UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MINNESOTA

VASCULAR SOLUTIONS LLC,)
TELEFLEX INNOVATIONS S.à r.l.,)
ARROW INTERNATIONAL, INC.,)
and TELEFLEX LLC) No
)
Plaintiff,)
)
V.) Jury Trial Demanded
)
MEDTRONIC, INC., and)
MEDTRONIC VASCULAR, INC.,)
)
Defendant.)

COMPLAINT

This is a complaint for patent infringement. Vascular Solutions LLC, Teleflex Innovations S.à r.l. ("Teleflex S.à r.l."), Arrow International, Inc. ("Arrow"), and Teleflex LLC (collectively "VSI") bring this action against Defendants Medtronic, Inc., and Medtronic Vascular, Inc. (collectively "Medtronic") and state as follows.

PARTIES

1. Plaintiff Vascular Solutions LLC is a Minnesota entity with a place of business at 6464 Sycamore Court North, Maple Grove, MN 55369. Together with its affiliated companies, Vascular Solutions LLC develops and manufactures clinical products for use in minimally invasive coronary and peripheral vasculature procedures. Vascular Solutions LLC's innovative products are developed to satisfy the needs of physicians performing complex vascular procedures.

- 2. Plaintiff Teleflex S.à r.l. is a Luxembourg corporation affiliated with Vascular Solutions LLC. Teleflex S.à r.l. is the owner by assignment of the patents-insuit. Teleflex S.à r.l. granted an exclusive license to the patents-in-suit to Vascular Solutions LLC to make, use, offer to sell, and sell products that are covered by the patents-in-suit along with the right to participate in litigation to enforce the patents-in-suit and other rights and obligations as stated in agreements between Vascular Solutions LLC and Teleflex S.à r.l.
- 3. Plaintiff Arrow is a Pennsylvania corporation with a place of business at 550 East Swedesford Road, Suite 400, Wayne, PA 19087 and is affiliated with Vascular Solutions LLC and Teleflex S.à r.l. Vascular Solutions LLC granted Arrow an exclusive license to offer to sell and sell under the patents-in-suit; a right to participate in litigation to enforce the patents-in-suit; and other rights and obligations as stated in the agreements between Vascular Solutions LLC and Arrow.
- 4. Plaintiff Teleflex LLC employs individuals, as part of a service provider relationship with Arrow, that sell products that practice the patents-in-suit. Teleflex LLC has entered into a binding asset purchase agreement with Arrow (scheduled to close in August 2019) that, among other things, transfers to Teleflex LLC all customer contracts, distributor agreements, sales contracts and other commitments and, in August, will be paired with a distribution agreement providing to Teleflex LLC the exclusive right to offer to sell and sell under the patents-in-suit.
- 5. Defendant Medtronic, Inc. is a Minnesota corporation with a place of business at 710 Medtronic Parkway, Minneapolis, MN 55432.

6. Defendant Medtronic Vascular, Inc. is a Delaware company with a place of business at 3576 Unocal Place, Fountaingrove A, Santa Rosa, CA 95403. Medtronic Vascular, Inc. is registered to do business in Minnesota with a registered business address of 2345 Rice Street, Suite 230, Roseville, MN 55113. The Minnesota Secretary of State Business Record Details identify the Chief Executive Officer of Medtronic Vascular, Inc. as Sean Salmon and list an address for the Chief Executive Officer at 710 Medtronic Parkway, LC300, Minneapolis, MN 55432.

JURISDICTION

- 7. This action arises under the Patent Act, 35 U.S.C. § 271 et seq.
- 8. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).
- 9. This Court has personal jurisdiction over Defendants. Medtronic, Inc. is incorporated in and is a resident of Minnesota and maintains an office and transacts business within Minnesota. Medtronic Vascular, Inc. is registered to conduct business in Minnesota, maintains a registered office in Minnesota, and identifies its Chief Executive Officer with an address in Minnesota.
- 10. Venue is proper in this District under 28 U.S.C. § 1391 and 1400(b). Medtronic, Inc. is incorporated in and is a resident of Minnesota and maintains an office and transacts business within Minnesota. Medtronic Vascular, Inc. is registered to conduct business in Minnesota, maintains a registered office in Minnesota, and identifies its Chief Executive Officer with an address in Minnesota. Medtronic has committed acts of infringement described herein in Minnesota.

