



2. Samsung Electronics Co., Ltd. is a corporation organized under the laws of South Korea with its principal place of business located at Samsung Main Building, 250, Taepyeongno 2-ga, Jung-gu, Seoul 100-742, Republic of Korea.

3. Samsung Electronics America, Inc. is a New York corporation and a subsidiary of Samsung Electronics Co., Ltd. This Defendant's principal place of business is located at 1200 New Hampshire Ave., Suite 500, Washington, DC 20036. It may be served with process through its registered agent in the Commonwealth of Virginia, CT Corporation System, 4701 Cox Rd., Suite 301, Glen Allen, Virginia 23060-6802.

4. Samsung Telecommunications America LLC is a Delaware corporation and a subsidiary of Samsung Electronics Co., Ltd. This Defendant's principal place of business is located at 1301 E. Lookout Drive, Richardson, Texas 75082. It may be served with process through its registered agent in the Commonwealth of Virginia, Corporation Service Company, 11 S. 12th St., PO Box 1463, Richmond, Virginia 23218.

#### **JURISDICTION AND VENUE**

5. Virginia Innovation Sciences brings this action for patent infringement under the patent laws of the United States, namely 35 U.S.C. §§ 271, 281, and 284-285, among others. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331, 1338(a), and 1367.

6. Venue is proper in this judicial district pursuant to 28 U.S.C. §§ 1391(c) and 1400(b). On information and belief, each Defendant is deemed to reside in this judicial district, has committed acts of infringement in this judicial district, has purposely transacted business involving their accused products in this judicial district, and/or has regular and established places of business in this judicial district.

7. Each Defendant is subject to this Court's specific and general personal jurisdiction pursuant to due process and/or the Virginia Long Arm Statute, due at least to its substantial business in this State and judicial district, including: (A) at least part of its infringing activities alleged herein; and (B) regularly doing or soliciting business, engaging in other persistent conduct, and/or deriving substantial revenue from goods sold and services provided to Virginia residents.

**COUNT I**

**(INFRINGEMENT OF U.S. PATENT NO. 7,899,492)**

8. Virginia Innovation Sciences incorporates paragraphs 1 through 7 herein by reference.

9. This cause of action arises under the patent laws of the United States, and in particular, 35 U.S.C. §§ 271, *et seq.*

10. Virginia Innovation Sciences is the owner of the '492 patent, entitled "Methods, Systems and Apparatus for Displaying the Multimedia Information From Wireless Communication Networks," with ownership of all substantial rights in the '492 patent, including the right to exclude others and to enforce, sue, and recover damages for past and future infringement. A true and correct copy of the '492 patent is attached as Exhibit A.

11. The '492 patent is valid, enforceable and was duly issued in full compliance with Title 35 of the United States Code.

**DIRECT INFRINGEMENT (35 U.S.C. § 271(a))**

12. Defendants have directly infringed, and continue to directly infringe, one or more claims of the '492 patent in this judicial district and elsewhere in Virginia and the United States.

13. In particular, Defendants are infringing at least claims 1, 2, 3, 4, 6, 7, 11, 23, 24, 25, 26, 28, 29, and 33, by, among other things, making, using, offering for sale, selling, and/or importing HDTV adapters that are capable of operating in conjunction with mobile terminals to provide video content to a television (“HDTV Adapters”). Such devices include, but are not limited to the HDMI Smart Adapter, the HDTV Smart Adapter, and the MHL 2.0 HDTV Smart Adapter. The HDTV Adapters infringe in and of themselves, and/or when used in conjunction with Micro-USB or MHL enabled devices.

14. Further, Defendants have directly infringed, and continue to directly infringe, at least claims 1, 2, 3, 4, 6, 7, 11, 23, 24, 25, 26, 28, 29, and 33, by, among other things, making, using, offering for sale, selling, and/or importing docking stations that are capable of operating in conjunction with mobile terminals to provide video content to a television. Such devices include, but are not limited to the Smart Dock Multimedia Hub.

15. Further, Defendants have directly infringed, and continue to directly infringe, at least claims 1, 3, 6, 7, 11, 23, 25, 28, and 33, by, among other things, making, using, offering for sale, selling, and/or importing smartphones that support video output using MHL. Such devices include, but are not limited to the Galaxy S4, the Galaxy Victory, the Galaxy Express, the Galaxy Note II, the Galaxy Note 3, and the Galaxy S Relay.

16. Further, Defendants have directly infringed, and continue to directly infringe, at least claims 1, 3, 6, 7, 11, 23, 25, 28, and 33, by, among other things, making, using, offering for sale, selling, and/or importing tablets that support video output using MHL. Such devices include, but are not limited to the Galaxy Tab 2 10.1, the Galaxy Note 10.1, the Galaxy Tab 3 7.0, the Galaxy Tab 3 8.0, and the Galaxy Tab 3 10.1.

