

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/CN2019/120225

**A. CLASSIFICATION OF SUBJECT MATTER**

H02G 9/06(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)

H02G

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)

CNPAT, CNKI, EPODOC, WPI: 管道, 金属, 壳体, 外壳, 绝缘, 互联, 互连, A相, B相, C相, pipe, metal, housing, shell, insulation, interconnect, A-phase, B-phase, C-phase

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
PX	CN 109449861 A (JIANGSU SHENMA POWER CO., LTD.) 08 March 2019 (2019-03-08) claims 1-10	1-3, 6-12
PX	CN 209419178 U (JIANGSU SHENMA POWER CO., LTD.) 20 September 2019 (2019-09-20) claims 1-10	1-3, 6-12
PX	CN 109449862 A (JIANGSU SHENMA POWER CO., LTD.) 08 March 2019 (2019-03-08) claims 1-12	1-14
PX	CN 209419177 U (JIANGSU SHENMA POWER CO., LTD.) 20 September 2019 (2019-09-20) claims 1-12	1-14
X	CN 104052011 A (JIANGSU SHENMA POWER CO., LTD.) 17 September 2014 (2014-09-17) description, paragraphs 21-28, and figures 1 and 2	1-5
X	CN 103795017 A (JIANGSU SHENMA POWER CO., LTD.) 14 May 2014 (2014-05-14) description, paragraphs 21-30, and figures 1 and 2	1-5

 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 February 2020

Date of mailing of the international search report

24 February 2020

Name and mailing address of the ISA/CN

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C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	CN 106877267 A (SHANGHAI KIRTUN ELECTRICAL EQUIPMENT GROUP ELECTRIC CO., LTD.) 20 June 2017 (2017-06-20) entire document	1-14
A	JP 2014207742 A (MITSUBISHI ELECTRIC CORP.) 30 October 2014 (2014-10-30) entire document	1-14

**INTERNATIONAL SEARCH REPORT**  
**Information on patent family members**

International application No.

**PCT/CN2019/120225**

Patent document cited in search report			Publication date (day/month/year)	Patent family member(s)			Publication date (day/month/year)
CN	109449861	A	08 March 2019	None			
CN	209419178	U	20 September 2019	None			
CN	109449862	A	08 March 2019	None			
CN	209419177	U	20 September 2019	None			
CN	104052011	A	17 September 2014	CN	104052011	B	25 August 2017
CN	103795017	A	14 May 2014	None			
CN	106877267	A	20 June 2017	CN	106877267	B	29 May 2018
JP	2014207742	A	30 October 2014	None			