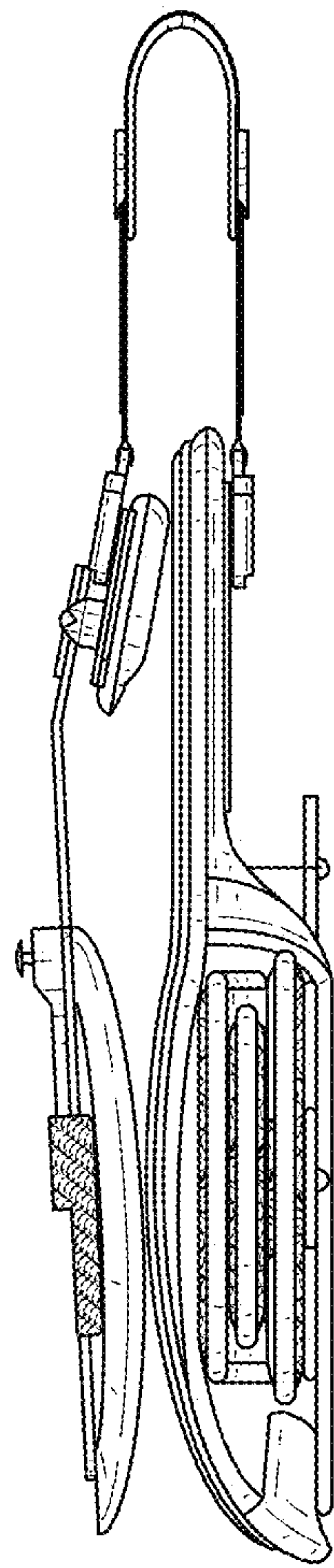


FIG. 5

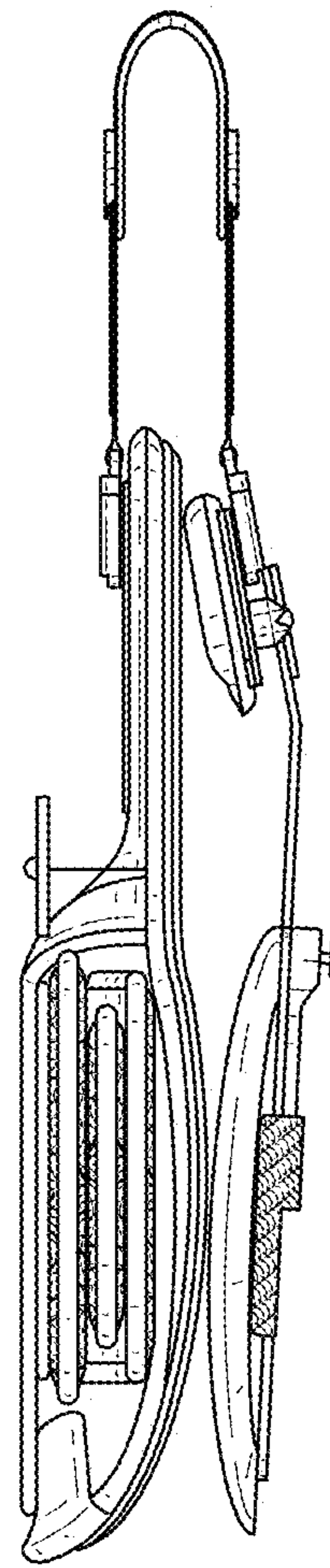