MEDTRONIC'S INFRINGING PRODUCTS AND ACTIVITIES

- 11. Medtronic has committed acts of patent infringement by making, using, selling, offering for sale, and/or importing into the United States a guide extension catheter for interventional cardiology procedures marketed and sold as the Telescope Guide Extension Catheter.
- 12. Medtronic's Telescope product is available in two sizes: 6F and 7F. When both products are discussed collectively they will be referred to as "Telescope." If referred to separately, they will be referred to as "Telescope 6F" and "Telescope 7F," respectively.
- 13. Medtronic's Telescope catheter and its uses are a copy of VSI's industry-leading and bestselling interventional product, the GuideLiner catheter, and its uses, and of the patented features of the GuideLiner catheter that resulted in its remarkable success.
- 14. A copy of Medtronic's in-service slide deck for its Telescope catheter is attached as Exhibit A. Medtronic believes and intends that the product information for the Telescope catheter in Exhibit A is accurate.
- 15. A copy of Medtronic's Instructions for Use for the Telescope catheter is attached as Exhibit B. Exhibit B is accessible through https://www.medtronic.com/us-en/healthcare-professionals/products/cardiovascular/coronary-catheters/telescope.html, which is a link provided on Medtronic's website https://www.medtronic.com/us-en/index.html. Medtronic believes and intends that the product information for the Telescope catheter in Exhibit B is accurate.

- as Exhibit C. Exhibit C is accessible through https://www.medtronic.com/us-en/healthcare-professionals/products/cardiovascular/coronary-catheters/telescope.html, which is a link provided on Medtronic's website https://www.medtronic.com/us-en/index.html. Medtronic believes and intends that the product information for the Telescope catheter in Exhibit C is accurate.
- 17. A copy of a Medtronic press release relating to the Telescope catheter dated May 16, 2019 is attached as Exhibit D. Exhibit D is accessible through http://newsroom.medtronic.com/phoenix.zhtml?c=251324&p=irol-newsArticle&ID=2398888, which is a link provided on Medtronic's website https://www.medtronic.com/us-en/index.html. Medtronic believes and intends that the product information for the Telescope catheter in Exhibit D is accurate.
- 18. A copy of a letter from the U.S. Food and Drug Administration ("FDA") to Medtronic concerning Medtronic's Section 510(k) premarket notification of intent to market the Telescope catheter is attached as Exhibit E. Pages 3 through 7 of Exhibit E were submitted by or on behalf of Medtronic to the FDA and contain a summary of the contents of Medtronic's Section 510(k) premarket notification of intent to market the Telescope catheter. Medtronic believes and intends that the information concerning the Telescope catheter and Medtronic's 510(k) premarket notification of intent to market the Telescope catheter are accurate.
- 19. Exhibit E states that "Medtronic's TelescopeTM Guide Extension Catheter is substantially equivalent to the predicate device based on similarities in intended use and

technological characteristics." Ex. E at 5. Exhibit E identifies the substantially equivalent predicate device as "GuideLiner V3 Catheter." *Id*.

- 20. Medtronic advertises its coronary guide catheters on its website, including at least the Launcher Coronary Guide Catheter, the Sherpa NX Active Coronary Guide Catheter, and the Sherpa NX Balanced Coronary Guide Catheter (collectively "Medtronic Guide Catheters"). Exhibit F is a copy of Medtronic's website https://www.medtronic.com/us-en/healthcare-professionals/products/cardiovascular/coronary-catheters/guide.html depicting its coronary guide catheter products. This website is accessible via a link provided on Medtronic's website https://www.medtronic.com/us-en/index.html. Medtronic believes and intends that the product information for its guide catheters in Exhibit F is accurate.
- 21. In connection with its literature regarding the Telescope catheter,

 Medtronic promotes its "legacy of market-leading catheter expertise" and refers to itself
 as a "true market leader . . . [b]ased on guide catheter . . . market share reports and data
 on file at Medtronic." Ex. A at 23.
- 22. A guide catheter is required in order to use Medtronic's Telescope catheter.

 E.g., Ex. A at 39 ("Required GC I.D. (in.) . . ."); Ex. B at 5 ("Other items that are required but not provided in the package: Guide catheter"); Ex. E at 5 ("TelescopeTM Guide Extension Catheter is intended to be used in conjunction with guide catheters").
- 23. Medtronic directs its customers and users of the Telescope guide extension catheter to use Telescope with a guide catheter. *E.g.*, Ex. A at 39 ("Required GC I.D.

- (in.) . . . "); Ex. B at 4 ("Telescope guide extension catheter is intended to be used in conjunction with guide catheters") ("The guide extension catheter is designed to act as an extension to a traditional guide catheter") ("The guide extension catheter is delivered through a guide catheter"), 5 ("Other items that are required but not provided in the package: Guide catheter"); Ex. E at 5 ("TelescopeTM Guide Extension Catheter is intended to be used in conjunction with guide catheters").
- 24. Medtronic markets its Telescope catheter for the purpose of acting "as an extension to a traditional guide catheter and to facilitate the delivery of interventional devices into the vasculature." Ex. B at 4; *see also id.* ("Telescope guide extension catheter is intended to be used in conjunction with guide catheters to access discrete regions of the coronary and/or peripheral vasculature, and to facilitate placement of interventional devices."); Ex. E at 5 ("The guide extension catheter is designed to act as an extension to a traditional guide catheter") ("TelescopeTM Guide Extension Catheter is intended to be used in conjunction with guide catheters").
- 25. As of at least February 22, 2019, Medtronic was aware that VSI had a patent portfolio relating to its GuideLiner catheter.
 - 26. Medtronic asked to discuss a license to VSI's GuideLiner patent portfolio.
 - 27. VSI declined to license its GuideLiner patent portfolio to Medtronic.