17. Defendants are liable for these direct infringements of the '492 patent pursuant to 35 U.S.C. § 271.

**INDIRECT INFRINGEMENT (INDUCEMENT - 35 U.S.C. § 271(b))**

18. Based on the information presently available to Virginia Innovation Sciences, absent discovery, and in the alternative to direct infringement, Virginia Innovation Sciences contends that Defendants have indirectly infringed, and continue to indirectly infringe, one or more claims of the '492 patent by inducing direct infringement by users who use the HDTV Adapters in conjunction with the Galaxy S4, Galaxy Victory, Galaxy Express, Galaxy Note II, the Galaxy Note 3, and Galaxy S Relay.

19. Based on the information presently available to Virginia Innovation Sciences, absent discovery, and in the alternative to direct infringement, Virginia Innovation Sciences contends that Defendants have indirectly infringed, and continue to indirectly infringe, one or more claims of the '492 patent by inducing direct infringement by users who use the Smart Dock Multimedia Hub in conjunction with the Galaxy S4, the Galaxy Note II, or the Galaxy Note 3.

20. Based on the information presently available to Virginia Innovation Sciences, absent discovery, and in the alternative to direct infringement, Virginia Innovation Sciences contends that Defendants have indirectly infringed, and continue to indirectly infringe, one or more claims of the '492 patent by inducing direct infringement by users who use smartphones that support video output using MHL. Such devices include, but are not limited to the Galaxy S4, the Galaxy Victory, the Galaxy Express, the Galaxy Note II, the Galaxy Note 3, and the Galaxy S Relay.

21. Based on the information presently available to Virginia Innovation Sciences, absent discovery, and in the alternative to direct infringement, Virginia Innovation Sciences

contends that Defendants have indirectly infringed, and continue to indirectly infringe, one or more claims of the '492 patent by inducing direct infringement by users who use the Samsung Galaxy Tab HDTV Adapter in conjunction with Samsung tablets. Such tablets include, but are not limited to, the Galaxy Note 10.1 and the Galaxy Tab 2 10.1.

22. Based on the information presently available to Virginia Innovation Sciences, absent discovery, and in the alternative to direct infringement, Virginia Innovation Sciences contends that Defendants have indirectly infringed, and continue to indirectly infringe, one or more claims of the '492 patent by inducing direct infringement by users who use tablets that support video output using MHL. Such devices include, but are not limited to the Galaxy Tab 2 10.1, the Galaxy Note 10.1, the Galaxy Tab 3 7.0, the Galaxy Tab 3 8.0, and the Galaxy Tab 3 10.1.

23. Defendants have had knowledge of the '492 patent and the infringing nature of their activities at least since October 23, 2012, when Virginia Innovation Sciences effected service of the Original Complaint in *Virginia Innovation Sciences, Inc. v. Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., and Samsung Telecommunications America LLC*, Civil Action No. 2:12-cv-548 (E.D. Va).

24. On information and belief, despite having knowledge of the '492 patent, Defendants have specifically intended for persons who acquire and use Samsung HDTV Adapters, docking stations, smartphones, and tablets, including Defendants' customers, to acquire and use such devices in such a way that infringes the '492 patent, including at least claims 1-4, 6, 7, 11, 23-26, 28, 29, and 33, and Defendants knew or should have known that their actions were inducing infringement.

25. Defendants instruct users to use the Samsung HDMI Smart Adapter in a manner that infringes the '492 patent by providing an instruction and/or user manual with the Samsung HDMI Smart Adapter. Defendants instruct users to use the Samsung HDTV Smart Adapter in a manner that infringes the '492 patent by providing an instruction and/or user manual with the Samsung HDTV Smart Adapter. And Defendants instruct users to use the Samsung Galaxy Tab HDTV Adapter in a manner that infringes the '492 patent by providing an instruction and/or user manual with the Samsung Galaxy Tab HDTV Adapter.

26. Furthermore, Defendants have not implemented a design around or otherwise taken any remedial action with respect to the '492 patent. In accordance with Fed. R. Civ. P. 11(b)(3), Virginia Innovation Sciences will likely have additional evidentiary support after a reasonable opportunity for discovery on this issue.

**INDIRECT INFRINGEMENT (CONTRIBUTORY - 35 U.S.C. § 271(c))**

27. Based on the information presently available to Virginia Innovation Sciences, absent discovery, and in the alternative to direct infringement, Virginia Innovation Sciences contends that Defendants have indirectly infringed, and continue to indirectly infringe, one or more claims of the '492 patent by contributing to the direct infringement by users who use the HDTV Adapters.

