



US00D895703S

(12) **United States Design Patent** (10) **Patent No.:** **US D895,703 S**
Lundbäck et al. (45) **Date of Patent:** **** Sep. 8, 2020**

(54) **ROBOT WITH FLEXIBLE ARMS**
(71) Applicant: **ABB Schweiz AG**, Baden (CH)
(72) Inventors: **Daniel Lundbäck**, Vasteras (SE); **Jeroen Derkx**, Vasteras (SE); **Johan Ernlund**, Västerås (SE); **Stefan Danielsson**, Vasteras (SE); **Mats Olov Olsson**, Vasteras (SE)
(73) Assignee: **ABB Schweiz AG**, Baden (CH)
(**) Term: **15 Years**
(21) Appl. No.: **29/661,920**
(22) Filed: **Aug. 31, 2018**

(30) **Foreign Application Priority Data**
Mar. 2, 2018 (EM) 004736270-0003
(51) **LOC (12) Cl.** **15-99**
(52) **U.S. Cl.**
USPC **D15/199**
(58) **Field of Classification Search**
USPC D15/199; D21/578-583, 621, 622;
D32/21
CPC B25J 5/007; B60B 19/006; B62D 57/024;
H01F 7/0221; Y10S 901/01
See application file for complete search history.

(56) **References Cited**
U.S. PATENT DOCUMENTS
D433,043 S * 10/2000 Uematsu D15/199
D461,855 S * 8/2002 Ewert D21/533
D478,921 S * 8/2003 Kullborg D15/199
D642,765 S * 8/2011 Long D34/28
D650,819 S * 12/2011 Liu D15/199
8,516,918 B2 * 8/2013 Jacobsen A61F 2/68
74/490.01
9,308,652 B2 * 4/2016 Pehlivan B25J 17/0266

D759,139 S * 6/2016 Brogardh D15/199
D779,146 S * 2/2017 Tokai D15/199
2003/0121350 A1 * 7/2003 Hvittfeldt B25J 17/0266
74/490.01
2010/0005919 A1 * 1/2010 Breu B25J 17/0266
74/490.05
2010/0122602 A1 * 5/2010 Marcroft B25J 17/0216
74/490.03
2010/0186534 A1 * 7/2010 Kinoshita B25J 17/0266
74/490.06
2011/0033275 A1 * 2/2011 Lehmann B25J 15/0616
414/737
2011/0113914 A1 * 5/2011 Zhang B25J 9/107
74/490.01
2011/0120254 A1 * 5/2011 Zhang B25J 17/0266
74/490.04
2011/0154936 A1 * 6/2011 Zhao B25J 9/1065
74/490.04

(Continued)

Primary Examiner — Patricia A Palasik
(74) *Attorney, Agent, or Firm* — Whitmyer IP Group LLC