FIG. 6

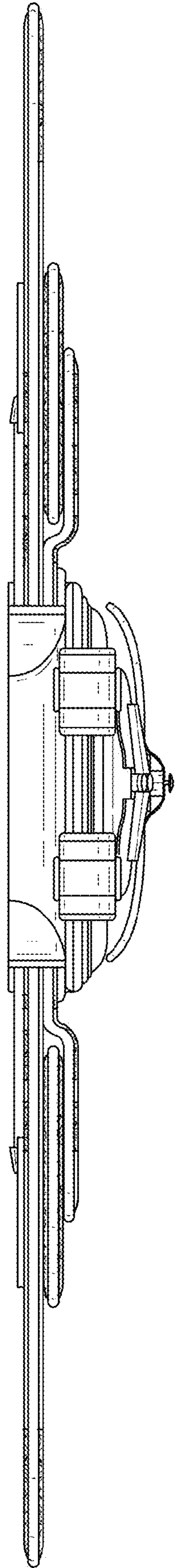


FIG. 7

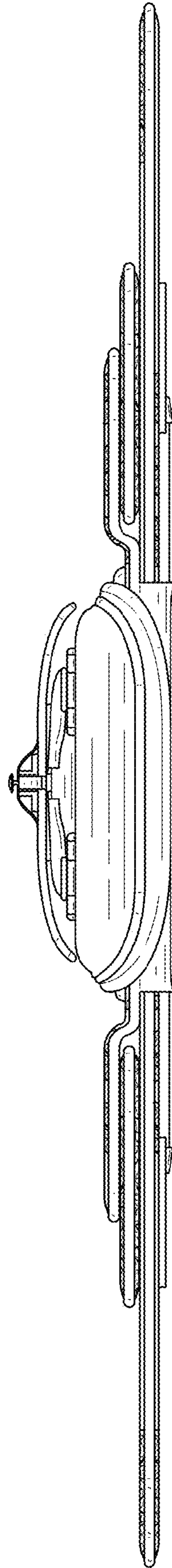


FIG. 8

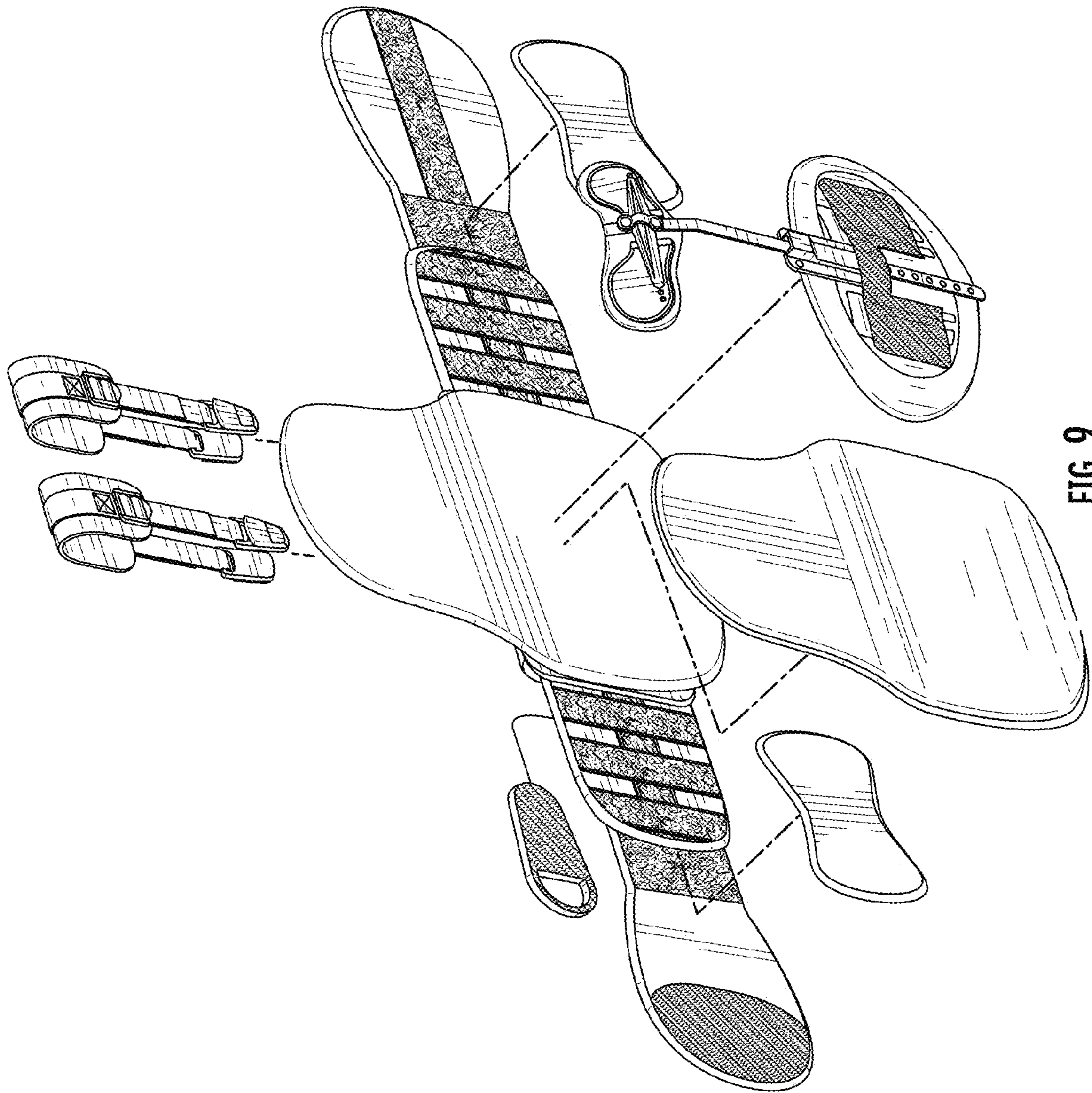


