

IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF NORTH CAROLINA

PANDUIT CORP., )  
 )  
 Plaintiff, )  
 )  
 v. )  
 )  
 CORNING OPTICAL COMMUNICATIONS ) Civil Action No. 5:18-CV-00024  
 LLC, )  
 ) **JURY TRIAL DEMANDED**  
 Defendant. )  
 )  
 )  
 )

**COMPLAINT**

Plaintiff Panduit Corp. (“Plaintiff” or “Panduit”), by its attorneys, demands a trial by jury on all issues so triable and for its complaint against Corning Optical Communications LLC (“Defendant” or “Corning”) alleges as follows:

**THE PARTIES**

1. Plaintiff Panduit is a corporation organized and existing under the laws of Delaware with its principal place of business at 18900 Panduit Drive, Tinley Park, Illinois, 60487. Panduit is the owner by assignment of United States Patent Nos. 8,351,027 and 8,488,115 identified in paragraphs 8-9 below.

2. On information and belief, Defendant is a North Carolina limited liability company with a principal place of business at 800 17th Street NW, Hickory, North Carolina, 28601, which is within this Judicial District.

## **JURISDICTION AND VENUE**

3. This is a civil action for patent infringement arising under the patent laws of the United States, 35 U.S.C. § 1 *et seq.*, including 35 U.S.C. § 271, which gives rise to the remedies specified under 35 U.S.C. §§ 281 and 283–285.

4. On information and belief, jurisdiction and venue for this action are proper in the Western District of North Carolina.

5. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

6. This Court has personal jurisdiction over Defendant because it has purposefully availed itself of the rights and benefits of the laws of this State and this Judicial District. On information and belief, Defendant is organized and existing under the laws of North Carolina and is registered to do business as a corporation in North Carolina. This Court also has personal jurisdiction over Defendant because it has done and is doing substantial business in this Judicial District, both generally and, on information and belief, with respect to the allegations in this complaint, including Defendant’s one or more acts of infringement in this Judicial District.

7. Venue is proper in this Judicial District under 28 U.S.C. § 1400(b) at least because Defendant resides in this Judicial District and/or because Defendant has committed acts of infringement in this District and has a regular and established place of business in the Western District of North Carolina.

## **BACKGROUND FACTS**

8. On January 8, 2013, the United States Patent and Trademark Office issued United States Patent No. 8,351,027 (“the ’027 Patent”) entitled “Method and Metric For Selecting And Designing Multimode Fiber For Improved Performance.” A copy of the ’027 Patent is attached

hereto as Exhibit A. Panduit is the lawful owner of all right, title, and interest in the '027 Patent and has exclusive right to sue for and recover all past, present, and future damages for infringement of the '027 Patent.

9. On July 16, 2014, the United States Patent and Trademark Office issued United States Patent No. 8,488,115 (“the '115 Patent”) entitled “Method And Metric For Selecting And Designing Multimode Fiber for Improved Performance.” A copy of the '115 Patent is attached hereto as Exhibit B. Panduit is the lawful owner of all right, title, and interest in the '115 Patent and has exclusive right to sue for and recover all past, present, and future damages for infringement of the '115 Patent.

10. Both the '027 and '115 Patents relate to innovative methods using new and useful techniques for selecting multimode optical fiber. These innovative methods use certain measurements and comparisons of relative delay for pulses traveling through different radii of multimode optical fiber, which allows for more accurate prediction of performance of the multimode optical fiber, resulting in improved performance and a reduction in fiber-related channel failures.

11. The '027 Patent relates to an innovative method of selecting fiber optic materials, including multimode optical fiber, by measuring the peak delay for pulses traveling through different radii of multimode optical fibers, subtracting the measured peak delay at one radius from the peak delay at a second larger radius, and then selecting the optical fibers where this subtraction results in a negative number (*i.e.* negative p-shift or negative relative delays). Exhibit A, 4:16-5:16, cl. 1.