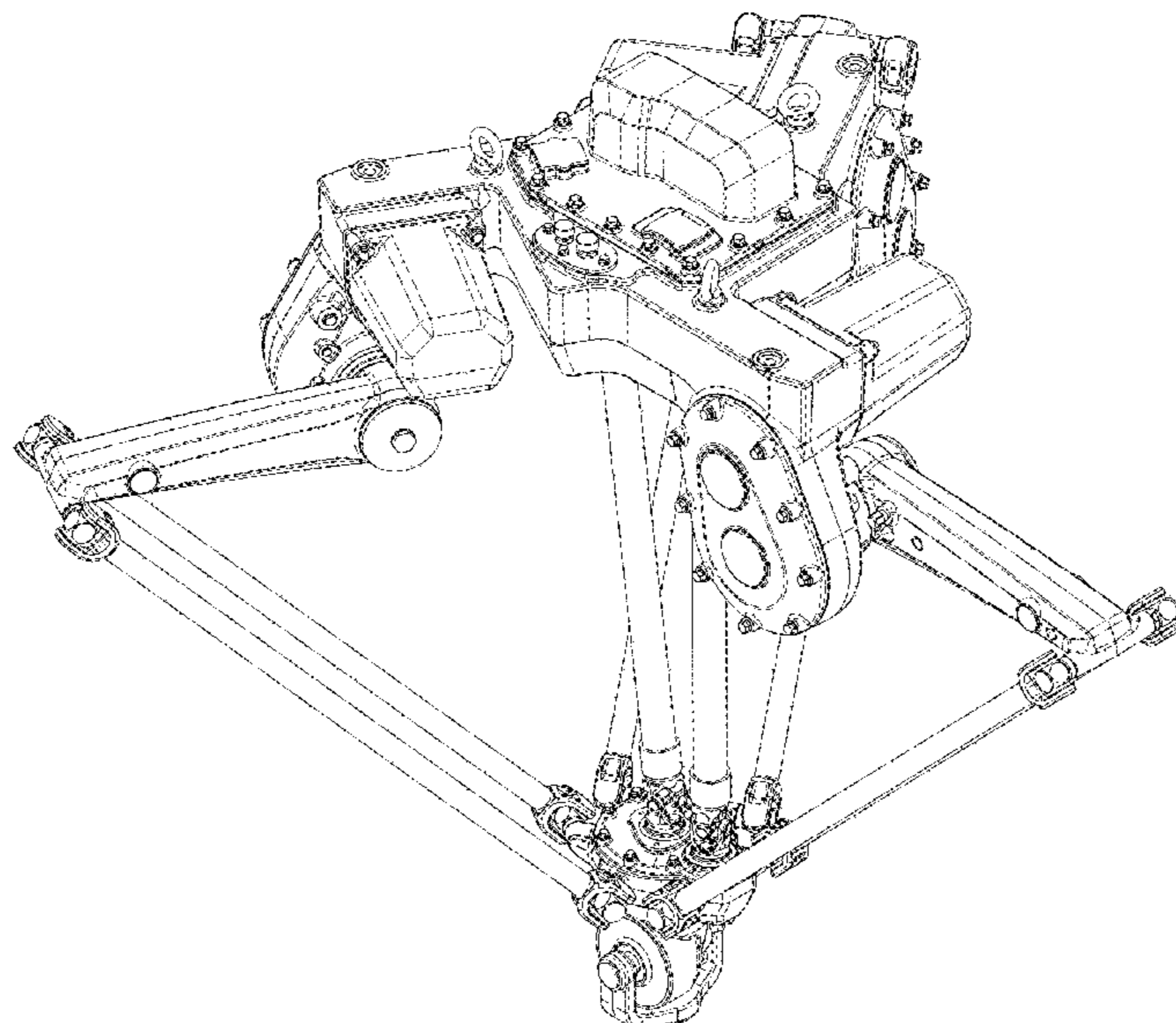
(57) **CLAIM**

The ornamental design for a robot with flexible arms, as shown and described.

DESCRIPTION

FIG. 1 is a front isometric view of a robot with flexible arms in accordance with the new design;
FIG. 2 is a front side elevational view thereof;
FIG. 3 is a rear side 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;
FIG. 7 is a bottom plan view thereof;
FIG. 8 is a front side elevational view thereof; and,
FIG. 9 is a rear side elevational view thereof.
The broken lines in the drawings depict portions of the robot with flexible arms that form no part of the claimed design.

1 Claim, 9 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

2012/0060637 A1* 3/2012 Kinoshita B25J 9/0051
74/490.03
2012/0168593 A1* 7/2012 Mekid F16M 11/043
248/398
2013/0017050 A1* 1/2013 Fukudome B25J 17/0266
414/729
2013/0118281 A1* 5/2013 Duplouy B25J 17/0266
74/108
2013/0164107 A1* 6/2013 Pehlivan B25J 17/0266
414/732
2013/0319157 A1* 12/2013 Yang B25J 17/0266
74/490.03
2018/0236655 A1* 8/2018 Nakanishi B25J 9/0063
2019/0308313 A1* 10/2019 Lundback F16H 57/02