COUNT IClaim for Patent Infringement of U.S. Patent No. 8,048,032

28. The allegations of paragraphs 1-27 are re-alleged as if fully set forth herein.

- 29. Teleflex S.à r.l. is the owner of United States Patent No. 8,048,032 ("'032 patent"), which issued on November 1, 2011, a copy of which is attached as Exhibit G.
- 30. Medtronic has infringed and continues to infringe one or more claims of the '032 patent, including at least claims 12 and 14, under 35 U.S.C. § 271(a) by making, using, offering to sell, selling, and importing (directly or through intermediaries), in this District and elsewhere in the United States, guide extension catheters, namely the Telescope guide extension catheter.
- 31. Attached as Exhibit L is a claim chart showing an example of how Medtronic infringes claims 12 and 14 of the '032 patent.
- 32. Medtronic's Telescope catheter satisfies claim element 11(p), as shown in Exhibit L.
- 33. Medtronic's Telescope catheter satisfies claim element 11(a), as shown in Exhibit L.
- 34. Medtronic's Telescope catheter satisfies claim element 11(b), as shown in Exhibit L.
- 35. Medtronic's Telescope catheter satisfies claim element 11(c), as shown in Exhibit L.
- 36. Medtronic's Telescope catheter satisfies claim element 11(d), as shown in Exhibit L.
- 37. Medtronic's Telescope catheter satisfies claim element 11(e), as shown in Exhibit L.

- 38. Medtronic's Telescope catheter satisfies claim element 12, as shown in Exhibit L.
- 39. Medtronic's Telescope catheter satisfies claim element 14, as shown in Exhibit L.
- 40. VSI did not give Medtronic authorization or license to make, use, offer to sell, sell, or import the Telescope catheter.
- 41. Medtronic also indirectly infringes the '032 patent, including at least claims 12 and 14 under at least 35 U.S.C. § 271(b).
- 42. Medtronic has induced and continues to induce infringement in this District and elsewhere in the United States of one or more claims of the '032 patent, including at least claims 12 and 14, by, among other things, actively and successfully encouraging, instructing, enabling, and otherwise causing end users and/or customers to use its Telescope catheter in a manner that infringes the '032 patent. For example, Medtronic's Instructions for Use instruct end users and/or customers to use the Telescope catheter to perform interventional cardiology procedures. E.g., Ex. B at 4 ("The guide extension catheter is designed to act as an extension to a traditional guide catheter and to facilitate the delivery of interventional devices into the vasculature. The guide extension catheter is intended to be used within the coronary and/or peripheral vasculature to provide support."). Medtronic's Instructions for Use, FDA submission, and marketing materials indicate that Telescope is specifically designed to be used with a guide catheter and require that the Telescope catheter be used along with a guide catheter and hemostatic valve. E.g., Ex. A at 11, 39 ("Required GC I.D. (in.) . . ."); Ex. B at 4 ("Telescope guide

- 43. Upon information and belief, at least as early as February 22, 2019, Medtronic had knowledge of the '032 patent.
- 44. Medtronic did not develop the Telescope catheter on its own, but instead copied VSI's GuideLiner catheter. Medtronic has willfully infringed and continues to willfully infringe the '032 patent.
 - 45. VSI has satisfied the notice or marking provisions of 35 U.S.C. § 287.
- 46. Medtronic's infringement of the '032 patent has caused and will continue to cause damage to VSI, causing irreparable harm for which there is no adequate remedy at law, unless enjoined.

COUNT IIClaim for Patent Infringement of U.S. Patent No. RE45,380

- 47. The allegations of paragraphs 1-46 are re-alleged as if fully set forth herein.
- 48. Teleflex S.à r.l. is the owner of United States Patent No. RE45,380 ("'380 Patent''), which issued on February 17, 2015, a copy of which is attached as Exhibit H.

