

## PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

# PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:  
MYERS BIGEL, P.A.  
  
PO Box 37428 Raleigh, North Carolina 27627 USA

Date of mailing  
(day/month/year) **18 September 2018 (18.09.2018)**

Applicant's or agent's file reference  
9833-1210-WO

**FOR FURTHER ACTION**

See paragraph 2 below

International application No.  
**PCT/US2018/036020**

International filing date (day/month/year)  
**05 June 2018 (05.06.2018)**

Priority date(day/month/year)  
09 June 2017 (09.06.2017)

International Patent Classification (IPC) or both national classification and IPC  
**H02G 7/06(2006.01)i**

Applicant  
**COMMSCOPE TECHNOLOGIES LLC**

1. This opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.  
For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/KR  
International Application Division  
Korean Intellectual Property Office  
189 Cheongsa-ro, Seo-gu, Daejeon,  
35208, Republic of Korea  
Facsimile No. +82-42-481-8578

Date of completion of this opinion  
  
18 September 2018 (18.09.2018)

Authorized officer

JANG, Gijeong

Telephone No. +82-42-481-8364



WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US2018/036020

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established 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))
2.  This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43bis.1(a))
3.  With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing:
  - a.  forming part of the international application as filed:
    - in the form of an Annex C/ST.25 text file.
    - on paper or in the form of an image file.
  - b.  furnished together with the international application under PCT Rule 13ter.1(a) for the purposes of international search only in the form of an Annex C/ST.25 text file.
  - c.  furnished subsequent to the international filing date for the purposes of international search only:
    - in the form of an Annex C/ST.25 text file (Rule 13ter.1(a)).
    - on paper or in the form of an image file (Rule 13ter.1(b) and Administrative Instructions, Section 713).
4.  In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that forming part of the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5. Additional comments:

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**PCT/US2018/036020**

**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	<u>1-24</u>	YES
	Claims	<u>NONE</u>	NO
Inventive step (IS)	Claims	<u>NONE</u>	YES
	Claims	<u>1-24</u>	NO
Industrial applicability (IA)	Claims	<u>1-24</u>	YES
	Claims	<u>NONE</u>	NO

2. Citations and explanations :

Reference is made to the following documents:

D1: US 2011-0283515 A1 (RICHARD KORCZAK) 24 November 2011

D2: US 2010-0090479 A1 (RUI LI et al.) 15 April 2010

1. Novelty and Inventive Step

1.1 Claims 1-11

D1, which is considered to be the closest prior art to the subject matter of claim 1, discloses a device comprising:

a mounting structure including a mounting hole (9) (see figure 6 in D1); legs (7) of a snap-in cable hanger (5) deflected towards one another into a spring space (13) between the legs (7) to enable clearance of locking barb(s) (11), projecting from a distal end (15) of each leg (7), through the mounting hole (9) (see paragraph [0026] and figures 1-7 in D1); and a clip (17) dimensioned to fit between the legs (7) at the mounting hole (9), filling the spring space (13) (see paragraph [0027] and figures 2-7 in D1).

Claim 1 differs from D1 in that this claim comprises a support including a main panel and first and second fingers extending in a direction away from, the main panel, wherein the second finger is inserted between arms of a cable hanger, and the first finger is positioned laterally of one of the arms. However, this feature can be easily derived from the features of D2 considering that: a hatch stop (30) is E-shaped with a first prong (32), a second prong (34), and a third prong (36) connected to each other (see paragraph [0013] and figure 3 in D2); and the second prong (34) is connected to the first prong (32) and is arranged against an internal surface of a hatch (22) (see paragraph [0015] and figure 4 in D2). Accordingly, claim 1 would have been obvious over D1 in view of D2. Therefore, claim 1 lacks an inventive step

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**Box No. VIII Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

Claim 8 is worded in reference to “the third finger” of claim 5. However, “the third finger” has not been worded previously. Therefore, claim 8 does not meet the requirement of PCT Article 6.

Claim 21 is worded in reference to “the third finger” of claim 18. However, “the third finger” has not been worded previously. Therefore, claim 21 does not meet the requirement of PCT Article 6.

**Supplemental Box**

In case the space in any of the preceding boxes is not sufficient.

Continuation of : Box No. V

under PCT Article 33(3).

The additional features of claims 2-6 can be easily derived from the feature of D2 considering that a hatch stop (30) is E-shaped with a first prong (32), a second prong (34), and a third prong (36) connected to each other (see paragraph [0013] and figure 3 in D2).

The additional feature of claim 7 can be easily derived from the feature of D1 considering that the clip (17) has a top (19) from which at least two clip arm(s) (21) extend (see paragraph [0028] and figure 2 in D1).

The additional feature of claim 8 can be easily derived from the feature of D2 considering that the third prong (36) is connected to the first prong (32) and the second prong (34) is arranged against an internal surface of the hub cone enclosure (7) (see paragraph [0015] and figures 3-4 in D2).

The additional features of claims 9-11 can be easily derived from the feature of D2 considering that the E-shape includes two U-shaped, C-shaped, or V-shaped portions formed by any two of the prongs (32 through 36) and the connection between them (see paragraph [0013] and figures 3-4 in D2).

Accordingly, claims 2-11 would have been obvious over D1 in view of D2. Therefore, claims 2-11 lack an inventive step under PCT Article 33(3).

#### 1.2 Claims 12-24

Independent claim 12 relates to a method of stabilizing a mounted cable hanger, and the features of claim 12 substantially correspond to those of claim 1. Accordingly, the same reasoning as in claim 1 could be applied to claim 12. Therefore, claim 12 lacks an inventive step under PCT Article 33(3) as being obvious over D1 in view of D2.

The additional features of claims 13-14 can be easily derived from the feature of D1 considering that cable hangers are used to secure signal cables and or transmission lines to support structures (see paragraph [0005] in D1).

The additional features of claims 15-19 can be easily derived from the feature of D2

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**Supplemental Box**

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considering that a hatch stop (30) is E-shaped with a first prong (32), a second prong (34), and a third prong (36) connected to each other (see paragraph [0013] and figure 3 in D2).

The additional feature of claim 20 can be easily derived from the feature of D1 considering that the clip (17) has a top (19) from which at least two clip arm(s) (21) extend (see paragraph [0028] and figure 2 in D1).

The additional feature of claim 21 can be easily derived from the feature of D2 considering that the third prong (36) is connected to the first prong (32) and the second prong (34) is arranged against an internal surface of the hub cone enclosure (7) (see paragraph [0015] and figures 3-4 in D2).

The additional features of claims 22-24 can be easily derived from the feature of D2 considering that the E-shape includes two U-shaped, C-shaped, or V-shaped portions formed by any two of the prongs (32 through 36) and the connection between them (see paragraph [0013] and figures 3-4 in D2).

Accordingly, claims 13-24 would have been obvious over D1 in view of D2. Therefore, claims 13-24 lack an inventive step under PCT Article 33(3).

**2. Industrial Applicability**

Claims 1-24 are industrially applicable under PCT Article 33(4).