

INTERNATIONAL SEARCH REPORT

International application No.

PCT/EP2018/070546

A. CLASSIFICATION OF SUBJECT MATTER

B61L 3/12(2006.01)i; **B61L 15/00**(2006.01)i; **B61L 23/08**(2006.01)i; **B61L 23/22**(2006.01)i; **B61L 27/00**(2006.01)i;
B61L 1/14(2006.01)i

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)

B61L

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, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 2902238 A1 (STANDARD ELEKTRIK LORENZ AG) 31 July 1980 (1980-07-31) figure 1; page 4, last paragraph; the paragraph spanning pages 6 and 7; and first whole paragraph on page 7	1-9
X	EP 2143614 A1 (SIEMENS SCHWEIZ AG [CH]) 13 January 2010 (2010-01-13) figures 1, 2 and 5; paragraphs [0010] - [0012] and [0016] - [0020]	1-9

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

14 November 2018

Date of mailing of the international search report

23 November 2018

Name and mailing address of the ISA/EP

**European Patent Office
p.b. 5818, Patentlaan 2, 2280 HV Rijswijk
Netherlands**

Telephone No. (+31-70)340-2040

Facsimile No. (+31-70)340-3016

Authorized officer

Plützer, Stefan

Telephone No.

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

PCT/EP2018/070546

Patent document cited in search report			Publication date (day/month/year)	Patent family member(s)			Publication date (day/month/year)
DE	2902238	A1	31 July 1980	DE	2902238	A1	31 July 1980
				ES	487822	A1	16 June 1980
				YU	11780	A	31 August 1982
EP	2143614	A1	13 January 2010	AT	518716	T	15 August 2011
				EP	2143614	A1	13 January 2010