

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
22 October 2020 (22.10.2020)



(10) International Publication Number
WO 2020/214031 A9

(51) International Patent Classification:

B62D 21/02 (2006.01) *B62D 21/12* (2006.01)
B62D 21/14 (2006.01)

(21) International Application Number:

PCT/NL2020/050253

(22) International Filing Date:

16 April 2020 (16.04.2020)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2022967 17 April 2019 (17.04.2019) NL

(71) Applicant: **TERBERG BENSCHOP B.V.** [NL/NL];
Oranje-Nassastraat 10, 3405 XK BENSCHOP (NL).

(72) Inventor: **VAN ZOELLEN, Ronald Cornelis Johannes**;
Nieuwegein (NL).

(74) Agent: **HAAN, Raimond Johannes Gerardus**; Bezuiden-
houtseweg 57, 2594 AC DEN HAAG (NL).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,

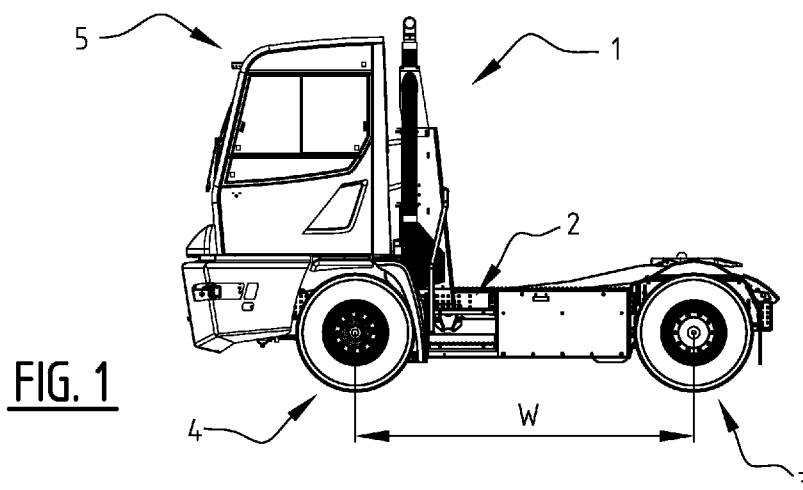
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ,
CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO,
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,
HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP,
KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME,
MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ,
OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA,
SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ,
UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ,
TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV,
MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
KM, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments (Rule 48.2(h))

(54) Title: VEHICLE COMPRISING A CHASSIS ASSEMBLY AND METHOD OF ADJUSTING THE LENGTH THEREOF



(57) Abstract: The present invention relates to a vehicle, comprising: - a chassis assembly, comprising: - at least one runner configured to support a first set of wheels; and - at least one variable extension configured to: - adjust a resulting length of the vehicle; - at least partially support a second set of wheels; and - adjust a wheelbase between the first set of wheels and the second set of wheels; and - wherein the second set of wheels is suspended by a suspension that is arranged between a first suspension support that is arranged on the runner and a second suspension support that is arranged on the extension. The invention further relates to a method of adjusting a length of such a vehicle.

(88) Date of publication of the revised international search report:

22 April 2021 (22.04.2021)

(15) Information about Correction:

see Notice of 22 April 2021 (22.04.2021)

INTERNATIONAL SEARCH REPORT

International application No
PCT/NL2020/050253

A. CLASSIFICATION OF SUBJECT MATTER
INV. B62D21/02 B62D21/14 B62D21/12
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
B62D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	CA 1 049 062 A (SANTERRE DAVID) 20 February 1979 (1979-02-20) pages 3-6; figure 1 -----	1-21
A	CN 102 730 065 A (SUZHOU EAGLE ELEC VEHICLE MFG) 17 October 2012 (2012-10-17) abstract; figures 1-3 -----	1-21
A	GB 2 264 468 A (ESS COLIN JOHN [GB]) 1 September 1993 (1993-09-01) pages 4-8; figures 1-3 -----	1-21
A	WO 2008/078139 A1 (RENAULT TRUCKS [FR]; HENDRICKS JAN [FR]; MOKDAD AYMAN [FR]) 3 July 2008 (2008-07-03) pages 3-8; figure 1 ----- -/-	1,15



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

25 February 2021

Date of mailing of the international search report

09/03/2021

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040,
Fax: (+31-70) 340-3016

Authorized officer

Szaip, András

INTERNATIONAL SEARCH REPORT

International application No

PCT/NL2020/050253

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 103 00 393 B3 (DAIMLER CHRYSLER AG [DE]) 29 July 2004 (2004-07-29) abstract; figures 1-5 -----	1,15

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/NL2020/050253

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
CA 1049062	A	20-02-1979	NONE
CN 102730065	A	17-10-2012	NONE
GB 2264468	A	01-09-1993	NONE
WO 2008078139	A1	03-07-2008	CN 101588955 A 25-11-2009 EP 2125495 A1 02-12-2009 US 2010066128 A1 18-03-2010 WO 2008078139 A1 03-07-2008
DE 10300393	B3	29-07-2004	BR 0317975 A 29-11-2005 DE 10300393 B3 29-07-2004 EP 1581421 A1 05-10-2005 JP 2006513082 A 20-04-2006 KR 20050085946 A 29-08-2005 US 2006219462 A1 05-10-2006 WO 2004062984 A1 29-07-2004