FIG. 9

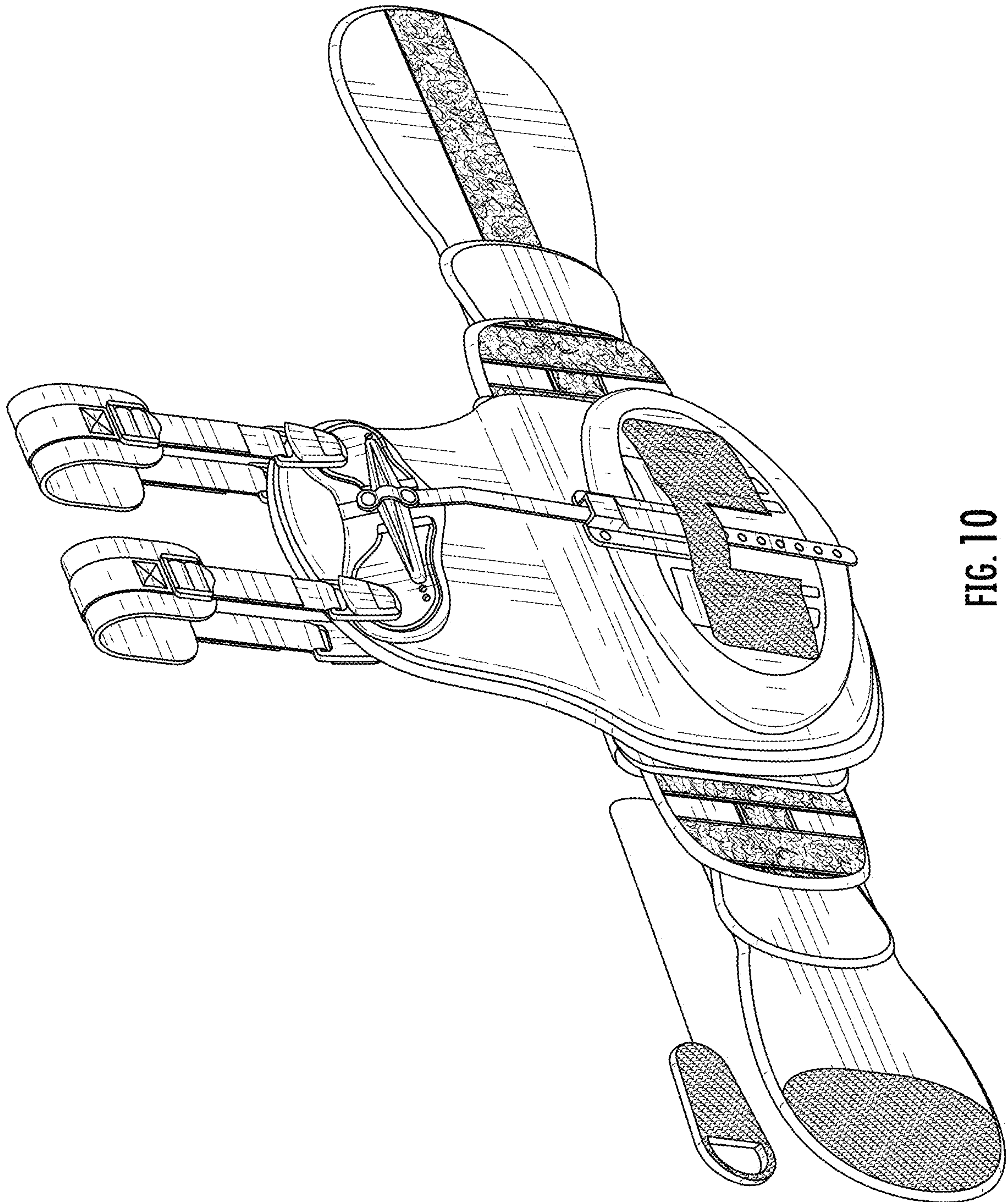


FIG. 10