28. Defendants have had knowledge of the '492 patent and the infringing nature of their activities at least since October 23, 2012, when Virginia Innovation Sciences effected service of the Original Complaint in *Virginia Innovation Sciences, Inc. v. Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., and Samsung Telecommunications America LLC*, Civil Action No. 2:12-cv-548 (E.D. Va). Despite this knowledge, Defendants have knowingly sold and continue to offer for sale HDTV Adapters even though such devices have no substantial

noninfringing use. Such devices infringe the '492 patent, including at least claims 1, 2, 3, 4, 6, 7, 11, 23, 24, 25, 26, 28, 29, and 33.

29. Virginia Innovation Sciences has been damaged as a result of Defendants' infringing conduct described in this Count. Defendants are, thus, liable to Virginia Innovation Sciences in an amount that adequately compensates Virginia Innovation Sciences for their infringements, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

## **COUNT II**

### **(INFRINGEMENT OF U.S. PATENT NO. 8,050,711)**

30. Virginia Innovation Sciences incorporates paragraphs 1 through 7 herein by reference.

31. This cause of action arises under the patent laws of the United States, and in particular, 35 U.S.C. §§ 271, *et seq.*

32. Virginia Innovation Sciences is the owner of the '711 patent, entitled "Methods, Systems and Apparatus for Displaying the Multimedia Information From Wireless Communication Networks," with ownership of all substantial rights in the '711 patent, including the right to exclude others and to enforce, sue, and recover damages for past and future infringement. A true and correct copy of the '711 patent is attached as Exhibit B.

33. The '711 patent is valid, enforceable and was duly issued in full compliance with Title 35 of the United States Code.

### **DIRECT INFRINGEMENT (35 U.S.C. § 271(a))**

34. Defendants have directly infringed, and continue to directly infringe, one or more claims of the '711 patent in this judicial district and elsewhere in Virginia and the United States.



35. In particular, Defendants are infringing at least claims 1, 2, 3, 4, 6, 7, 15, 16, 17, 18, 20, and 21, by, among other things, making, using, offering for sale, selling, and/or importing the HDTV Adapters. The HDTV Adapters infringe in and of themselves, and/or when used in conjunction with Micro-USB or MHL enabled devices

36. Further, Defendants have directly infringed, and continue to directly infringe, at least claims 1, 2, 3, 4, 6, 7, 15, 16, 17, 18, 20, and 21, by, among other things, making, using, offering for sale, selling, and/or importing docking stations that are capable of operating in conjunction with mobile terminals to provide video content to a television. Such devices include, but are not limited to the Smart Dock Multimedia Hub.

37. Further, Defendants have directly infringed, and continue to directly infringe, at least claims 1, 2, 6, 7, 15, 16, 20, and 21, by, among other things, making, using, offering for sale, selling, and/or importing smartphones that support video output using MHL. Such devices include, but are not limited to the Galaxy S4, the Galaxy Victory, the Galaxy Express, the Galaxy Note II, the Galaxy Note 3, and the Galaxy S Relay.

38. Further, Defendants have directly infringed, and continue to directly infringe, at least claims 1, 3, 6, 7, 15, 17, 20, and 21, by, among other things, making, using, offering for sale, selling, and/or importing tablets that support video output using MHL. Such devices include, but are not limited to the Galaxy Tab 2 10.1, the Galaxy Note 10.1, the Galaxy Tab 3 7.0, the Galaxy Tab 3 8.0, and the Galaxy Tab 3 10.1.

39. Defendants are liable for these direct infringements of the '711 patent pursuant to 35 U.S.C. § 271.

**INDIRECT INFRINGEMENT (INDUCEMENT - 35 U.S.C. § 271(b))**

40. Based on the information presently available to Virginia Innovation Sciences, absent discovery, and in the alternative to direct infringement, Virginia Innovation Sciences contends that Defendants have indirectly infringed, and continue to indirectly infringe, one or more claims of the '711 patent by inducing direct infringement by users who use the HDTV Adapters in conjunction with the Galaxy S4, Galaxy Victory, Galaxy Express, Galaxy Note II, Galaxy Note 3, and Galaxy S Relay.

41. Based on the information presently available to Virginia Innovation Sciences, absent discovery, and in the alternative to direct infringement, Virginia Innovation Sciences contends that Defendants have indirectly infringed, and continue to indirectly infringe, one or more claims of the '711 patent by inducing direct infringement by users who use the Smart Dock Multimedia Hub in conjunction with the Galaxy S4, the Galaxy Note II, or the Galaxy Note 3.