* cited by examiner

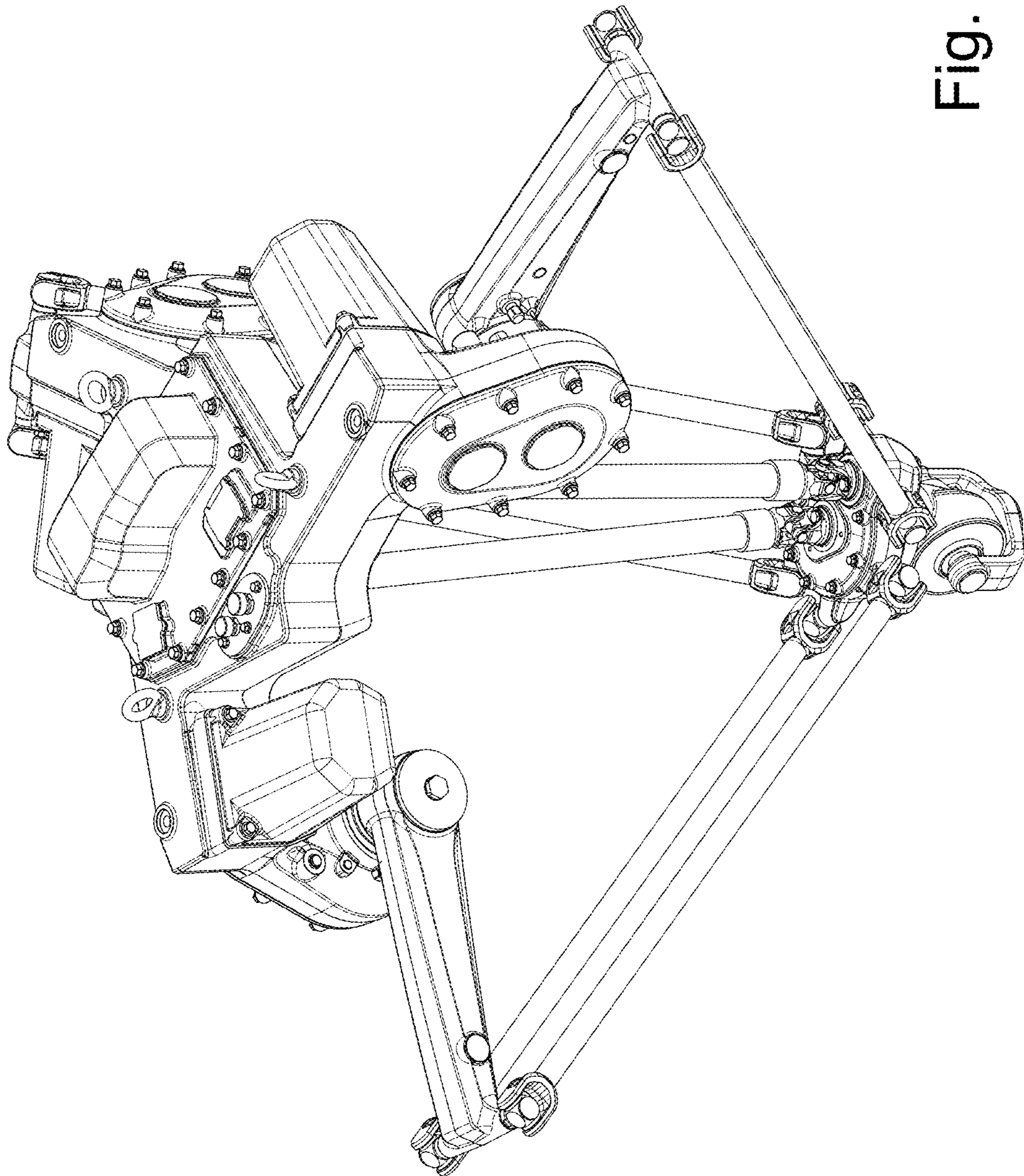


Fig. 1

