

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 9833-1210-WO	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/US2018/036020	International filing date (<i>day/month/year</i>) 05 June 2018 (05.06.2018)	(Earliest) Priority Date (<i>day/month/year</i>) 09 June 2017 (09.06.2017)
Applicant COMMSCOPE TECHNOLOGIES LLC		

This International search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the report**

a. With regard to the **language**, the international search was carried out on the basis of:

the international application in the language in which it was filed

a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))

b. This international search report has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43.6bis(a)).

c. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. **Certain claims were found unsearchable** (See Box No. II)

3. **Unity of invention is lacking** (See Box No. III)

4. With regard to the **title**,

the text is approved as submitted by the applicant.

the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

the text is approved as submitted by the applicant.

the text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

a. the figure of the **drawings** to be published with the abstract is Figure No. 10

as suggested by the applicant.

as selected by this Authority, because the applicant failed to suggest a figure.

as selected by this Authority, because this figure better characterizes the invention.

b. none of the figures is to be published with the abstract.

A. CLASSIFICATION OF SUBJECT MATTER**H02G 7/06(2006.01)i**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHEDMinimum documentation searched (classification system followed by classification symbols)
H02G 7/06; E05C 19/00; F16L 3/08; B23P 11/02; F03D 11/00; F16L 3/13; F16L 3/22Documentation 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
Japanese utility models and applications for utility modelsElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)
eKOMPASS(KIPO internal) & Keywords: cable hanger, support, main panel, finger, arm, mounting**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2011-0283515 A1 (RICHARD KORCZAK) 24 November 2011 See paragraphs [0005], [0026]-[0028]; and figures 1-7.	1-24
Y	US 2010-0090479 A1 (RUI LI et al.) 15 April 2010 See paragraphs [0013]-[0015]; and figures 3-4.	1-24
A	US 2016-0281881 A1 (COMMSCOPE TECHNOLOGIES LLC) 29 September 2016 See paragraph [0010]; and figure 4.	1-24
A	US 2014-0131529 A1 (CARLO FEIGE et al.) 15 May 2014 See paragraph [0021]; and figure 9.	1-24
A	US 7097142 B1 (FREDERICK SCHMIDT) 29 August 2006 See column 2, lines 21-63; and figure 2.	1-24

 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

18 September 2018 (18.09.2018)

Date of mailing of the international search report

18 September 2018 (18.09.2018)

Name and mailing address of the ISA/KR

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2018/036020

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2011-0283515 A1	24/11/2011	US 2009-0294602 A1 US 8011621 B2 US 8191836 B2	03/12/2009 06/09/2011 05/06/2012
US 2010-0090479 A1	15/04/2010	CA 2681435 A1 CA 2681435 C CN 101725460 A CN 101725460 B DK 2175126 T3 EP 2175126 A2 EP 2175126 A3 EP 2175126 B1 US 7845693 B2	10/04/2010 10/01/2017 09/06/2010 17/06/2015 31/08/2015 14/04/2010 10/07/2013 05/08/2015 07/12/2010
US 2016-0281881 A1	29/09/2016	CN 107407305 A EP 3275062 A1 US 2018-0097346 A1 US 9866004 B2 WO 2016-160493 A1	28/11/2017 31/01/2018 05/04/2018 09/01/2018 06/10/2016
US 2014-0131529 A1	15/05/2014	CA 2769838 A1 CA 2769838 C EP 2464907 A1 EP 2464907 B1 EP 2940360 A1 ES 2554856 T3 IT 1395161 B1 IT MI20091469 A1 MX 2012001871 A US 2011-0226913 A1 US 8439316 B2 US 9086175 B2 WO 2010-143222 A1	16/12/2010 21/11/2017 20/06/2012 02/09/2015 04/11/2015 23/12/2015 05/09/2012 13/02/2011 11/04/2012 22/09/2011 14/05/2013 21/07/2015 16/12/2010
US 7097142 B1	29/08/2006	None	