

INTERNATIONAL SEARCH REPORT

International application No.

PCT/EP2019/083486

A. CLASSIFICATION OF SUBJECT MATTER**H01M 4/62**(2006.01)i; **H01M 4/139**(2010.01)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)

H01M

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	CN 107834019 A (SHENYANG GUOKE JINNENG NEW MAT CO LTD) 23 March 2018 (2018-03-23)	8-10,12
Y	paragraphs [0039], [0066] - [0070]	11
Y	CN 108232111 A (QINGTAO KUNSHAN ENERGY DEV CO LTD) 29 June 2018 (2018-06-29) paragraph [0037]	11
X,P	US 2019036103 A1 (PIERCE NEAL [US] ET AL) 31 January 2019 (2019-01-31) abstract; figure 5 paragraphs [0070] - [0072]	1,2,6

 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

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“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

07 February 2020

Date of mailing of the international search report

20 February 2020

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INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

PCT/EP2019/083486

Patent document cited in search report	Publication date (day/month/year)	Patent family member(s)	Publication date (day/month/year)
CN 107834019 A	23 March 2018	NONE	
CN 108232111 A	29 June 2018	NONE	
US 2019036103 A1	31 January 2019	CN 109326765 A EP 3439075 A1 JP 2019050186 A KR 20190013664 A US 2019036103 A1	12 February 2019 06 February 2019 28 March 2019 11 February 2019 31 January 2019