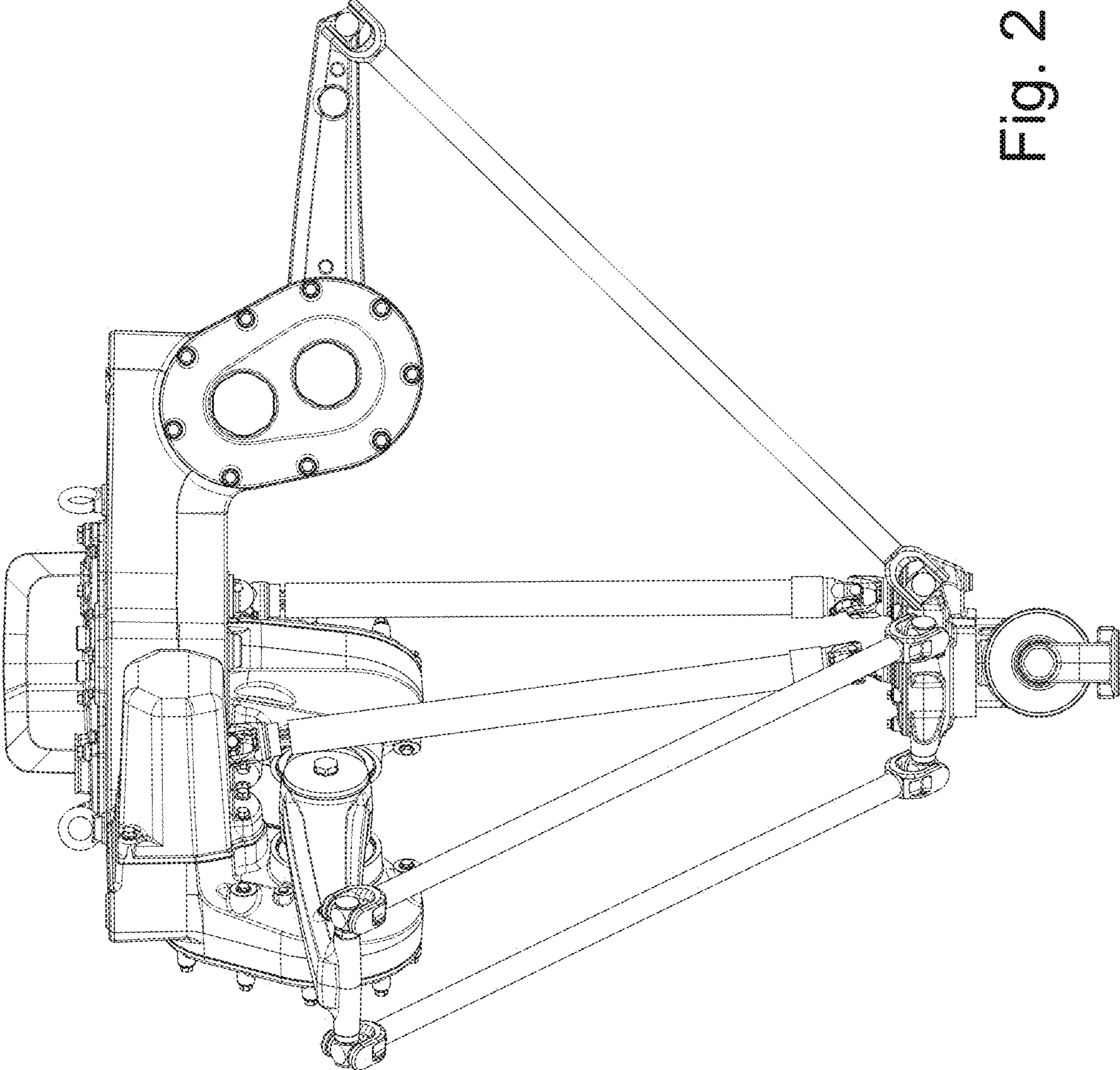


Fig. 2

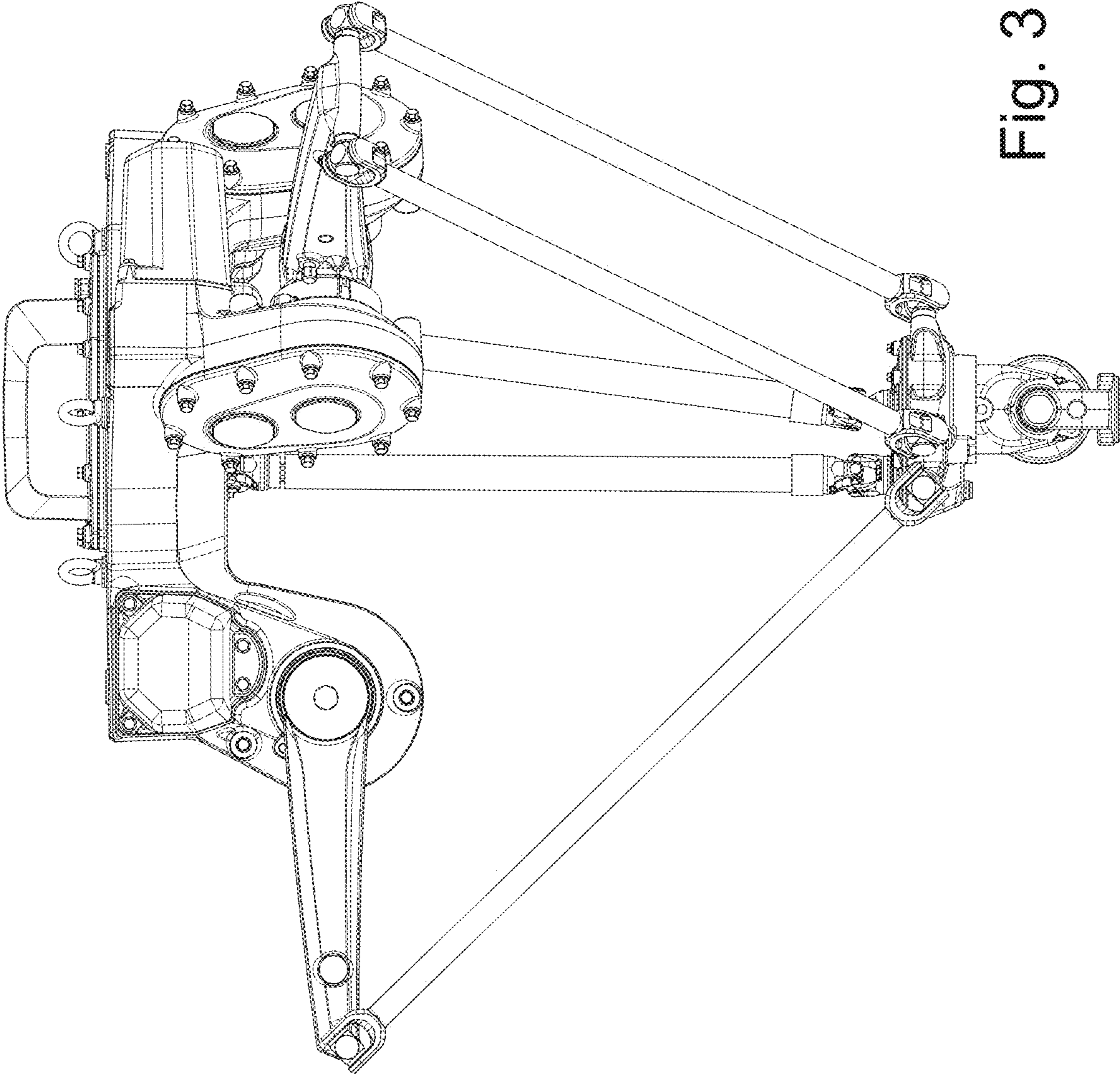