- 49. Medtronic has infringed and continues to infringe one or more claims of the '380 patent, including at least claims 12, 13, and 15, under 35 U.S.C. § 271(a) by making, using, offering to sell, selling, and/or importing (directly or through intermediaries), in this District and elsewhere in the United States, a system made up of guide extension catheters, namely the Telescope catheter, and guide catheters, namely the Medtronic Guide Catheters.
- 50. Attached as Exhibit M is a claim chart showing an example of how Medtronic infringes claims 12, 13, and 15 of the '380 patent.
- 51. Medtronic's Telescope catheter and/or Medtronic's Guide Catheters satisfy claim element 12(p), as shown in Exhibit M.
- 52. Medtronic's Telescope catheter and/or Medtronic's Guide Catheters satisfy claim element 12(a), as shown in Exhibit M.
- 53. Medtronic's Telescope catheter and/or Medtronic's Guide Catheters satisfy claim element 12(b), as shown in Exhibit M.
- 54. Medtronic's Telescope catheter and/or Medtronic's Guide Catheters satisfy claim element 12(c), as shown in Exhibit M.
- 55. Medtronic's Telescope catheter and/or Medtronic's Guide Catheters satisfy claim element 12(d), as shown in Exhibit M.
- 56. Medtronic's Telescope catheter and/or Medtronic's Guide Catheters satisfy claim element 12(e), as shown in Exhibit M.
- 57. Medtronic's Telescope catheter and/or Medtronic's Guide Catheters satisfy claim element 12(f), as shown in Exhibit M.

- 58. Medtronic's Telescope catheter and/or Medtronic's Guide Catheters satisfy claim element 12(g), as shown in Exhibit M.
- 59. Medtronic's Telescope catheter and/or Medtronic's Guide Catheters satisfy claim element 13, as shown in Exhibit M.
- 60. Medtronic's Telescope catheter and/or Medtronic's Guide Catheters satisfy claim element 15, as shown in Exhibit M.
- 61. VSI did not give Medtronic authorization or license to make, use, offer to sell, sell, or import the Telescope catheter or a system comprising the Telescope catheter and a Medtronic Guide Catheter.
- 62. Medtronic also indirectly infringes the '380 patent, including at least claims 12, 13, and 15, under 35 U.S.C. § 271(b) and (c).
- 63. Upon information and belief, at least as early as February 22, 2019, Medtronic had knowledge of the '380 patent.
- 64. Medtronic has induced and continues to induce infringement in this District and elsewhere in the United States of one or more claims of the '380 patent, including at least claims 12, 13, and 15, by, among other things, actively and successfully encouraging, instructing, enabling, and otherwise causing end users and/or customers to use its Telescope catheter along with Medtronic Guide Catheters and/or third-party guide catheters, and a hemostatic valve as a system which infringes the '380 patent. For example, Medtronic's Instructions for Use instruct end users and/or customers to use the Telescope catheter along with a guide catheter and hemostatic valve to perform interventional cardiology procedures. *E.g.*, Ex. B at 4 ("The guide extension catheter is

designed to act as an extension to a traditional guide catheter and to facilitate the delivery of interventional devices into the vasculature. The guide extension catheter is intended to be used within the coronary and/or peripheral vasculature to provide support.") ("Open the hemostasis valve and advance the guide extension catheter through the hemostasis valve and into the guide catheter."). Medtronic's Instructions for Use, FDA submission, and marketing materials indicate that Telescope is specifically designed to be used with a guide catheter and require that the Telescope catheter be used along with a guide catheter and hemostatic valve. E.g., Ex. A at 11, 39 ("Required GC I.D. (in.) . . . "); Ex. B at 4 ("Telescope guide extension catheter is intended to be used in conjunction with guide catheters . . . ") ("The guide extension catheter is designed to act as an extension to a traditional guide catheter "), 5 ("Other items that are required but not provided in the package: Guide catheter . . . Y-adaptor with hemostasis valve"); Ex. E at 5 ("The guide extension catheter is designed to act as an extension to a traditional guide catheter ") ("TelescopeTM Guide Extension Catheter is intended to be used in conjunction with guide catheters "). End users and/or customers have used the Telescope catheter as part of a system that infringes one or more claims of the '380 patent.

65. Medtronic has contributed to and continues to contribute to the infringement of one or more claims of the '380 patent, including at least claims 12, 13, and 15, by importing into the United States (directly or through intermediaries) and/or offering to sell and selling (directly or through intermediaries), to end users and/or customers, in this District and elsewhere in the United States, its Telescope catheter, a product that constitutes a component of a system covered by the '380 patent. Upon

information and belief, Medtronic knows its products are especially made or especially adapted for use in an infringement and that there is no substantial non-infringing use for a Telescope catheter without a guide catheter and a hemostatic valve. *E.g.*, Ex. A at 11, 39 ("Required GC I.D. (in.) . . ."); Ex. B at 4 ("Telescope guide extension catheter is intended to be used in conjunction with guide catheters") ("The guide extension catheter is designed to act as an extension to a traditional guide catheter"), 5 ("Other items that are required but not provided in the package: Guide catheter Y-adaptor with hemostasis valve"); Ex. E at 5 ("The guide extension catheter is designed to act as an extension to a traditional guide catheter") ("TelescopeTM Guide Extension Catheter is intended to be used in conjunction with guide catheters"). The Telescope catheter constitutes a material part of the invention, and end users and/or customers have used the Telescope catheter as part of a system that infringes one or more claims of the '380 patent.