12. The '115 Patent relates to an innovative method of selecting fiber optic materials, including multimode optical fiber, by measuring the pulse delay for pulses traveling through

different radii of multimode optical fibers, subtracting the measured pulse delay at one radius from the pulse delay at a second larger radius, and then selecting the optical fibers where this subtraction results in a negative number (*i.e.* negative p-shift or negative relative delays). Exhibit B, 4:19-5:19, cl. 1.

13. On information and belief, Defendant sells and manufactures, and/or directs and controls others, or is in a joint enterprise with others, who manufacture on Defendant's behalf, fiber optic materials, including multimode optical fiber.

14. On information and belief, Defendant has imported into the United States, or manufactured, used, offered for sale, or sold within the United States, fiber optic materials, including multimode optical fibers, made or selected by processes which include methods that infringe, either literally or under the doctrine of equivalents, one or more claims of the '027 Patent and '115 Patent.

15. On information and belief, Defendant, and/or others under Defendant's direction and control or who are in a joint enterprise with Defendant, have made or selected fiber optic materials, including multimode optical fibers, by processes which include methods that infringe, either literally or under the doctrine of equivalents, one or more claims of the '027 Patent and '115 Patent.

16. On information and belief, Defendant, and/or others under Defendant's direction and control or who are in a joint enterprise with Defendant, use measurements to select and/or classify fiber optic materials, including multimode optical fiber, based on testing the optical and physical parameters of the fiber optic materials using methods that infringe, either literally or under the doctrine of equivalents, one or more claims of the '027 Patent and the '115 Patent. For example, in a video titled "Corning's Manufacturing Advantage (updated 2013)," available at

<https://www.youtube.com/watch?v=7tsF3mSpqX8>, at 3:45, Defendant explains that “[T]hen optical and physical parameters are measured to verify performance against specifications.” On information and belief, Defendant, and/or others under Defendant’s direction and control or who are in a joint enterprise with Defendant, measures the peak delay and/or pulse delay for pulses traveling through different radii of a number of multimode optical fibers to determine the design of, and to select, the fiber optic materials, including multimode optical fibers.

**COUNT I – INFRINGEMENT OF U.S. PATENT NO. 8,351,027**

17. Plaintiff incorporates by reference the allegations contained in paragraphs 1-16 above.

18. On information and belief, Defendant, and/or others under Defendant’s direction and control or who are in a joint enterprise with Defendant, have imported into the United States, or manufactured, used, offered for sale, or sold within the United States, fiber optic materials, including multimode optical fibers, made or selected by processes which include methods that infringe, either literally or under the doctrine of equivalents, one or more claims of the ’027 Patent in violation of at least 35 U.S.C. §§ 271(a), (g). Defendant’s infringement will continue unless enjoined by this Court.

19. On information and belief, Defendant, and/or others under Defendant’s direction and control or who are in a joint enterprise with Defendant, with knowledge of the ’027 Patent and of the infringement thereof, actively induce others to import into the United States, or manufacture, use, offer for sale, or sell within the United States, fiber optic materials, including multimode optical fibers, made or selected by processes which include methods that infringe, either literally or under the doctrine of equivalents, one or more claims of the ’027 Patent in violation of at least 35 U.S.C. § 271(b). Defendant’s knowledge of the ’027 Patent and of the infringement thereof occurred at least on or about a December 20, 2017 meeting between

Plaintiff and Defendant wherein such was explained to Defendant. Defendant's infringement will continue unless enjoined by this Court.