Fig. 3

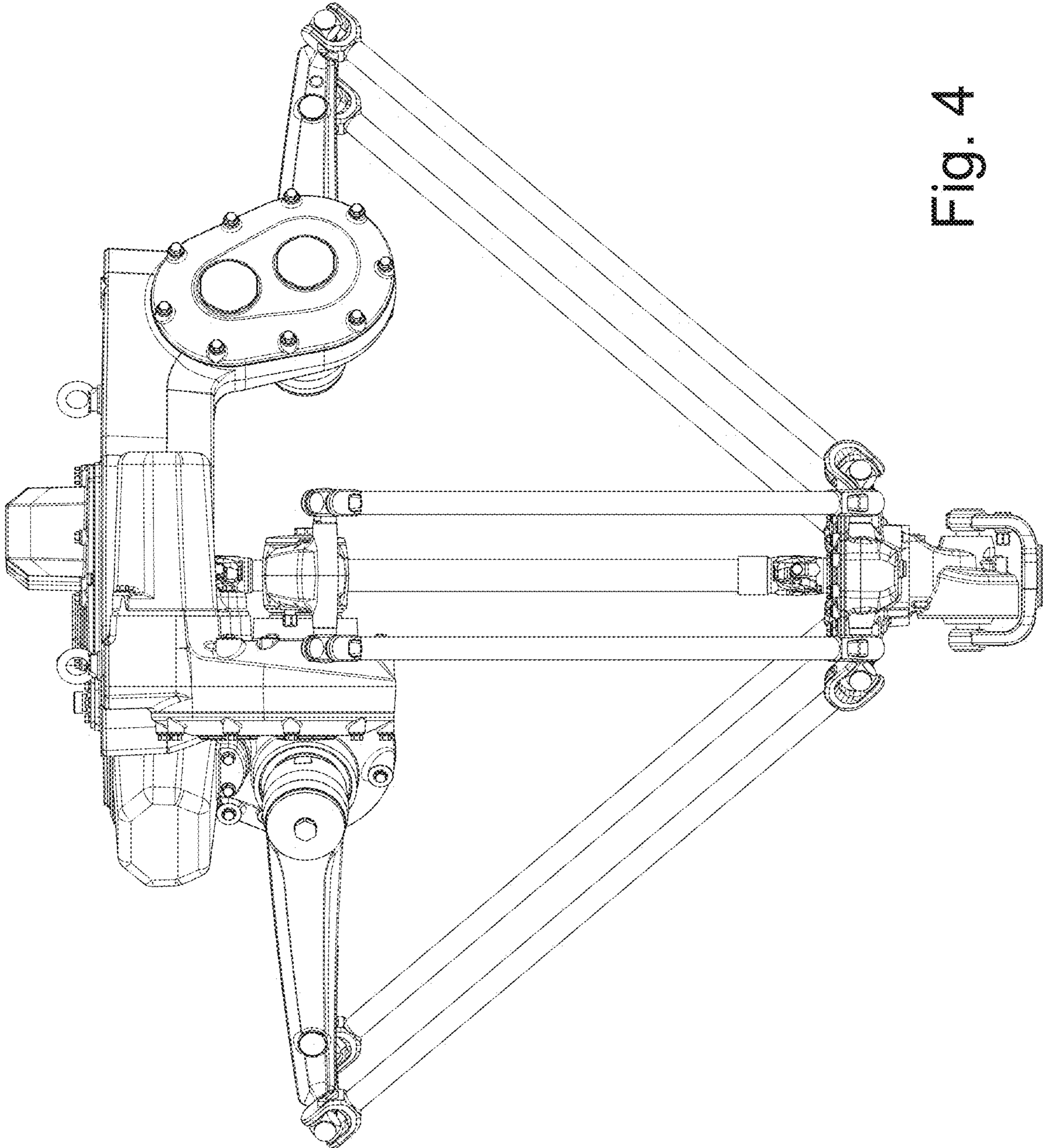


Fig. 4