42. Based on the information presently available to Virginia Innovation Sciences, absent discovery, and in the alternative to direct infringement, Virginia Innovation Sciences contends that Defendants have indirectly infringed, and continue to indirectly infringe, one or more claims of the '711 patent by inducing direct infringement by users who use smartphones that support video output using MHL. Such devices include, but are not limited to the Galaxy S4, the Galaxy Victory, the Galaxy Express, the Galaxy Note II, the Galaxy Note 3, and the Galaxy S Relay.

43. Based on the information presently available to Virginia Innovation Sciences, absent discovery, and in the alternative to direct infringement, Virginia Innovation Sciences contends that Defendants have indirectly infringed, and continue to indirectly infringe, one or more claims of the '711 patent by inducing direct infringement by users who use the Samsung

Galaxy Tab HDTV Adapter in conjunction with Samsung tablets. Such tablets include, but are not limited to, the Galaxy Note 10.1 and the Galaxy Tab 2 10.1.

44. Based on the information presently available to Virginia Innovation Sciences, absent discovery, and in the alternative to direct infringement, Virginia Innovation Sciences contends that Defendants have indirectly infringed, and continue to indirectly infringe, one or more claims of the '711 patent by inducing direct infringement by users who use tablets that support video output using MHL. Such devices include, but are not limited to the Galaxy Tab 2 10.1, the Galaxy Note 10.1, the Galaxy Tab 3 7.0, the Galaxy Tab 3 8.0, and the Galaxy Tab 3 10.1.

45. Defendants have had knowledge of the '711 patent and the infringing nature of their activities at least since October 23, 2012, when Virginia Innovation Sciences effected service of the Original Complaint in *Virginia Innovation Sciences, Inc. v. Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., and Samsung Telecommunications America LLC*, Civil Action No. 2:12-cv-548 (E.D. Va).

46. On information and belief, despite having knowledge of the '711 patent, Defendants have specifically intended for persons who acquire and use Samsung HDTV Adapters, docking stations, smartphones, and tablets, including Defendants' customers, to acquire and use such devices in such a way that infringes the '711 patent, including at least claims 1, 2, 3, 4, 6, 7, 15, 16, 17, 18, 20, and 21, and Defendants knew or should have known that their actions were inducing infringement.

47. Defendants instruct users to use the Samsung HDMI Smart Adapter in a manner that infringes the '711 patent by providing an instruction and/or user manual with the Samsung HDMI Smart Adapter. Defendants instruct users to use the Samsung HDTV Smart Adapter in a

manner that infringes the '711 patent by providing an instruction and/or user manual with the Samsung HDTV Smart Adapter. And Defendants instruct users to use the Samsung Galaxy Tab HDTV Adapter in a manner that infringes the '711 patent by providing an instruction and/or user manual with the Samsung Galaxy Tab HDTV Adapter.

48. Furthermore, Defendants have not implemented a design around or otherwise taken any remedial action with respect to the '711 patent. In accordance with Fed. R. Civ. P. 11(b)(3), Virginia Innovation Sciences will likely have additional evidentiary support after a reasonable opportunity for discovery on this issue.

**INDIRECT INFRINGEMENT (CONTRIBUTORY - 35 U.S.C. § 271(c))**

49. Based on the information presently available to Virginia Innovation Sciences, absent discovery, and in the alternative to direct infringement, Virginia Innovation Sciences contends that Defendants have indirectly infringed, and continue to indirectly infringe, one or more claims of the '711 patent by contributing to the direct infringement by users who use the HDTV Adapters.

50. Defendants have had knowledge of the '711 patent and the infringing nature of their activities at least since October 23, 2012, when Virginia Innovation Sciences effected service of the Original Complaint in *Virginia Innovation Sciences, Inc. v. Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., and Samsung Telecommunications America LLC*, Civil Action No. 2:12-cv-548 (E.D. Va). Despite this knowledge, Defendants have knowingly sold and continue to offer for sale HDTV Adapters even though such devices have no substantial noninfringing use. Such devices infringe the '711 patent, including at least claims 1, 2, 3, 4, 6, 7, 15, 16, 17, 18, 20, and 21.

51. Virginia Innovation Sciences has been damaged as a result of Defendants' infringing conduct described in this Count. Defendants are, thus, liable to Virginia Innovation Sciences in an amount that adequately compensates Virginia Innovation Sciences for their infringements, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

**COUNT III**

**(INFRINGEMENT OF U.S. PATENT NO. 8,145,268)**

52. Virginia Innovation Sciences incorporates paragraphs 1 through 7 herein by reference.

53. This cause of action arises under the patent laws of the United States, and in particular, 35 U.S.C. §§ 271, *et seq.*

54. Virginia Innovation Sciences is the owner of the '268 patent, entitled "Methods, Systems and Apparatus for Displaying the Multimedia Information From Wireless Communication Networks," with ownership of all substantial rights in the '268 patent, including the right to exclude others and to enforce, sue, and recover damages for past and future infringement. A true and correct copy of the '268 patent is attached as Exhibit C.