20. On information and belief, Defendant, and/or others under Defendant's direction and control or who are in a joint enterprise with Defendant, with knowledge of the '027 Patent and of the infringement thereof, have imported into the United States, or manufactured, used, offered for sale, or sold within the United States, fiber optic materials, including multimode optical fibers, made or selected by processes which include methods that infringe, either literally or under the doctrine of equivalents, one or more claims of the '027 Patent, or a material or apparatus for use in practicing, either literally or under the doctrine of equivalents, one or more claims of the '027 Patent, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use in violation of at least 35 U.S.C. §§ 271(c), (g). Defendant's knowledge of the '027 Patent and of the infringement thereof occurred at least on or about a December 20, 2017 meeting between Plaintiff and Defendant wherein such was explained to Defendant. Defendant's infringement will continue unless enjoined by this Court.

21. On information and belief, in connection with the acts described in paragraphs 18-20, Defendant, and/or others under Defendant's direction and control or who are in a joint enterprise with Defendant, and/or others actively induced by the foregoing, have imported into the United States, or manufactured, used, offered for sale, or sold within the United States, fiber optic materials, including multimode optical fibers, made or selected by processes which include methods that infringe, either literally or under the doctrine of equivalents, one or more claims of the '027 Patent, including claim 1, which reads as follows:

1. A method for selecting multimode optical fiber for use in a communications network comprising:

measuring the peak delay for pulses traveling through different radii of a number of multimode optical fibers;

subtracting the peak delay at a first radius of each multimode optical fiber from the peak delay at a second, larger radius of each multimode fiber; and

choosing for use in a communications network those optical fibers in which the result of subtracting the peak delay at the first radius from the peak delay at the second radius is a negative number.

22. On information and belief, Defendant, and/or others under Defendant's direction and control or who are in a joint enterprise with Defendant, and/or others actively induced by the foregoing, select fiber optic materials, including multimode optical fibers.

23. On information and belief, Defendant, and/or others under Defendant's direction and control or who are in a joint enterprise with Defendant, and/or others actively induced by the foregoing, measure the peak delay for pulses traveling through different radii of a number of multimode optical fibers.

24. On information and belief, after measuring the relative peak delay at different radii, Defendant, and/or others under Defendant's direction and control or who are in a joint enterprise with Defendant, and/or others actively induced by the foregoing, subtract the peak delay at a first radius of each multimode optical fiber from the peak delay at a second, larger radius of each multimode fiber.

25. On information and belief, after measuring and subtracting the relative peak delay at different radii, as described above, Defendant, and/or others under Defendant's direction and control or who are in a joint enterprise with Defendant, and/or others actively induced by the foregoing, choose those optical fibers in which the result of subtracting the peak delay at the first

radius from the peak delay at the second radius is a negative number. This negative number is a Differential Mode Delay (DMD) profile exhibiting a negative p-shift or negative relative delays. Exhibit A, 1:33-36, 3:23-27, 4:16-30.

26. On information and belief, for at least Defendant's OM4+ fiber, measurement of relative delays indicates that for the low radial region 1-3 microns and high radial region 15-17 microns, such fiber systematically (*i.e.*, in all 12 fibers in a cable) has a Differential Mode Delay (DMD) profile exhibiting negative p-shift or negative relative delays. *See* Exhibit A, 6:18-23, 6:5-9. On information and belief, in connection with the acts described in paragraphs 18-25, Defendant's OM 4+ fiber was selected using methods that infringe, either literally or under the doctrine of equivalents, one or more claims of the '027 patent.

27. To the extent any third party performs any of the steps discussed above, the performance of such steps is attributable to Defendant because it directs and controls the performance of those functions and/or because Defendant is in a joint enterprise with such third party.

28. Defendant's infringement has damaged and continues to damage and injure Plaintiff. Plaintiff's injury is irreparable and will continue unless and until Defendant is enjoined by this Court from further infringement.

