

INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR2018/007699

A. CLASSIFICATION OF SUBJECT MATTER

H02S 20/30(2014.01)i, H02S 30/10(2014.01)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)

H02S 20/30; E04D 13/18; H01L 31/042; H02S 10/00; H02S 20/10; H02S 30/10

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

Korean Utility models and applications for Utility models: IPC as above

Japanese Utility models and applications for Utility models: IPC as above

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

eKOMPASS (KIPO internal) & Keywords: solar cell, rail, wire, chain, inclination, connection, crane

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 2012-174788 A (FUJI ELECTRIC CO., LTD. et al.) 10 September 2012 See paragraphs [21]-[44], claims 1-6, figures 1-9.	1-14
Y	KR 10-1725037 B1 (MADANGWORLD CO., LTD. et al.) 10 April 2017 See paragraphs [28]-[45], figures 1-2.	1-14
Y	KR 10-1368923 B1 (ABM GREENTECH CO., LTD.) 04 March 2014 See paragraphs [25]-[26], [44]-[51], figure 1.	3,7
Y	KR 10-2008-0027092 A (KIM, Song Gui) 26 March 2008 See claim 1, figure 2.	11
A	JP 2016-220510 A (MIZUGUCHI, Hisashi) 22 December 2016 See the entire document.	1-14



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

12 DECEMBER 2018 (12.12.2018)

Date of mailing of the international search report

12 DECEMBER 2018 (12.12.2018)

Name and mailing address of the ISA/KR


 Korean Intellectual Property Office
 Government Complex Daejeon Building 4, 189, Cheongsa-ro, Seo-gu,
 Daejeon, 35208, Republic of Korea

Facsimile No. +82-42-481-8578

Authorized officer

Telephone No.

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

PCT/KR2018/007699

Patent document cited in search report	Publication date	Patent family member	Publication date
JP 2012-174788 A	10/09/2012	NONE	
KR 10-1725037 B1	10/04/2017	WO 2018-034403 A1	22/02/2018
KR 10-1368923 B1	04/03/2014	NONE	
KR 10-2008-0027092 A	26/03/2008	NONE	
JP 2016-220510 A	22/12/2016	NONE	