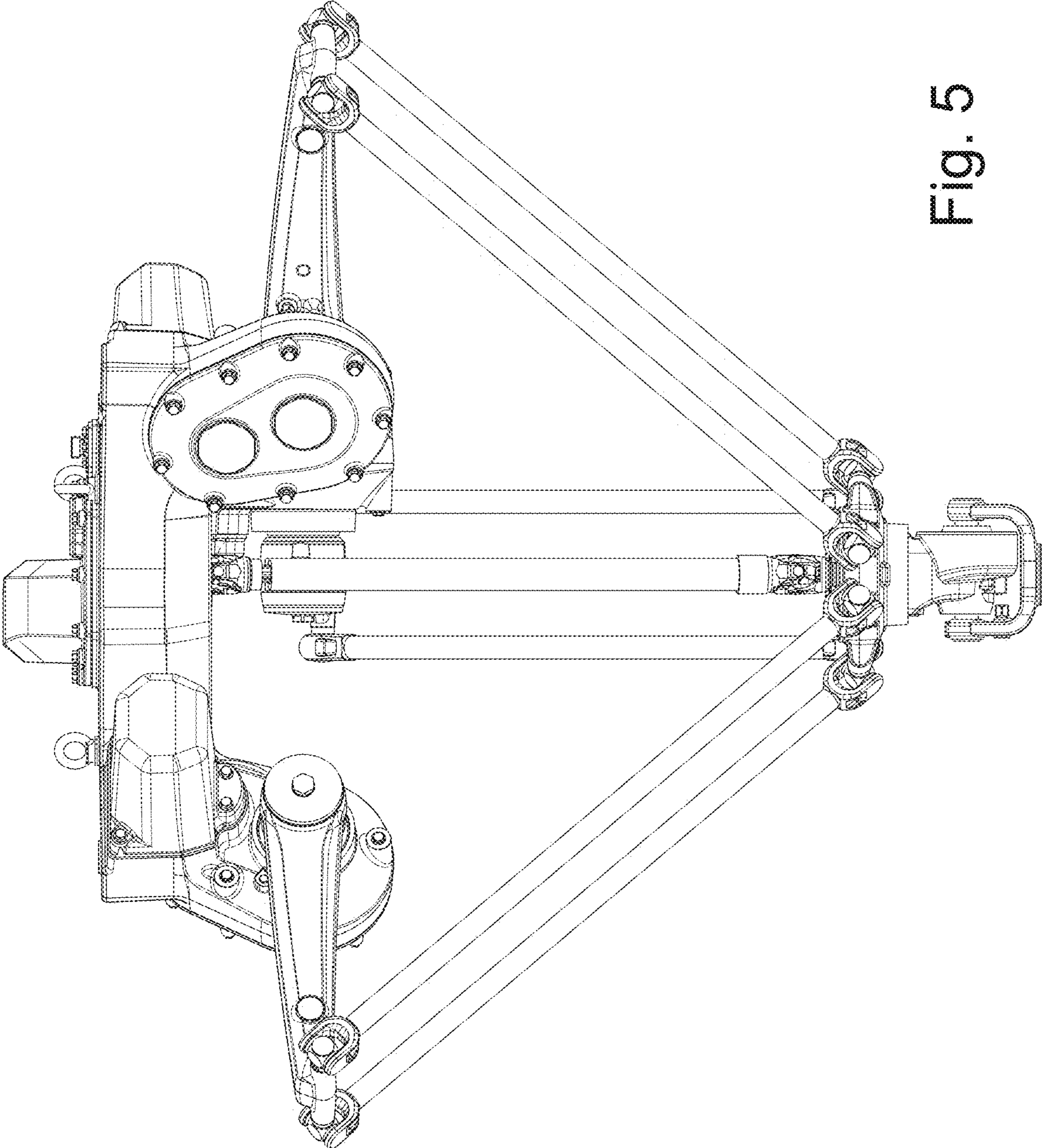


Fig. 5

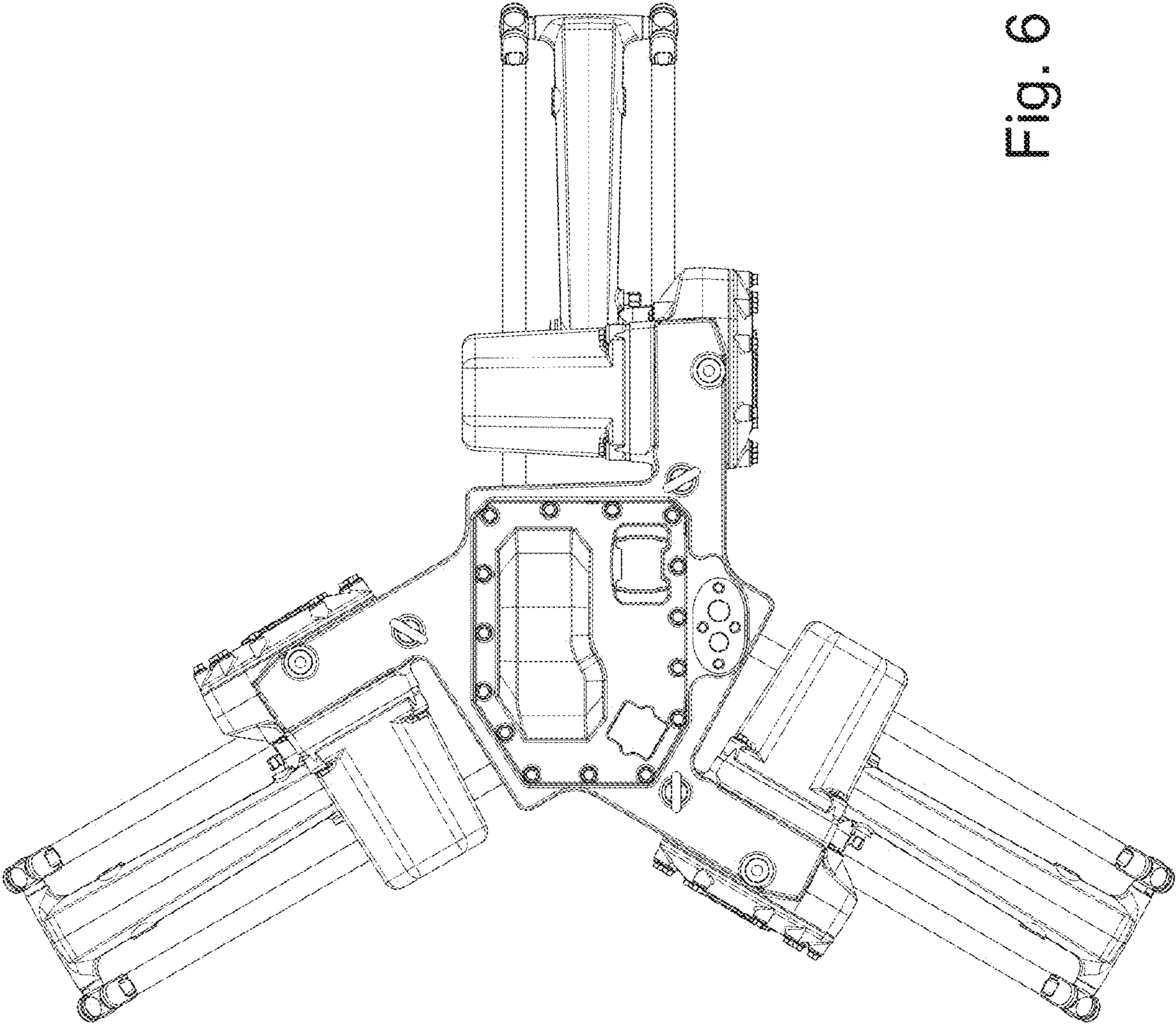


