

**SUPPLEMENTARY PARTIAL EUROPEAN
SEARCH REPORT**

under Rule 62a and/or 63 of the European Patent Convention. This report shall be considered, for the purposes of subsequent proceedings, as the European search report

Application number:
EP 21 78 81 59

Classification of the application (IPC):

H02J 7/35, H02J 13/00, H02J 3/32, H02J 3/38, G01D 4/00, G05F 1/66,
B60L 53/51

Technical fields searched (IPC):

H02J, B60L, G01D, G01F

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X	US 2018316192 A1 (PETROSYAN ARA [US]) 01 November 2018 (2018-11-01) * the whole document * * Particularly;claims 11,14-20; figures 1-3 *	3-10
Y	US 2018131226 A1 (NARLA SANDEEP [US] ET AL) 10 May 2018 (2018-05-10) * the whole document *	3-10
Y	US 2015331035 A1 (LI LINGLAI [CN] ET AL) 19 November 2015 (2015-11-19) * the whole document *	3-10
Y	US 2013030590 A1 (PROSSER RONALD D [US]) 31 January 2013 (2013-01-31) * the whole document *	7, 8
Y	US 2011291479 A1 (LEE SUNG-IM [KR]) 01 December 2011 (2011-12-01) * the whole document *	9, 10
INCOMPLETE SEARCH		
The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC so that only a partial search (R. 62a, 63) has been carried out.		
Claim(s) completely searchable:3-10		
Claim(s) not searched:1, 2		
Reason for the limitation of the search:		
[0001] See the communication and the letter of reply following Rule 62a EPC dated 03.05.2024 and 03.07.2024.		

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search Munich	Date of completion of the search 09 August 2024	Examiner Fiat, Cyrille
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CATEGORY OF CITED DOCUMENTS	
X: particularly relevant if taken alone	P: intermediate document
Y : particularly relevant if combined with another document of the same category	T: theory or principle underlying the invention
A: technological background	E: earlier patent document, but published on, or after the filing date
O: non-written disclosure	D: document cited in the application
& : member of the same patent family, corresponding document	L: document cited for other reasons

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ANNEX TO SUPPLEMENTARY PARTIAL EUROPEAN SEARCH REPORT

Application number:
EP 21 78 81 59

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on 09-08-2024
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Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 2018316192	A1	01-11-2018	NONE		
US 2018131226	A1	10-05-2018	NONE		
US 2015331035	A1	19-11-2015	CN	105092999 A	25-11-2015
			US	2015331035 A1	19-11-2015
US 2013030590	A1	31-01-2013	NONE		
US 2011291479	A1	01-12-2011	CN	102270884 A	07-12-2011
			EP	2400621 A2	28-12-2011
			JP	5272040 B2	28-08-2013
			JP	2011254696 A	15-12-2011
			KR	20110132122 A	07-12-2011
			US	2011291479 A1	01-12-2011