- 66. Medtronic did not develop the Telescope catheter on its own, but instead copied VSI's GuideLiner catheter. Medtronic has willfully infringed and continues to willfully infringe the '380 patent.
 - 67. VSI has satisfied the notice or marking provisions of 35 U.S.C. § 287.
- 68. Medtronic's infringement of the '380 patent has caused and will continue to cause damage to VSI, causing irreparable harm for which there is no adequate remedy at law, unless enjoined.

COUNT IIIClaim for Patent Infringement of U.S. Patent No. RE45,776

- 69. The allegations of paragraphs 1-68 are re-alleged as if fully set forth herein.
- 70. Teleflex S.à r.l. is the owner of United States Patent No. RE45,776 ("'776 Patent''), which issued on October 27, 2015, a copy of which is attached as Exhibit I.
- 71. Medtronic has infringed and continues to infringe one or more claims of the '776 patent, including at least claims 25, 36, and 37, under 35 U.S.C. § 271(a) by making, using, offering to sell, selling, and importing (directly or through intermediaries), in this District and elsewhere in the United States, guide extension catheters, namely the Telescope catheter.
- 72. Attached as Exhibit N is a claim chart showing an example of how Medtronic infringes claims 25, 36, and 37 of the '776 patent.
- 73. Medtronic's Telescope catheter satisfies claim element 25(p), as shown in Exhibit N.
- 74. Medtronic's Telescope catheter satisfies claim element 25(a), as shown in Exhibit N.
- 75. Medtronic's Telescope catheter satisfies claim element 25(b), as shown in Exhibit N.
- 76. Medtronic's Telescope catheter satisfies claim element 25(c), as shown in Exhibit N.
- 77. Medtronic's Telescope catheter satisfies claim element 25(d), as shown in Exhibit N.

- 78. Medtronic's Telescope catheter satisfies claim element 36, as shown in Exhibit N.
- 79. Medtronic's Telescope catheter satisfies claim element 37, as shown in Exhibit N.
- 80. VSI did not give Medtronic authorization or license to make, use, offer to sell, sell, or import the Telescope catheter.
- 81. Medtronic also indirectly infringes the '776 patent, including at least claims 25, 36, and 37 under at least 35 U.S.C. § 271(b).
- 82. Upon information and belief, at least as early as February 22, 2019, Medtronic had knowledge of the '776 patent.
- 83. Medtronic has induced and continues to induce infringement in this District and elsewhere in the United States of one or more claims of the '776 patent, including at least claims 25, 36, and 37, by, among other things, actively and successfully encouraging, instructing, enabling, and otherwise causing end users and/or customers to use its Telescope catheter in a manner that infringes the '776 patent. For example, Medtronic's Instructions for Use instruct end users and/or customers to use the Telescope catheter to perform interventional cardiology procedures. *E.g.*, Ex. B at 4 ("The guide extension catheter is designed to act as an extension to a traditional guide catheter and to facilitate the delivery of interventional devices into the vasculature. The guide extension catheter is intended to be used within the coronary and/or peripheral vasculature to provide support."). Medtronic's Instructions for Use, FDA submission, and marketing materials indicate that Telescope is specifically designed to be used with a guide catheter

and require that the Telescope catheter be used along with a guide catheter. *E.g.*, Ex. A at 39 ("Required GC I.D. (in.) . . ."); Ex. B at 4 ("Telescope guide extension catheter is intended to be used in conjunction with guide catheters") ("The guide extension catheter is designed to act as an extension to a traditional guide catheter"), 5 ("Other items that are required but not provided in the package: Guide catheter"); Ex. E at 5 ("The guide extension catheter is designed to act as an extension to a traditional guide catheter") ("TelescopeTM Guide Extension Catheter is intended to be used in conjunction with guide catheters"). End users and/or customers have used the Telescope catheter in a manner that infringes one or more claims of the '776 patent.

- 84. Medtronic did not develop the Telescope catheter on its own, but instead copied VSI's GuideLiner catheter. Medtronic has willfully infringed, and continues to willfully infringe, the '776 patent.
 - 85. VSI has satisfied the notice or marking provisions of 35 U.S.C. § 287.
- 86. Medtronic's infringement of the '776 patent has caused and will continue to cause damage to VSI, causing irreparable harm for which there is no adequate remedy at law, unless enjoined.

COUNT IVClaim for Patent Infringement of U.S. Patent No. RE47,379

- 87. The allegations of paragraphs 1-86 are re-alleged as if fully set forth herein.
- 88. Teleflex S.à r.l. is the owner of United States Patent No. RE47,379 ("'379 Patent"), which issued on May 7, 2019, a copy of which is attached as Exhibit J.