55. The '268 patent is valid, enforceable and was duly issued in full compliance with Title 35 of the United States Code.

**DIRECT INFRINGEMENT (35 U.S.C. § 271(a))**

56. Defendants have directly infringed, and continue to directly infringe, one or more claims of the '268 patent in this judicial district and elsewhere in Virginia and the United States.

57. In particular, Defendants are infringing at least claims 4, 6, 10, 14, 16, 20, 24, 25, and 29, by, among other things, making, using, offering for sale, selling, and/or importing the

HDTV Adapters. The HDTV Adapters infringe in and of themselves, and/or when used in conjunction with Micro-USB or MHL enabled devices

58. Further, Defendants have directly infringed, and continue to directly infringe, at least claims 4, 6, 10, 14, 16, 20, 24, 25, and 29, by, among other things, making, using, offering for sale, selling, and/or importing docking stations that are capable of operating in conjunction with mobile terminals to provide video content to a television. Such devices include, but are not limited to the Smart Dock Multimedia Hub.

59. Further, Defendants have directly infringed, and continue to directly infringe, at least claims 6, 9, 16, 19, 21, 22, 25, and 28, by, among other things, making, using, offering for sale, selling, and/or importing smartphones that support video output using MHL. Such devices include, but are not limited to the Galaxy S4, the Galaxy Victory, the Galaxy Express, the Galaxy Note II, the Galaxy Note 3, and the Galaxy S Relay.

60. Further, Defendants have directly infringed, and continue to directly infringe, at least claims 6, 9, 16, 19, 21, 23, 25, and 28, by, among other things, making, using, offering for sale, selling, and/or importing tablets that support video output using MHL. Such devices include, but are not limited to the Galaxy Tab 2 10.1, the Galaxy Note 10.1, the Galaxy Tab 3 7.0, the Galaxy Tab 3 8.0, and the Galaxy Tab 3 10.1.

61. Defendants are liable for these direct infringements of the '268 patent pursuant to 35 U.S.C. § 271.

**INDIRECT INFRINGEMENT (INDUCEMENT - 35 U.S.C. § 271(b))**

62. Based on the information presently available to Virginia Innovation Sciences, absent discovery, and in the alternative to direct infringement, Virginia Innovation Sciences contends that Defendants have indirectly infringed, and continue to indirectly infringe, one or

more claims of the '268 patent by inducing direct infringement by users who use the HDTV Adapters in conjunction with the Galaxy S4, Galaxy Victory, Galaxy Express, Galaxy Note II, Galaxy Note 3, and Galaxy S Relay.

63. Based on the information presently available to Virginia Innovation Sciences, absent discovery, and in the alternative to direct infringement, Virginia Innovation Sciences contends that Defendants have indirectly infringed, and continue to indirectly infringe, one or more claims of the '268 patent by inducing direct infringement by users who use the Smart Dock Multimedia Hub in conjunction with the Galaxy S4, the Galaxy Note II, or the Galaxy Note 3.

64. Based on the information presently available to Virginia Innovation Sciences, absent discovery, and in the alternative to direct infringement, Virginia Innovation Sciences contends that Defendants have indirectly infringed, and continue to indirectly infringe, one or more claims of the '268 patent by inducing direct infringement by users who use smartphones that support video output using MHL. Such devices include, but are not limited to the Galaxy S4, the Galaxy Victory, the Galaxy Express, the Galaxy Note II, the Galaxy Note 3, and the Galaxy S Relay.

65. Based on the information presently available to Virginia Innovation Sciences, absent discovery, and in the alternative to direct infringement, Virginia Innovation Sciences contends that Defendants have indirectly infringed, and continue to indirectly infringe, one or more claims of the '268 patent by inducing direct infringement by users who use the Samsung Galaxy Tab HDTV Adapter in conjunction with Samsung tablets. Such tablets include, but are not limited to, the Galaxy Note 10.1 and the Galaxy Tab 2 10.1.

66. Based on the information presently available to Virginia Innovation Sciences, absent discovery, and in the alternative to direct infringement, Virginia Innovation Sciences

contends that Defendants have indirectly infringed, and continue to indirectly infringe, one or more claims of the '268 patent by inducing direct infringement by users who use tablets that support video output using MHL. Such devices include, but are not limited to the Galaxy Tab 2 10.1, the Galaxy Note 10.1, the Galaxy Tab 3 7.0, the Galaxy Tab 3 8.0, and the Galaxy Tab 3 10.1.

