

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

AFL TELECOMMUNICATIONS LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	C.A. No. _____
	)	
STERLITE TECHNOLOGIES INC.,	)	
	)	
Defendant.	)	<u>JURY TRIAL DEMANDED</u>

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff, AFL Telecommunications LLC (hereinafter “AFL” or “Plaintiff”), by and through its attorneys, files this Complaint against Defendant Sterlite Technologies Inc. (hereinafter “Sterlite” or “Defendant”) for patent infringement under 35 U.S.C. § 271 and alleges as follows:

THE PARTIES

1. AFL is a limited liability company organized and existing under the laws of the State of Delaware and maintains its principal place of business at 170 Ridgeview Center Drive, Duncan, SC 29334. AFL designs and sells fiber optic products and associated equipment that enable cutting edge communications networks with low latency and high throughput. AFL sells its products throughout the United States.

2. Sterlite is a corporation organized and existing under the laws of the State of Delaware, maintains a place of business at 250 Berryhill Road, Suite 513, Columbia, SC 29210, and maintains a manufacturing plant at 2 Business Parkway, Lugoff, SC 29078.

3. This is an action for patent infringement arising under the patent laws of the United States, 35 U.S.C. §§ 1, *et seq.*

4. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C.

§§ 1331 and 1338(a).

5. This Court has personal jurisdiction over Sterlite, which is incorporated in the State of Delaware.

6. Venue is proper in this district under 28 U.S.C. §§ 1391 and 1400 because Sterlite is incorporated in the State of Delaware.

THE ASSERTED PATENT

7. On March 29, 2022, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 11,287,591 (the “’591 Patent” or “Asserted Patent”), entitled “Optical Fiber Cable.”

8. A true and correct copy of the ’591 Patent is attached as Exhibit A.

9. The ’591 Patent is valid and enforceable and is directed to patentable subject matter.

10. AFL, through assignment, is the sole and exclusive owner of all rights, title, and interest to and in the ’591 Patent. Attached as Exhibit B is a true and accurate copy of the assignment of the patent to AFL as recorded with the United States Patent and Trademark Office.

11. AFL holds the exclusive right to take all actions necessary to enforce its rights to the ’591 Patent, including the filing of this patent infringement lawsuit. AFL also has the right to recover all damages for past, present, and future infringement of the ’591 Patent and to seek injunctive relief as appropriate under the law.

BACKGROUND

12. The subject matter of this Complaint relates generally to optical fiber cables. Telecommunications and computer networks rely daily on the transmission of massive amounts

of data between equipment that may be within a single facility, distributed throughout the United States, or located throughout the world. As the amount of data transmitted daily continues to grow, the need for networks that can transfer larger amounts of data at higher speeds also continues to grow.

13. Optical fibers, which use light pulses to transmit data, are frequently utilized as a medium for these transmissions because optical fibers can provide advantages in performance as compared to other mediums. For example, as compared to electrical conductors, optical fibers can transmit data over greater distances, at higher rates, and without electromagnetic interference. Optical fibers can be used to provide data transmission over relatively short distances such as within a single enterprise or facility, or over relatively long distances such as between data centers.

14. To increase the amount and speed of data transfer, multiple optical fibers may be used to connect between various locations in a telecommunications or computer network. Optical fibers have a relatively small diameter and can be bundled together to form an optical fiber cable that can be more readily handled than individual fibers while also being more resistant against damage to the light transmitting cores of the individual fibers. The optical fiber cable can also be provided with features to provide further protection.

15. During installation of optical fiber cable that is connected between network equipment, the optical fiber cable may be installed within a duct or conduit. Air blowing is a technique that can be used to extend the optical fiber cable through the duct. In general, compressed air injected into the duct flows at relatively high speed through the duct and along the cable thereby drawing the cable through the duct.

16. AFL engineers, manufactures, and sells fiber optic products and equipment in

the United States, including fiber optic cable, and has made substantial investments in research and development of the same. AFL is the owner of multiple United States patents protecting various innovations including the '591 Patent protecting cable that AFL sells in the United States.