#### **COUNT II – INFRINGEMENT OF U.S. PATENT NO. 8,488,115**

29. Plaintiff incorporates by reference the allegations contained in paragraphs 1-16 above.

30. On information and belief, Defendant, and/or others under Defendant's direction and control or who are in a joint enterprise with Defendant, have imported into the United States, or manufactured, used, offered for sale, or sold within the United States, fiber optic materials, including multimode optical fibers, made or selected by processes which include methods that



infringe, either literally or under the doctrine of equivalents, one or more claims of the '115 Patent in violation of at least 35 U.S.C. §§ 271(a), (g). Defendant's infringement will continue unless enjoined by this Court.

31. On information and belief, Defendant, and/or others under Defendant's direction and control or who are in a joint enterprise with Defendant, with knowledge of the '115 Patent and of the infringement thereof, actively induce others to import into the United States, or manufacture, use, offer for sale, or sell within the United States, fiber optic materials, including multimode optical fibers, made or selected by processes which include methods that infringe, either literally or under the doctrine of equivalents, one or more claims of the '115 Patent in violation of at least 35 U.S.C. § 271(b). Defendant's knowledge of the '115 Patent and of the infringement thereof occurred at least on or about a December 20, 2017 meeting between Plaintiff and Defendant wherein such was explained to Defendant. Defendant's infringement will continue unless enjoined by this Court.

32. On information and belief, Defendant, and/or others under Defendant's direction and control or who are in a joint enterprise with Defendant, with knowledge of the '115 Patent and of the infringement thereof, have imported into the United States, or manufactured, used, offered for sale, or sold within the United States, fiber optic materials, including multimode optical fibers, made or selected by processes which include methods that infringe, either literally or under the doctrine of equivalents, one or more claims of the '115 Patent, or a material or apparatus for use in practicing, either literally or under the doctrine of equivalents, one or more claims of the '115 Patent, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use in violation of at

least 35 U.S.C. §§ 271(c), (g). Defendant's knowledge of the '115 Patent and of the infringement thereof occurred at least on or about a December 20, 2017 meeting between Plaintiff and Defendant wherein such was explained to Defendant. Defendant's infringement will continue unless enjoined by this Court.

33. On information and belief, in connection with the acts described in paragraphs 30-32, Defendant, and/or others under Defendant's direction and control or who are in a joint enterprise with Defendant, and/or others actively induced by the foregoing, have imported into the United States, or manufactured, used, offered for sale, or sold within the United States, fiber optic materials, including multimode optical fibers, made or selected by processes which include methods that infringe, either literally or under the doctrine of equivalents, one or more claims of the '115 Patent, including claim 1, which reads as follows:

1. A method for selecting multimode optical fiber for use in a communications network comprising:

measuring the pulse delay for pulses traveling through different radii of a number of multimode optical fibers;

subtracting the pulse delay at a first radius of each multimode optical fiber from the pulse delay at a second, larger radius of each multimode fiber; and

choosing for use in the communications network those optical fibers in which the result of subtracting the pulse delay at the first radius from the pulse delay at the second radius is a negative number.

34. On information and belief, Defendant, and/or others under Defendant's direction and control or who are in a joint enterprise with Defendant, and/or others actively induced by the foregoing, select fiber optic materials, including multimode optical fibers.

35. On information and belief, Defendant, and/or others under Defendant's direction and control or who are in a joint enterprise with Defendant, and/or others actively induced by the

foregoing, measure the pulse delay for pulses traveling through different radii of a number of multimode optical fibers.

36. On information and belief, after measuring the relative pulse delay at different radii, Defendant, and/or others under Defendant's direction and control or who are in a joint enterprise with Defendant, and/or others actively induced by the foregoing, subtract the pulse delay at a first radius of each multimode optical fiber from the pulse delay at a second, larger radius of each multimode fiber.

37. On information and belief, after measuring and subtracting the relative pulse delay at different radii, as described above, Defendant, and/or others under Defendant's direction and control or who are in a joint enterprise with Defendant, and/or others actively induced by the foregoing, choose those optical fibers in which the result of subtracting the pulse delay at the first radius from the pulse delay at the second radius is a negative number. This negative number is a Differential Mode Delay (DMD) profile exhibiting a negative p-shift or negative relative delays. Exhibit B, 1:35-38, 3:26-28, 4:19-33.