- 89. Medtronic has infringed and continues to infringe one or more claims of the '379 patent, including at least claims 25, 33, 34, 38, and 44, under 35 U.S.C. § 271(g) by importing into the United States and/or offering to sell, selling, or using (directly or through intermediaries), in this District and elsewhere in the United States, guide extension catheters, namely Telescope guide extension catheters that are made by a process patented in the United States.
- 90. Attached as Exhibit O is a claim chart showing an example of how Medtronic infringes claims 25, 33, 34, 38, and 44 of the '379 patent.
- 91. Manufacture of Medtronic's Telescope catheter satisfies claim element 25(p), as shown in Exhibit O.
- 92. Manufacture of Medtronic's Telescope catheter satisfies claim element 25(a), as shown in Exhibit O.
- 93. Manufacture of Medtronic's Telescope catheter satisfies claim element 25(b), as shown in Exhibit O.
- 94. Manufacture of Medtronic's Telescope catheter satisfies claim element 25(c), as shown in Exhibit O.
- 95. Manufacture of Medtronic's Telescope catheter satisfies claim element 25(d), as shown in Exhibit O.
- 96. Manufacture of Medtronic's Telescope catheter satisfies claim element 25(e), as shown in Exhibit O.
- 97. Manufacture of Medtronic's Telescope catheter satisfies claim element 25(f), as shown in Exhibit O.

- 98. Manufacture of Medtronic's Telescope catheter satisfies claim element 25(g), as shown in Exhibit O.
- 99. Manufacture of Medtronic's Telescope catheter satisfies claim element 33, as shown in Exhibit O.
- 100. Manufacture of Medtronic's Telescope 6F catheter satisfies claim element 34, as shown in Exhibit O.
- 101. Manufacture of Medtronic's Telescope catheter satisfies claim element 38(p), as shown in Exhibit O.
- 102. Manufacture of Medtronic's Telescope catheter satisfies claim element 38(a), as shown in Exhibit O.
- 103. Manufacture of Medtronic's Telescope catheter satisfies claim element 38(b), as shown in Exhibit O.
- 104. Manufacture of Medtronic's Telescope catheter satisfies claim element 38(c), as shown in Exhibit O.
- 105. Manufacture of Medtronic's Telescope catheter satisfies claim element 38(d), as shown in Exhibit O.
- 106. Manufacture of Medtronic's Telescope catheter satisfies claim element 38(e), as shown in Exhibit O.
- 107. Manufacture of Medtronic's Telescope catheter satisfies claim element 44, as shown in Exhibit O.
- 108. VSI did not give Medtronic authorization or license to use, offer to sell, sell, or import the Telescope catheter.

- 109. Medtronic also indirectly infringes the '379 patent, including at least claims 25, 33, 34, 38, and 44 under 35 U.S.C. § 271(b) and claims 33 and 34 under 35 U.S.C. § 271(c).
- 110. At least as of the date of this complaint, Medtronic had knowledge of the '379 patent.
- 111. Medtronic has induced and continues to induce infringement in this District and elsewhere in the United States of one or more claims of the '379 patent, including at least claims 25, 33, 34, 38, and 44, by, among other things, actively and successfully encouraging, instructing, enabling, and otherwise causing end users and/or customers to use its Telescope catheter in a manner that infringes the '379 patent. For example, Medtronic's Instructions for Use instruct end users and/or customers to use the Telescope catheter to perform interventional cardiology procedures. E.g., Ex. B at 4 ("The guide extension catheter is designed to act as an extension to a traditional guide catheter and to facilitate the delivery of interventional devices into the vasculature. The guide extension catheter is intended to be used within the coronary and/or peripheral vasculature to provide support."). Medtronic's Instructions for Use, FDA submission, and marketing materials indicate that Telescope is specifically designed to be used with a guide catheter and require that the Telescope catheter be used along with a guide catheter. E.g., Ex. A at 39 ("Required GC I.D. (in.) . . ."); Ex. B at 4 ("Telescope guide extension catheter is intended to be used in conjunction with guide catheters . . . ") ("The guide extension catheter is designed to act as an extension to a traditional guide catheter . . . "), 5 ("Other items that are required but not provided in the package: Guide catheter "); Ex. E at 5

("The guide extension catheter is designed to act as an extension to a traditional guide catheter") ("TelescopeTM Guide Extension Catheter is intended to be used in conjunction with guide catheters"). End users and/or customers have used the Telescope catheter in a manner that infringes one or more claims of the '379 patent.