17. AFL's '591 Patent provides for innovative and advantageous optical fiber cables. Features are provided that can, for example, facilitate or enhance the installation of the cable within a duct or conduit by air-blowing techniques. Features are also provided that can help reduce the overall diameter and weight of such optical fiber cables.

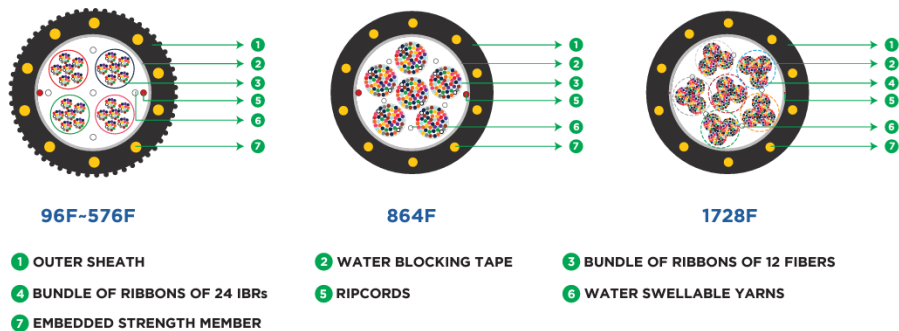
18. Sterlite has committed acts of patent infringement by making, using, offering for sale, selling, and/or importing into the United States certain optical fiber cables including, by way of example, products Sterlite refers to as the "Celesta Intelligently Bonded Ribbon" with a 96F- 576F fiber count (the "Accused Cables").

19. The Accused Cables include certain innovative and advantageous features provided in AFL's '591 Patent including features that facilitate air blowing of the cables and smaller cable diameter. Sterlite touts such advantageous features in its advertising and specifications for the Accused Cables.

20. For example, certain such features are represented as being included in the Celesta Intermittently Bonded Ribbon for the 96F-576F cables as set forth below:

Celesta

Intermittently Bonded Ribbon OFC
Single Sheath Duct



* Typical Construction Diagram - Not to Scale

Available at:

https://cdn.shopify.com/s/files/1/0591/6554/0405/files/6_Celesta_IBR.pdf?v=1683211832.

21. The Accused Cables are offered for sale in the United States.
22. Sterlite imports the Accused Cables into the United States from its foreign parent, Sterlite Industries, Ltd. of India.
23. Sterlite imports optical fiber cable, including the Accused Cables, into the United States through multiple ports located in different States of the United States.
24. The Accused Cables are advertised in the United States through a website maintained at <https://stl.tech/> and on which Sterlite's contact information is provided.
25. Quotes for sales of Accused Cables in the United States may be requested through an online store located at <https://online.stl.tech/en-us/collections/optical-fibre-cable>.
26. The Accused Cables include a core of intermittently bonded fiber ribbons bundled together and housed within an outer sheath.
27. The outer sheath of the Accused Cables includes alternating recesses and protrusions disposed circumferentially on the surface of the outer sheath.

28. Sterlite has had knowledge of the '591 Patent at least since the filing of this Complaint.

COUNT I
(Infringement of the '591 Patent)

29. AFL incorporates by reference the preceding paragraphs as if fully stated herein.

30. AFL has not licensed or otherwise authorized Sterlite to make, use, offer for sale, sell, or import any products that embody the inventions of the '591 Patent.

31. As set forth in the attached non-limiting claim chart (Exhibit C), Sterlite has and continues to directly infringe one or more claims of the '591 Patent, including exemplary claim 1, either literally or under the doctrine of equivalents, by making, using, offering to sell, selling, and/or importing into the United States the Accused Cables without authority and in violation of 35 U.S.C. § 271.