67. Defendants have had knowledge of the '268 patent and the infringing nature of their activities at least since October 23, 2012, when Virginia Innovation Sciences effected service of the Original Complaint in *Virginia Innovation Sciences, Inc. v. Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., and Samsung Telecommunications America LLC*, Civil Action No. 2:12-cv-548 (E.D. Va).

68. On information and belief, despite having knowledge of the '268 patent, Defendants have specifically intended for persons who acquire and use Samsung HDTV Adapters, docking stations, smartphones, and tablets, including Defendants' customers, to acquire and use such devices in such a way that infringes the '268 patent, including at least claims 4, 6, 9, 10, 14, 16, 19, 20, 21, 22, 24, 25, 28, and 29, and Defendants knew or should have known that their actions were inducing infringement.

69. Defendants instruct users to use the Samsung HDMI Smart Adapter in a manner that infringes the '268 patent by providing an instruction and/or user manual with the Samsung HDMI Smart Adapter. Defendants instruct users to use the Samsung HDTV Smart Adapter in a manner that infringes the '268 patent by providing an instruction and/or user manual with the Samsung HDTV Smart Adapter. And Defendants instruct users to use the Samsung Galaxy Tab HDTV Adapter in a manner that infringes the '268 patent by providing an instruction and/or user manual with the Samsung Galaxy Tab HDTV Adapter.



70. Furthermore, Defendants have not implemented a design around or otherwise taken any remedial action with respect to the '268 patent. In accordance with Fed. R. Civ. P. 11(b)(3), Virginia Innovation Sciences will likely have additional evidentiary support after a reasonable opportunity for discovery on this issue.

**INDIRECT INFRINGEMENT (CONTRIBUTORY - 35 U.S.C. § 271(c))**

71. Based on the information presently available to Virginia Innovation Sciences, absent discovery, and in the alternative to direct infringement, Virginia Innovation Sciences contends that Defendants have indirectly infringed, and continue to indirectly infringe, one or more claims of the '268 patent by contributing to the direct infringement by users who use the HDTV Adapters.

72. Defendants have had knowledge of the '268 patent and the infringing nature of their activities at least since October 23, 2012, when Virginia Innovation Sciences effected service of the Original Complaint in *Virginia Innovation Sciences, Inc. v. Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., and Samsung Telecommunications America LLC*, Civil Action No. 2:12-cv-548 (E.D. Va). Despite this knowledge, Defendants have knowingly sold and continue to offer for sale HDTV Adapters even though such devices have no substantial noninfringing use. Such devices infringe the '268 patent, including at least claims 4, 6, 10, 14, 16, 20, 24, 25, and 29.

73. Virginia Innovation Sciences has been damaged as a result of Defendants' infringing conduct described in this Count. Defendants are, thus, liable to Virginia Innovation Sciences in an amount that adequately compensates Virginia Innovation Sciences for their infringements, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

**COUNT IV**

**(INFRINGEMENT OF U.S. PATENT NO. 8,224,381)**

74. Virginia Innovation Sciences incorporates paragraphs 1 through 7 herein by reference.

75. This cause of action arises under the patent laws of the United States, and in particular, 35 U.S.C. §§ 271, *et seq.*

76. Virginia Innovation Sciences is the owner of the '381 patent, entitled "Methods, Systems and Apparatus for Displaying the Multimedia Information From Wireless Communication Networks," with ownership of all substantial rights in the '381 patent, including the right to exclude others and to enforce, sue, and recover damages for past and future infringement. A true and correct copy of the '381 patent is attached as Exhibit D.

77. The '381 patent is valid, enforceable and was duly issued in full compliance with Title 35 of the United States Code.

**DIRECT INFRINGEMENT (35 U.S.C. § 271(a))**

78. Defendants have directly infringed, and continue to directly infringe, one or more claims of the '381 patent in this judicial district and elsewhere in Virginia and the United States.

79. In particular, Defendants are infringing at least claims 2, 3, 4, 6, 7, 8, 10, 12, 13, 14, 16, 17, 18, 20, 21, 22, 24, 25, 26, 29, 30, 31, 32, 34, 35, 37, 38, 39, 42, 43, 44, 45, 46, and 47, by, among other things, making, using, offering for sale, selling, and/or importing HDTV Adapters. The HDTV Adapters infringe in and of themselves, and/or when used in conjunction with Micro-USB or MHL enabled devices

80. Further, Defendants have directly infringed, and continue to directly infringe, at least claims 2, 3, 4, 6, 7, 8, 10, 12, 13, 14, 16, 17, 18, 20, 21, 22, 24, 25, 26, 29, 30, 31, 32, 34,

35, 37, 38, 39, 42, 43, 44, 45, 46, and 47, by, among other things, making, using, offering for sale, selling, and/or importing docking stations that are capable of operating in conjunction with mobile terminals to provide video content to a television. Such devices include, but are not limited to the Smart Dock Multimedia Hub.