112. Medtronic has contributed to and continues to contribute to the infringement of one or more claims of the '379 patent, including at least claims 33 and 34, by importing into the United States (directly or through intermediaries) and/or offering to sell and selling (directly or through intermediaries), to end users and/or customers, in this District and elsewhere in the United States, its Telescope catheter, a product that constitutes a component of a combination or system covered by the '379 patent. Upon information and belief, Medtronic knows its products are especially made or especially adapted for use in an infringement and that there is no substantial noninfringing use for a Telescope catheter without a guide catheter. E.g., Ex. A at 39 ("Required GC I.D. (in.) . . . "); Ex. B at 4 ("Telescope guide extension catheter is intended to be used in conjunction with guide catheters ") ("The guide extension catheter is designed to act as an extension to a traditional guide catheter ") ("The guide extension catheter is offered in sizes compatible with 6 Fr and 7 Fr guide catheters. ...") ("The guide extension catheter is delivered through a guide catheter resulting in an overall inner diameter that is approximately 1 Fr smaller than the guide catheter."), 5 ("Other items that are required but not provided in the package: Guide catheter . . . "); Ex. E at 5 ("The guide extension catheter is designed to act as an extension to a traditional guide catheter ") ("TelescopeTM Guide Extension Catheter is intended to

be used in conjunction with guide catheters"). The Telescope catheter constitutes a material part of the invention, and end users and/or customers have used the Telescope catheter, along with a guide catheter and/or a Medtronic Guide Catheter as part of a combination that infringes one or more claims of the '379 patent.

- 113. VSI has satisfied the notice or marking provisions of 35 U.S.C. § 287.
- 114. Medtronic's infringement of the '379 patent has caused and will continue to cause damage to VSI, causing irreparable harm for which there is no adequate remedy at law, unless enjoined.

COUNT V Claim for Patent Infringement of U.S. Patent No. RE45,760

- 115. The allegations of paragraphs 1-114 are re-alleged as if fully set forth herein.
- 116. Teleflex S.à r.l. is the owner of United States Patent No. RE45,760 ("'760 Patent"), which issued on October 20, 2015, a copy of which is attached as Exhibit K.
- 117. Medtronic has infringed and continues to infringe one or more claims of the '760 patent, including at least claims 25, 28, 29, 32, and 48, under 35 U.S.C. § 271(a) by making, using, offering to sell, selling, and/or importing (directly or through intermediaries), in this District and elsewhere in the United States, a system made up of guide extension catheters, namely the Telescope 6F catheter, and guide catheters, namely Medtronic Guide Catheters.
- 118. Attached as Exhibit P is a claim chart showing an example of how Medtronic infringes claims 25, 28, 29, 32, and 48 of the '760 patent.

- 119. Medtronic's Telescope 6F catheter and/or Medtronic's Guide Catheters satisfy claim element 25(p), as shown in Exhibit P.
- 120. Medtronic's Telescope 6F catheter and/or Medtronic's Guide Catheters satisfy claim element 25(a), as shown in Exhibit P.
- 121. Medtronic's Telescope 6F catheter and/or Medtronic's Guide Catheters satisfy claim element 25(b), as shown in Exhibit P.
- 122. Medtronic's Telescope 6F catheter and/or Medtronic's Guide Catheters satisfy claim element 25(c), as shown in Exhibit P.
- 123. Medtronic's Telescope 6F catheter and/or Medtronic's Guide Catheters satisfy claim element 25(d), as shown in Exhibit P.
- 124. Medtronic's Telescope 6F catheter and/or Medtronic's Guide Catheters satisfy claim element 25(e), as shown in Exhibit P.
- 125. Medtronic's Telescope 6F catheter and/or Medtronic's Guide Catheters satisfy claim element 25(f), as shown in Exhibit P.
- 126. Medtronic's Telescope 6F catheter and/or Medtronic's Guide Catheters satisfy claim element 28, as shown in Exhibit P.
- 127. Medtronic's Telescope 6F catheter and/or Medtronic's Guide Catheters satisfy claim element 29, as shown in Exhibit P.
- 128. Medtronic's Telescope 6F catheter and/or Medtronic's Guide Catheters satisfy claim element 32, as shown in Exhibit P.
- 129. Medtronic's Telescope 6F catheter and/or Medtronic's Guide Catheters satisfy claim element 48(p), as shown in Exhibit P.

- 130. Medtronic's Telescope 6F catheter and/or Medtronic's Guide Catheters satisfy claim element 48(a), as shown in Exhibit P.
- 131. Medtronic's Telescope 6F catheter and/or Medtronic's Guide Catheters satisfy claim element 48(b), as shown in Exhibit P.
- 132. Medtronic's Telescope 6F catheter and/or Medtronic's Guide Catheters satisfy claim element 48(c), as shown in Exhibit P.
- 133. Medtronic's Telescope 6F catheter and/or Medtronic's Guide Catheters satisfy claim element 48(d), as shown in Exhibit P.
- 134. Medtronic's Telescope 6F catheter and/or Medtronic's Guide Catheters satisfy claim element 48(e), as shown in Exhibit P.
- 135. Medtronic's Telescope 6F catheter and/or Medtronic's Guide Catheters satisfy claim element 48(f), as shown in Exhibit P.
- 136. VSI did not give Medtronic authorization or license to make, use, offer to sell, sell, or import the Telescope 6F catheter or a system comprising the Telescope 6F catheter and a Medtronic Guide Catheter.
- 137. Medtronic also indirectly infringes the '760 patent, including at least claims 25, 28, 29, 32, and 48, under 35 U.S.C. § 271(b) and (c).
- 138. Upon information and belief, at least as early as February 22, 2019, Medtronic had knowledge of the '760 patent.
- 139. Medtronic has induced and continues to induce infringement in this District and elsewhere in the United States of one or more claims of the '760 patent, including at least claims 25, 28, 29, 32, and 48, by, among other things, actively and successfully