32. For example, Sterlite infringes exemplary claim 1 of the '591 Patent by making, using, offering to sell, selling, and/or importing into the United States at least the Accused Cables as detailed through a representative example, Celesta Intermittently Bonded Ribbon 432F, as included in Exhibit C, and Sterlite's infringement includes other fiber count configurations of Celesta Intermittently Bonded Ribbon as well.

33. Exhibit C includes true and accurate references to advertising and/or specifications for the Accused Cables promulgated by Sterlite or its parent, Sterlite Industries, Ltd. of India.

34. AFL provides the following explanation of infringement by the Accused Cables with regard to exemplary claim 1 of the '591 Patent and the representative example of Exhibit C.

35. The preamble of exemplary claim 1 of the '591 Patent recites: "An optical fiber

cable comprising.” Exhibit A. Although not required for purposes of infringement, the Accused Cables are optical fiber cables and thus satisfy the preamble, which is also demonstrated in Exhibit C.

36. Exemplary claim 1 of the ’591 Patent further recites: “a sheath; and.” Exhibit A. The Accused Cables have an outer sheath and thus satisfy this limitation, which is also demonstrated in Exhibit C.

37. Exemplary claim 1 of the ’591 Patent further recites: “a core that is housed in the sheath and comprises an intermittently-adhered optical fiber ribbon comprising: optical fibers; and. . . .” Exhibit A. As demonstrated in Exhibit C, the Accused Cables have a core within the outer sheath. The Accused Cables have intermittently-bonded fiber ribbons that are in the core and are comprised of optical fibers. The Accused Cables therefore meet this limitation of exemplary claim 1.

38. Exemplary claim 1 of the ’591 Patent further recites: “adhesive portions that intermittently adhere the optical fibers together in a longitudinal direction. . . .” Exhibit A. The Accused Cables have adhesive portions that intermittently adhere the fibers together along the length of the fibers, which is also demonstrated in Exhibit C. The Accused Cables thus satisfy this limitation.

39. Exemplary claim 1 of the ’591 Patent further recites: “recesses and protrusions are disposed alternately in a circumferential direction on an outer circumferential surface of the sheath. . . .” Exhibit A. As demonstrated with reference to Exhibit C, the Accused Cables have a sheath with alternating recesses and protrusions along the circumference of the outer sheath and thus satisfy this limitation.

40. Exemplary claim 1 of the ’591 Patent further recites: “the recesses each comprise:

two connecting portions respectively connected to radial inner ends of two adjacent protrusions; and a bottom surface positioned between the two connecting portions, and” Exhibit A. As shown with reference to Exhibit C, the Accused Cables have a sheath with alternating recesses and protrusions along the circumference of the outer sheath. The construction of each recess includes two connecting portions, each connected to a radial inner end of an adjacent protrusion. For each recess, a bottom surface is positioned between the two connecting portions. The Accused Cables thus satisfy this limitation, which is also illustrated in Exhibit C.

41. Exemplary claim 1 of the ’591 Patent further recites: “in a transverse cross-sectional view, a cross-sectional area of the recesses that is enclosed by closed curves tangent to radial outer ends of the protrusions and all the recesses is 1.3 mm^2 or greater and 4.8 mm^2 or less.” Exhibit A. As set forth in Exhibit C, the Accused Cables have a sheath with alternating recesses and protrusions along the circumference of the outer sheath and the cross-sectional area of the recesses that is enclosed by closed curves tangent to radial outer ends of the protrusions falls within the range of 1.3 mm^2 to 4.8 mm^2 . The Accused Cables thus satisfy this limitation of exemplary claim 1.

42. Sterlite also has and continues to infringe one or more claims of the ’591 Patent by actively inducing others to use, offer for sale, or sell the Accused Cables. At least since the filing of the Complaint, Sterlite has had knowledge that Sterlite’s customers who use the Accused Cables in accordance with Sterlite’s instructions directly infringe one or more claims of the ’591 Patent, in violation of 35 U.S.C. § 271(a).