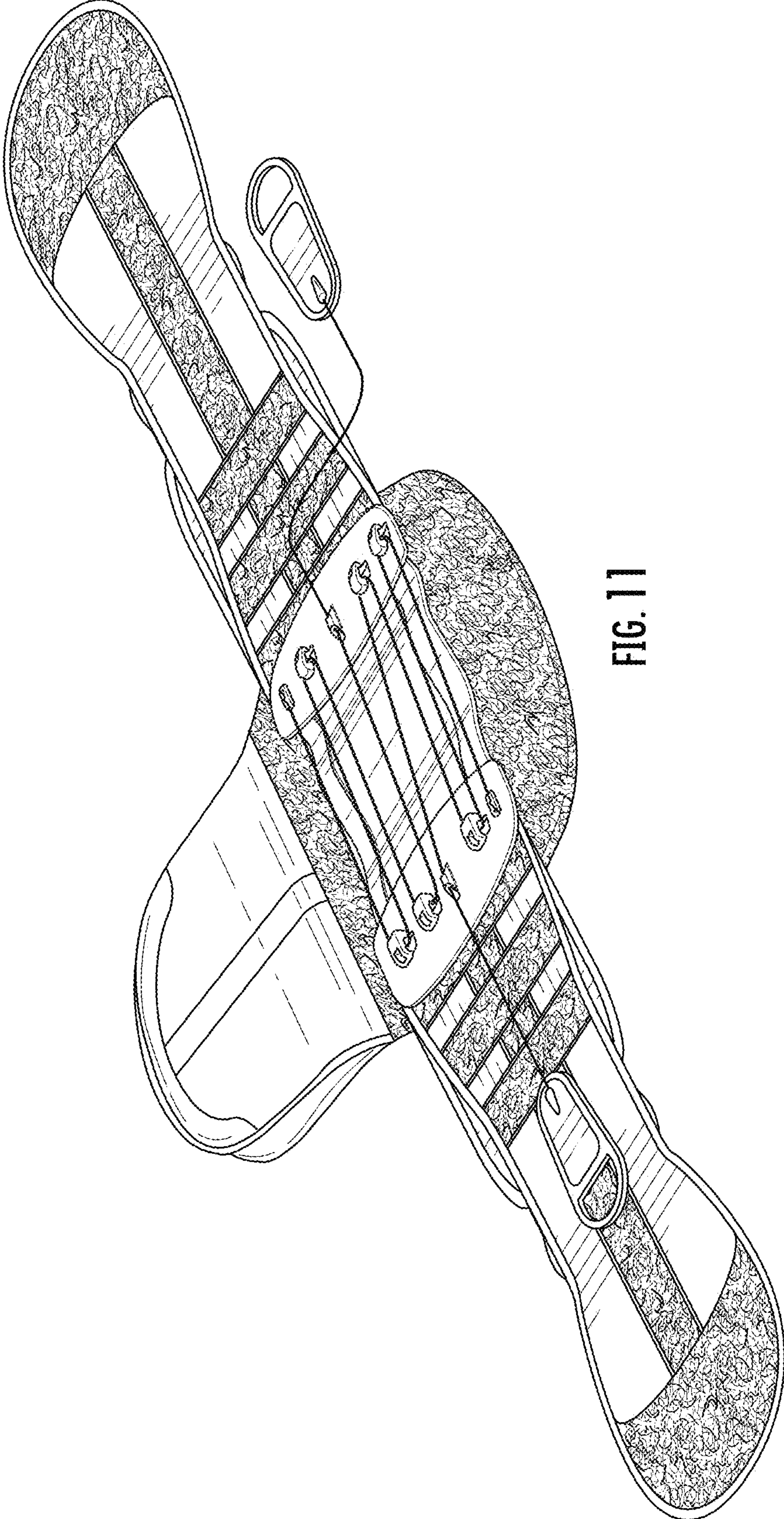


FIG. 11

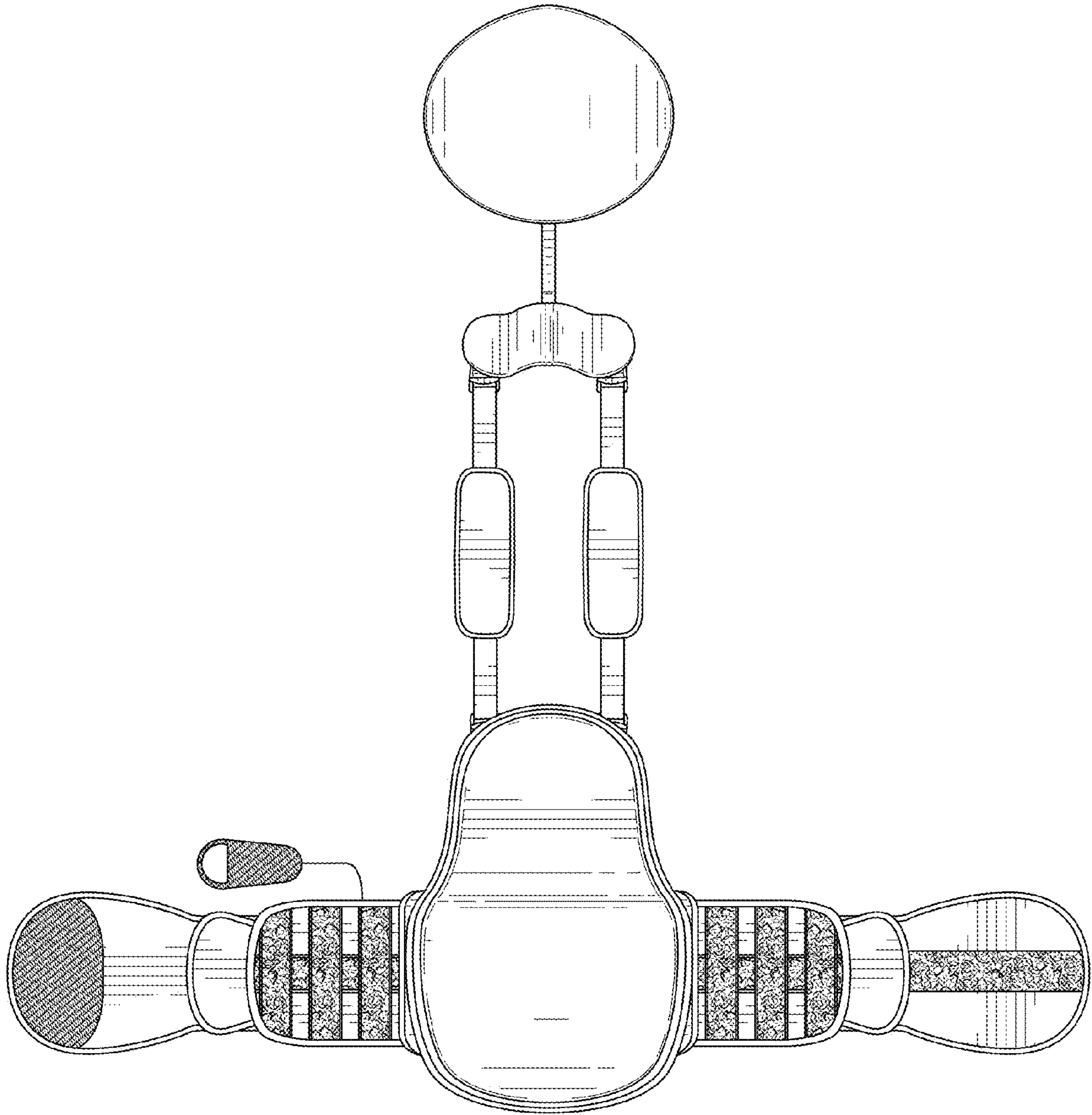