81. Further, Defendants have directly infringed, and continue to directly infringe, at least claims 33, 34, 37, 38, 43, and 45, by, among other things, making, using, offering for sale, selling, and/or importing smartphones that support video output using MHL. Such devices include, but are not limited to the Galaxy S4, the Galaxy Victory, the Galaxy Express, the Galaxy Note II, the Galaxy Note 3, and the Galaxy S Relay.

82. Further, Defendants have directly infringed, and continue to directly infringe, at least claims 33, 35, 37, 38, 43, and 45, by, among other things, making, using, offering for sale, selling, and/or importing tablets that support video output using MHL. Such devices include, but are not limited to the Galaxy Tab 2 10.1, the Galaxy Note 10.1, the Galaxy Tab 3 7.0, the Galaxy Tab 3 8.0, and the Galaxy Tab 3 10.1.

83. Defendants are liable for these direct infringements of the '381 patent pursuant to 35 U.S.C. § 271.

**INDIRECT INFRINGEMENT (INDUCEMENT - 35 U.S.C. § 271(b))**

84. Based on the information presently available to Virginia Innovation Sciences, absent discovery, and in the alternative to direct infringement, Virginia Innovation Sciences contends that Defendants have indirectly infringed, and continue to indirectly infringe, one or more claims of the '381 patent by inducing direct infringement by users who use the HDTV Adapters in conjunction with the Galaxy S4, Galaxy Victory, Galaxy Express, Galaxy Note II, Galaxy Note 3, and Galaxy S Relay.

85. Based on the information presently available to Virginia Innovation Sciences, absent discovery, and in the alternative to direct infringement, Virginia Innovation Sciences contends that Defendants have indirectly infringed, and continue to indirectly infringe, one or more claims of the '381 patent by inducing direct infringement by users who use the Smart Dock Multimedia Hub in conjunction with the Galaxy S4, the Galaxy Note II, or the Galaxy Note 3.

86. Based on the information presently available to Virginia Innovation Sciences, absent discovery, and in the alternative to direct infringement, Virginia Innovation Sciences contends that Defendants have indirectly infringed, and continue to indirectly infringe, one or more claims of the '381 patent by inducing direct infringement by users who use the Samsung Galaxy Tab HDTV Adapter in conjunction with Samsung tablets. Such tablets include, but are not limited to, the Galaxy Note 10.1 and the Galaxy Tab 2 10.1.

87. Defendants have had knowledge of the '381 patent and the infringing nature of their activities at least since October 23, 2012, when Virginia Innovation Sciences effected service of the Original Complaint in *Virginia Innovation Sciences, Inc. v. Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., and Samsung Telecommunications America LLC*, Civil Action No. 2:12-cv-548 (E.D. Va).

88. On information and belief, despite having knowledge of the '381 patent, Defendants have specifically intended for persons who acquire and use Samsung HDTV Adapters, docking stations, smartphones, and tablets, including Defendants' customers, to acquire and use such devices in such a way that infringes the '381 patent, including at least claims 2, 3, 4, 6, 7, 8, 10, 12, 13, 14, 16, 17, 18, 20, 21, 22, 24, 25, 26, 29, 30, 31, 32, 33, 34, 35, 37, 38, 39, 42, 43, 44, 45, 46, and 47, and Defendants knew or should have known that their actions were inducing infringement.

89. Specifically, Defendants instruct users to use the Samsung HDMI Smart Adapter in a manner that infringes the '381 patent by providing an instruction and/or user manual with the Samsung HDMI Smart Adapter. Defendants instruct users to use the Samsung HDTV Smart Adapter in a manner that infringes the '381 patent by providing an instruction and/or user manual with the Samsung HDTV Smart Adapter. And Defendants instruct users to use the Samsung Galaxy Tab HDTV Adapter in a manner that infringes the '381 patent by providing an instruction and/or user manual with the Samsung Galaxy Tab HDTV Adapter.

90. Furthermore, Defendants have not implemented a design around or otherwise taken any remedial action with respect to the '381 patent. In accordance with Fed. R. Civ. P. 11(b)(3), Virginia Innovation Sciences will likely have additional evidentiary support after a reasonable opportunity for discovery on this issue.

**INDIRECT INFRINGEMENT (CONTRIBUTORY - 35 U.S.C. § 271(c))**

91. Based on the information presently available to Virginia Innovation Sciences, absent discovery, and in the alternative to direct infringement, Virginia Innovation Sciences contends that Defendants have indirectly infringed, and continue to indirectly infringe, one or more claims of the '381 patent by contributing to the direct infringement by users who use the HDTV Adapters.