encouraging, instructing, enabling, and otherwise causing end users and/or customers to use its Telescope 6F catheter along with Medtronic Guide Catheters and/or third-party guide catheters, and a hemostasis valve as a system which infringes the '760 patent. For example, Medtronic's Instructions for Use instruct end users and/or customers to use the Telescope 6F catheter along with a guide catheter and hemostatic valve to perform interventional cardiology procedures. E.g., Ex. B at 4 ("The guide extension catheter is designed to act as an extension to a traditional guide catheter and to facilitate the delivery of interventional devices into the vasculature. The guide extension catheter is intended to be used within the coronary and/or peripheral vasculature to provide support.") ("Open the hemostasis valve and advance the guide extension catheter through the hemostasis valve and into the guide catheter."). Medtronic's Instructions for Use, FDA submission, and marketing materials indicate that Telescope is specifically designed to be used with a guide catheter and require that the Telescope catheter be used along with a guide catheter. E.g., Ex. A at 11, 39 ("Required GC I.D. (in.) . . . "); Ex. B at 4 ("Telescope guide extension catheter is intended to be used in conjunction with guide catheters ") ("The guide extension catheter is designed to act as an extension to a traditional guide catheter. ..."), 5 ("Other items that are required but not provided in the package: Guide catheter... . Y-adaptor with hemostasis valve"); Ex. E at 5 ("The guide extension catheter is designed to act as an extension to a traditional guide catheter ") ("TelescopeTM Guide Extension Catheter is intended to be used in conjunction with guide catheters "). End users and/or customers have used the Telescope 6F catheter as part of a system that infringes one or more claims of the '760 patent.

- Medtronic has contributed to and continues to contribute to the 140. infringement of one or more claims of the '760 patent, including at least claims 25, 28, 29, 32, and 48, by importing into the United States (directly or through intermediaries) and/or offering to sell and selling (directly or through intermediaries), to end users and/or customers, in this District and elsewhere in the United States, its Telescope 6F catheter, a product that constitutes a component of a combination or system covered by the '760 patent. Upon information and belief, Medtronic knows its products are especially made or especially adapted for use in an infringement and that there is no substantial noninfringing use for a Telescope 6F catheter without a guide catheter and a hemostatic valve. E.g., Ex. A at 11, 39 ("Required GC I.D. (in.) . . ."); Ex. B at 4 ("Telescope guide extension catheter is intended to be used in conjunction with guide catheters ") ("The guide extension catheter is designed to act as an extension to a traditional guide catheter. ..."), 5 ("Other items that are required but not provided in the package: Guide catheter... . Y-adaptor with hemostasis valve"); Ex. E at 5 ("The guide extension catheter is designed to act as an extension to a traditional guide catheter ") ("TelescopeTM Guide Extension Catheter is intended to be used in conjunction with guide catheters "). The Telescope 6F catheter constitutes a material part of the invention, and end users and/or customers have used the Telescope catheter as part of a system that infringes one or more claims of the '760 patent.
- 141. Medtronic did not develop the Telescope catheter on its own, but instead copied VSI's GuideLiner catheter. Medtronic has willfully infringed and continues to willfully infringe, the '760 patent.

- 142. VSI has satisfied the notice or marking provisions of 35 U.S.C. § 287.
- 143. Medtronic's infringement of the '760 patent has caused and will continue to cause damage to VSI, causing irreparable harm for which there is no adequate remedy at law, unless enjoined.

PRAYER FOR RELIEF

VSI respectfully requests the following relief:

- A. A judgment that Medtronic has infringed the '032, '380, '776, '379 and '760 patents;
- B. A judgment and order requiring Medtronic to pay all appropriate damages under 35 U.S.C. § 284, including pre-judgment and post-judgment interest, costs, and increased damages for Medtronic's willful infringement;
- C. A judgment and order that this is an exceptional case under 35 U.S.C. § 285 and awarding VSI its reasonable attorney fees;
- D. Preliminary and permanent injunctions against Medtronic and its officers, agents, employees, attorneys, and all persons in active concert or participation with them, prohibiting infringement of the '032, '380, '776, '379, and '760 patents; and
 - E. Such other and further relief that this Court may deem just and equitable.

DEMAND FOR A JURY TRIAL

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, VSI demands a trial by jury of all issues so triable.

Dated: July 2, 2019

s/ J. Derek Vandenburgh

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