FIG. 12

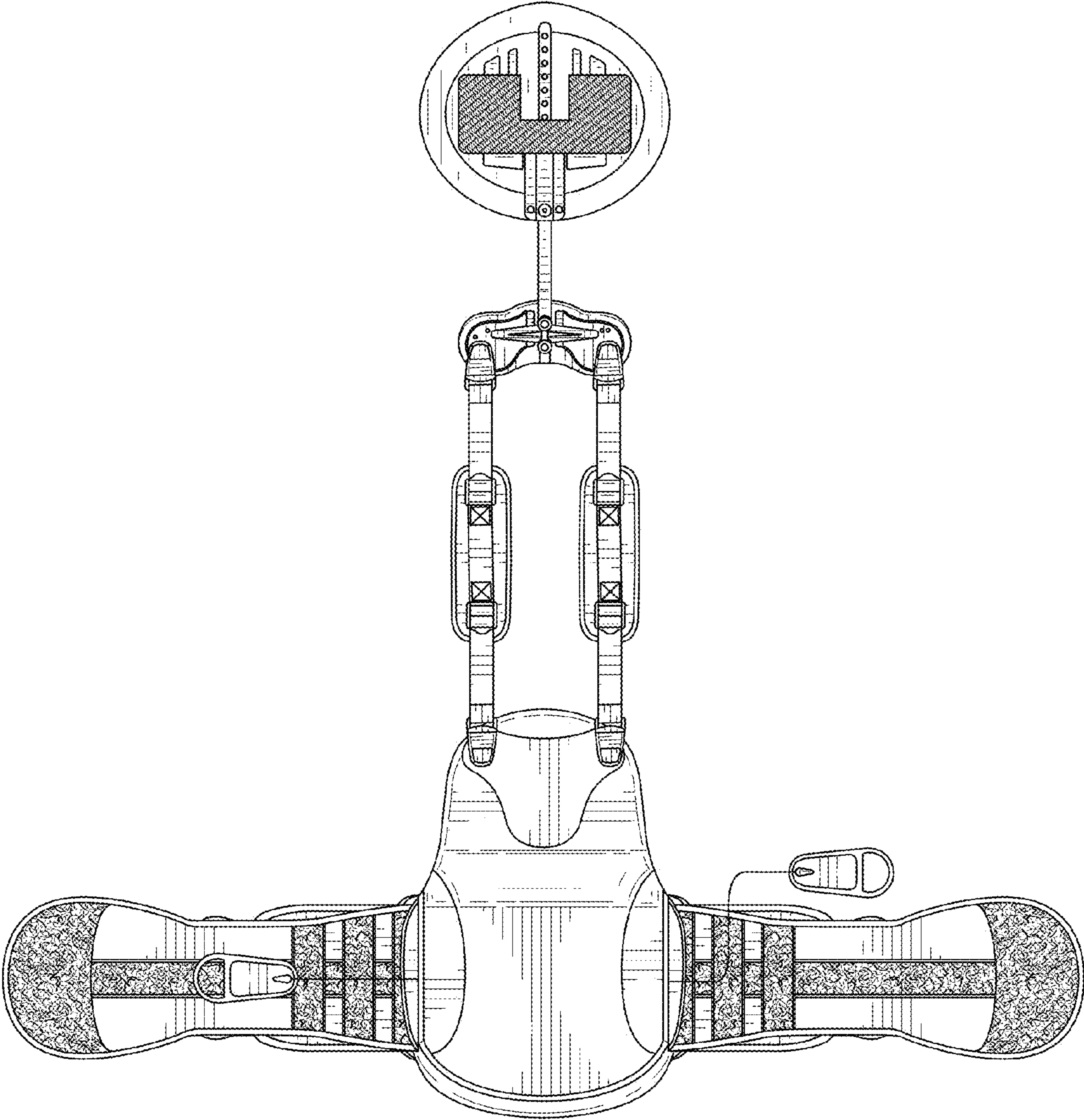


FIG. 13