Fig. 6

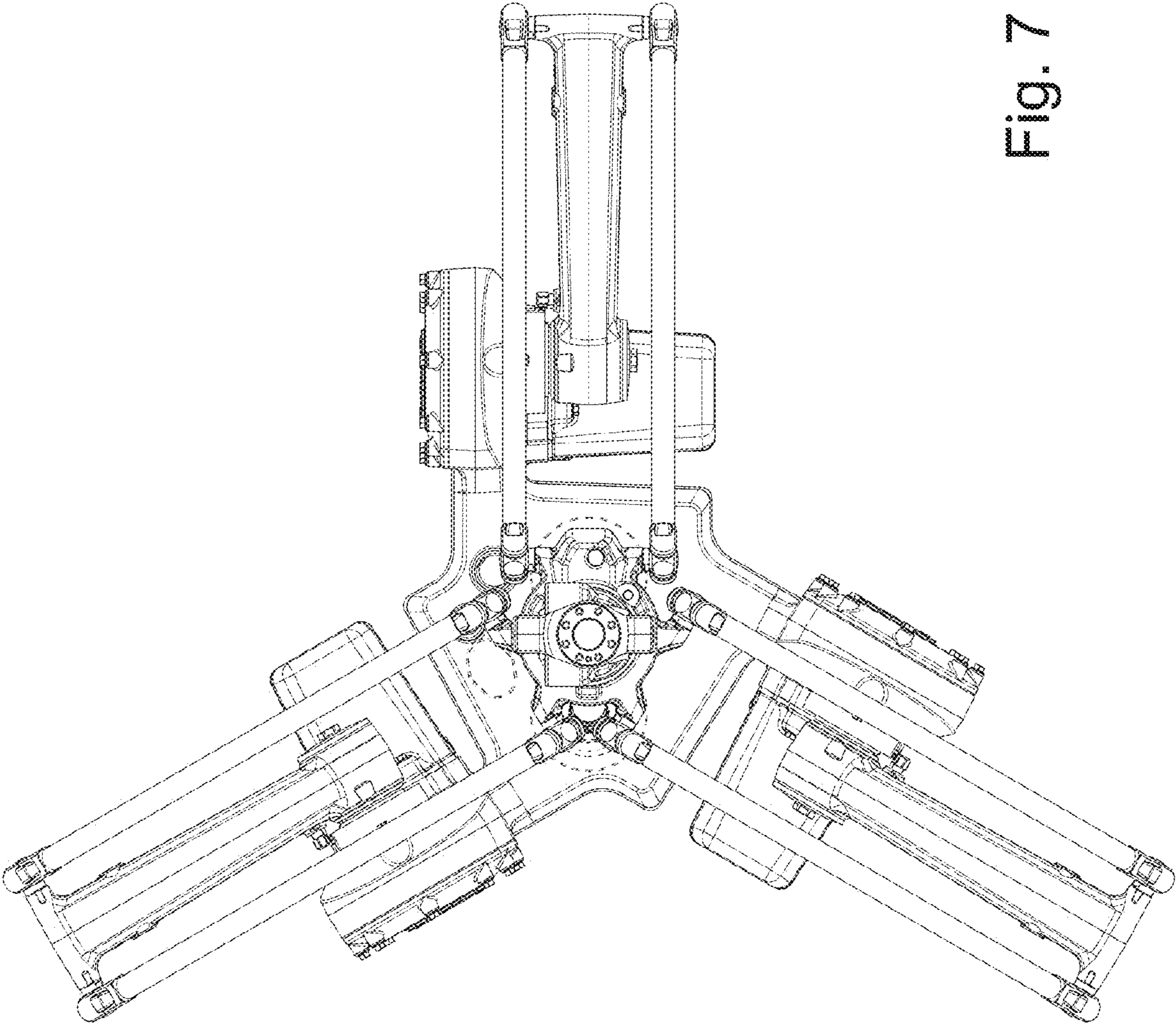


Fig. 7