38. On information and belief, for at least Defendant's OM4+ fiber, measurement of relative delays indicates that for the low radial region 1-3 microns and high radial region 15-17 microns, such fiber systematically (*i.e.*, in all 12 fibers in a cable) has a Differential Mode Delay (DMD) profile exhibiting negative p-shift or negative relative delays. *See* Exhibit B, 6:19-24, 6:6-10. On information and belief, in connection with the acts described in paragraphs 30-37, Defendant's OM 4+ fiber was selected using methods that infringe, either literally or under the doctrine of equivalents, one or more claims of the '115 Patent.

39. To the extent any third party performs any of the steps discussed above, the performance of such steps is attributable to Defendant because it directs and controls the

performance of those functions and/or because Defendant is in a joint enterprise with such third party.

40. Defendant's infringement has damaged and continues to damage and injure Plaintiff. Plaintiff's injury is irreparable and will continue unless and until Defendant is enjoined by this Court from further infringement.

### **JURY DEMAND**

41. Plaintiff, pursuant to Rule 38 of the Federal Rules of Civil Procedure, requests a trial by jury of any issues so triable.

### **PRAYER FOR RELIEF**

WHEREFORE, Plaintiff respectfully requests the following relief:

A. A judgment in favor of Plaintiff that Defendant has directly and/or indirectly infringed one or more claims of the '027 Patent and/or one or more claims of the '115 Patent, literally or under the doctrine of equivalents;

B. A judgment that the '027 and '115 Patents are valid and enforceable patents;

C. That the Court preliminarily and permanently enjoin Defendant, their officers, partners, agents, servants, employees, parents, subsidiaries, divisions, affiliate corporations, joint ventures, other related business entities and all other persons acting in concert, participation, or in privity with them, and their successors and assigns, from any manufacture, use, offer to sell, or sale within the United States, or importation into the United States of fiber optic materials, including but not limited to multimode optical fiber, or any product containing such materials, made or selected according to methods that infringe the '027 and/or '115 Patents, literally or under the doctrine of equivalents, prior to the expiration of the '027 and '115 Patents;

D. A judgment requiring Defendant to pay Plaintiff damages adequate to compensate for infringement under 35 U.S.C. § 284, which damages in no event shall be less than a reasonable royalty for the use made of the inventions of the '027 and '115 Patents, including pre- and post-judgment interest and costs, including expenses and disbursements;

E. That the Court declare this an exceptional case and award Plaintiff its attorneys' fees, as provided by 35 U.S.C. § 285; and

F. That Plaintiff be awarded such other and further relief as this Court may deem just and proper.

Dated: February 7, 2018

Respectfully submitted,

/s/ F. Hill Allen

F. Hill Allen  
N.C. State Bar No. 18884  
THARRINGTON SMITH, L.L.P.  
Post Office Box 1151  
150 Fayetteville Street, Suite 1800  
Raleigh, N.C. 27602-1151  
Telephone: (919) 821-4711  
Fax: (919) 829-1583  
E-mail: hallen@tharringtonsmith.com

*Attorneys for Plaintiff Panduit Corp.*

OF COUNSEL:  
Kelly J. Eberspecher  
Daniel S. Stringfield  
STEPTOE & JOHNSON LLP  
115 South LaSalle Street, Suite 3100  
Chicago, IL 60603  
(312) 577-1300  
keberspecher@Steptoe.com  
dstringfield@Steptoe.com  
*Pro Hac Vice Applications To Be Submitted*

Katherine D. Cappaert  
STEPTOE & JOHNSON LLP  
1330 Connecticut Avenue, N.W.  
Washington, DC 20036  
(202) 429-6407  
kcappaert@Step toe.com  
*Pro Hac Vice* Application To Be Submitted