43. Sterlite intentionally instructs its customers to infringe through training videos, demonstrations, brochures, installation guides, and other instructional and marketing materials, such as those located at one or more of the following:

- <https://stl.tech/?s=celesta>
- <https://stl.tech/optical-interconnect/celesta-ribbon-cable/>
- https://stl.tech/wp-content/uploads/2023/05/Celesta-Ribbon-Cable_432F_Datasheet.pdf
- https://stl.tech/wp-content/uploads/2023/05/Celesta-Ribbon-Cable_Brochure.pdf
- https://stl.tech/wp-content/uploads/2023/04/Ribbon_Fiber_Cable-__A_comparison_with_Non-Ribbon_Cable.pdf
- <https://online.stl.tech/products/stl-celesta-96f-intermittently-bonded-ribbon-ofc-stl-bow-lite-e-sm-g-657-a2>
- https://cdn.shopify.com/s/files/1/0591/6554/0405/files/6_Celesta_IBR.pdf?v=1683211832
- <https://www.youtube.com/watch?v=iq8bnL2SZPk>

44. At least since the filing of this Complaint, Sterlite has known that by such acts it actively induces its customers to infringe the '591 Patent. Sterlite is thereby liable for indirect infringement of the '591 Patent under 35 U.S.C. § 271(b).

45. AFL and Sterlite are competitors for the sale of optical fiber cables in the United States.

46. AFL has suffered damages as a result of Sterlite's direct and indirect infringement of the '591 Patent in an amount to be proven at trial.

47. AFL has suffered, and will continue to suffer, irreparable harm as a result of Sterlite's infringement of the '591 Patent for which there is no adequate remedy at law, unless Sterlite's infringement is enjoined by this Court.

48. Sterlite has committed and continues to commit acts of infringement that Sterlite

actually knew, or should have known, constituted an unjustifiably high risk of infringement of at least one valid claim of the '591 Patent.

49. Because Sterlite's infringement of the '591 Patent has been and continues to be willful, AFL is entitled to an award of treble damages, reasonable attorney fees, and costs in bringing this action.

DEMAND FOR JURY TRIAL

AFL hereby demands a trial by jury on all issues so triable.

PRAYER FOR RELIEF

AFL respectfully requests the following relief:

a. Entry of judgment against Sterlite, finding Sterlite has directly infringed one or more claims of the Asserted Patent;

b. Entry of judgment against Sterlite, finding Sterlite has indirectly infringed one or more claims of the Asserted Patent by inducing its customers to directly infringe the Asserted Patent;

c. Entry of judgment against Sterlite, finding Sterlite's infringement of the Asserted Patent has been willful and deliberate;

d. An order requiring Sterlite to pay all appropriate damages, including prejudgment and post-judgment interest, for its direct and indirect infringement of the Asserted Patent;

e. An order pursuant to 35 U.S.C. § 283 permanently enjoining Sterlite, its officers, agents, servants, employees, attorneys, and all persons in active concert or participation with them, from further acts of infringement of the Asserted Patent;

f. An order awarding AFL treble damages under 35 U.S.C. § 284 as a result of

Sterlite's willful and deliberate infringement of the Asserted Patent;

g. Entry of judgment declaring that this case is exceptional and awarding Plaintiff its costs and reasonable attorney fees under 35 U.S.C. § 285; and

h. Such other and further relief as the Court deems just and proper.

Respectfully submitted,

CONNOLLY GALLAGHER LLP

OF COUNSEL:

Tim F. Williams
Scott Cole
Mark H. Johnson
DORITY & MANNING, P.A.
75 Beattie Place, Suite 1100
Greenville, SC 29601
(864) 271-1592
timw@dority-manning.com
scole@dority-manning.com
mjohnson@dority-manning.com

/s/ Arthur G. Connolly, III

Arthur G. Connolly, III (#2667)
1201 North Market Street, 20th Floor
Wilmington, DE 19801
(302) 757-7300
aconnolly@connollygallagher.com

Attorneys for Plaintiffs

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