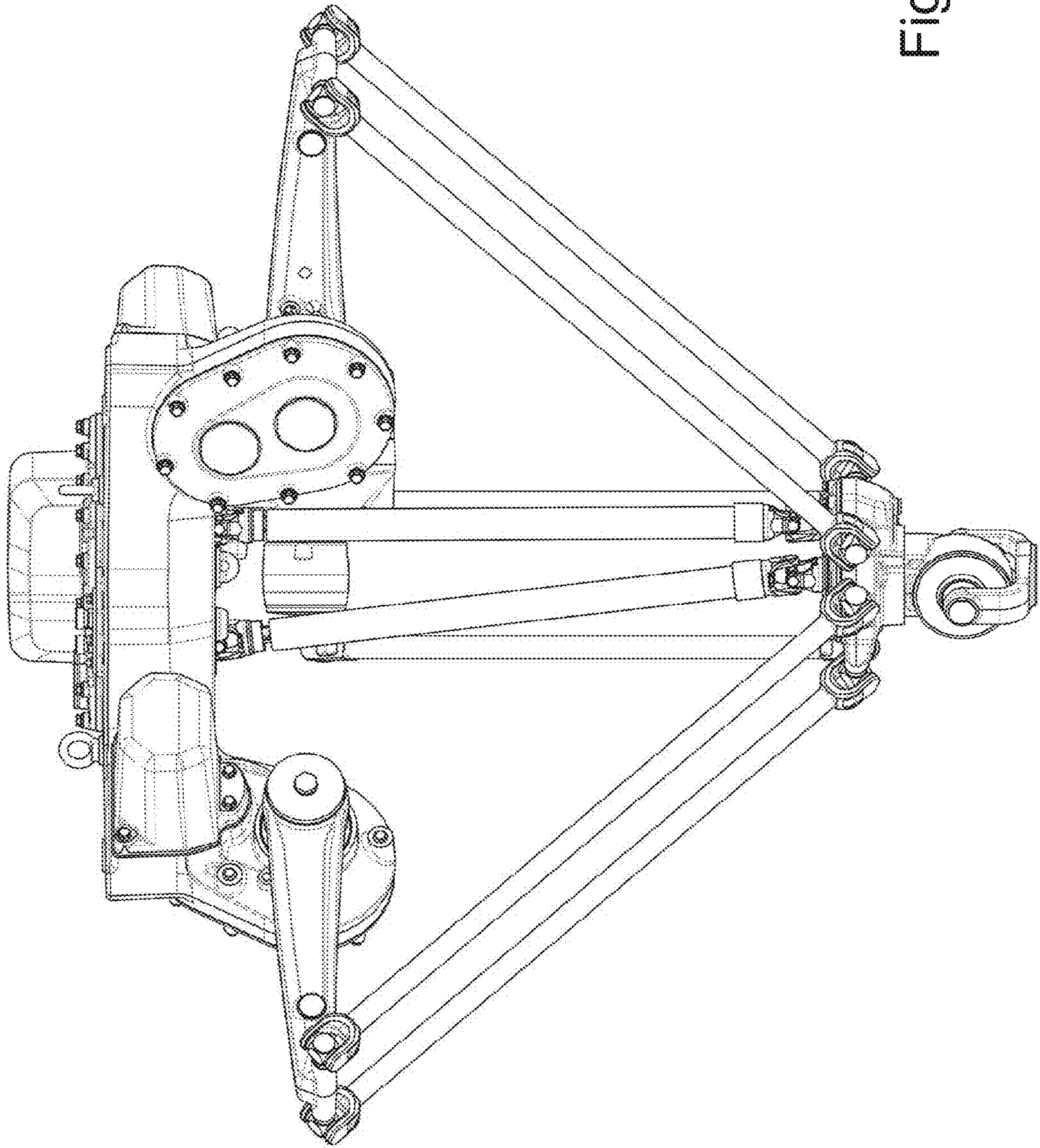


Fig. 8

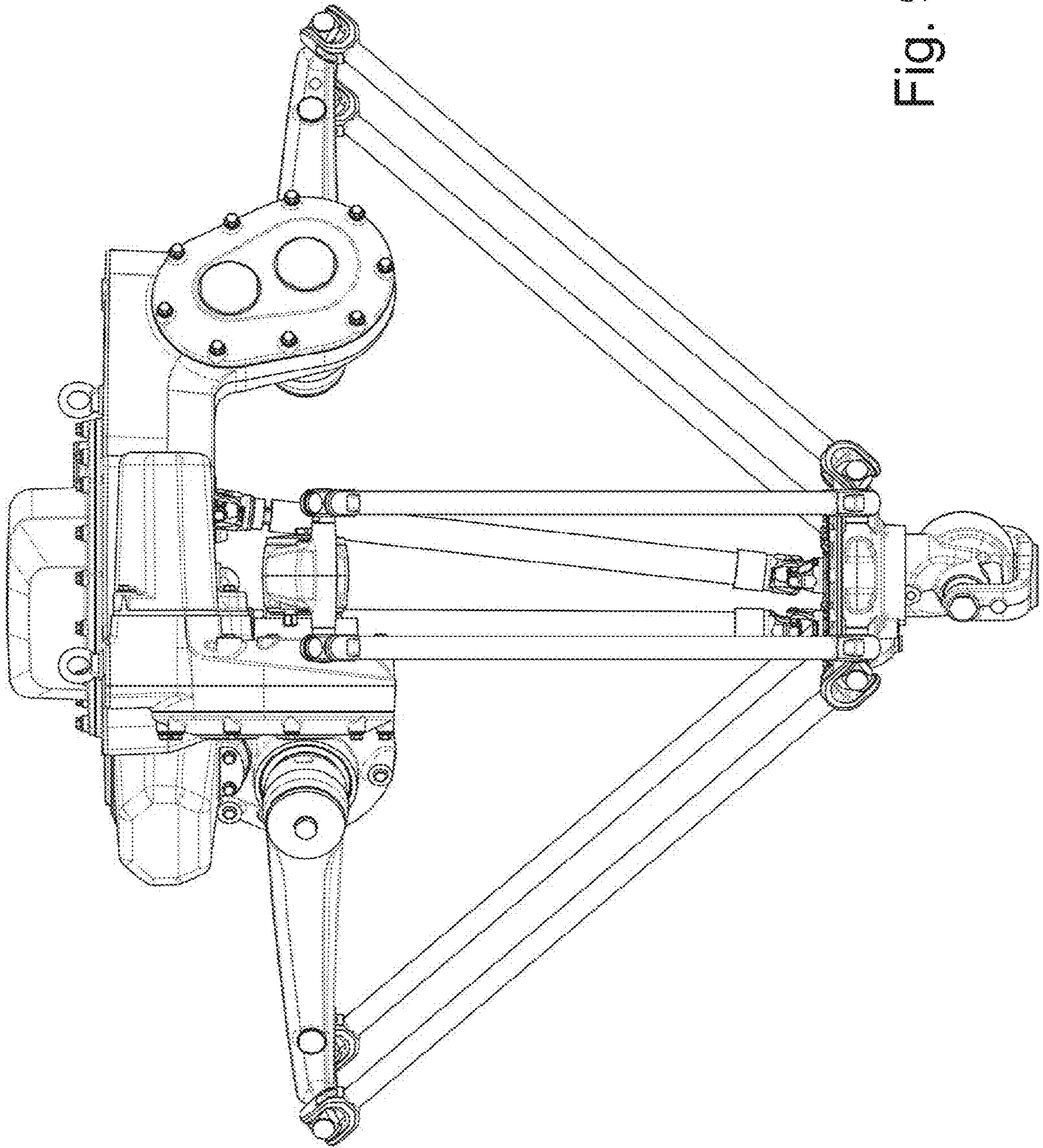


Fig. 9