92. Defendants have had knowledge of the '381 patent and the infringing nature of their activities at least since October 23, 2012, when Virginia Innovation Sciences effected service of the Original Complaint in *Virginia Innovation Sciences, Inc. v. Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., and Samsung Telecommunications America LLC*, Civil Action No. 2:12-cv-548 (E.D. Va). Despite this knowledge, Defendants have knowingly sold and continue to offer for sale HDTV Adapters even though such devices have no substantial

noninfringing use. Such devices infringe the '381 patent, including at least claims 2, 3, 4, 6, 7, 8, 10, 12, 13, 14, 16, 17, 18, 20, 21, 22, 24, 25, 26, 29, 30, 31, 32, 34, 35, 37, 38, 39, 42, 43, 44, 45, 46, and 47.

93. Virginia Innovation Sciences has been damaged as a result of Defendants' infringing conduct described in this Count. Defendants are, thus, liable to Virginia Innovation Sciences in an amount that adequately compensates Virginia Innovation Sciences for their infringements, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

### **COUNT V**

#### **(INFRINGEMENT OF U.S. PATENT NO. 8,135,398)**

94. Virginia Innovation Sciences incorporates paragraphs 1 through 7 herein by reference.

95. This cause of action arises under the patent laws of the United States, and in particular, 35 U.S.C. §§ 271, *et seq.*

96. Virginia Innovation Sciences is the owner of the '398 patent, entitled "Methods and Apparatus for Multimedia Communications with Different User Terminals," with ownership of all substantial rights in the '398 patent, including the right to exclude others and to enforce, sue, and recover damages for past and future infringement. A true and correct copy of the '398 patent is attached as Exhibit E.

97. The '398 patent is valid, enforceable and was duly issued in full compliance with Title 35 of the United States Code.

**DIRECT INFRINGEMENT (35 U.S.C. § 271(a))**

98. Defendants have directly infringed, and continue to directly infringe, one or more claims of the '398 patent in this judicial district and elsewhere in Virginia and the United States.

99. In particular, Defendants are infringing at least claims 1, 2, 3, 5, 8, 9, 14, 15, 16, 17, 20, 21, 22, 23, 24, 27, 28, 31, 32, 33, 34, 35, 36, 37, 38, 40, 41, 42, 43, 46, 47, 48, 51, 52, 53, 54, 55, 56, 58, 59, 60, 61, 62, 63, 64, 65, by, among other things, making, using, offering for sale, selling, and/or importing HDTV Adapters. The HDTV Adapters infringe in and of themselves, and/or when used in conjunction with Micro-USB or MHL enabled devices

100. Further, Defendants have directly infringed, and continue to directly infringe, at least claims 1, 2, 3, 5, 8, 9, 15, 16, 17, 20, 21, 22, 23, 24, 27, 28, 31, 32, 33, 34, 35, 37, 38, 40, 41, 42, 43, 46, 47, 48, 51, 52, 53, 54, 55, 56, 58, 59, 60, 61, 62, 63, 64, 65, by, among other things, making, using, offering for sale, selling, and/or importing docking stations that are capable of operating in conjunction with mobile terminals to provide video content to a television. Such devices include, but are not limited to the Smart Dock Multimedia Hub.

101. Further, Defendants have directly infringed, and continue to directly infringe, at least claims 1, 2, 3, 8, 9, 14, 15, 16, 18, 19, 20, 21, 22, 23, 25, 27, 28, 31, 32, 33, 37, 38, 41, 42, 44, 45, 46, 47, 49, 51, 52, 53, 55, 56, 59, 60, 61, 62, 64, 65, by, among other things, making, using, offering for sale, selling, and/or importing smartphones that support video output using MHL. Such devices include, but are not limited to the Galaxy S4, the Galaxy Victory, the Galaxy Express, the Galaxy Note II, the Galaxy Note 3, and the Galaxy S Relay.

102. Further, Defendants have directly infringed, and continue to directly infringe, at least claims 1, 2, 3, 8, 9, 14, 15, 18, 20, 21, 22, 23, 25, 27, 28, 31, 32, 33, 37, 38, 41, 44, 46, 47, 49, 51, 52, 55, 56, 59, 61, 62, 64, by, among other things, making, using, offering for sale,

selling, and/or importing tablets that support video output using MHL. Such devices include, but are not limited to the Galaxy Tab 2 10.1, the Galaxy Note 10.1, the Galaxy Tab 3 7.0, the Galaxy Tab 3 8.0, and the Galaxy Tab 3 10.1.

103. Defendants are liable for these direct infringements of the '398 patent pursuant to 35 U.S.C. § 271.

**INDIRECT INFRINGEMENT (INDUCEMENT - 35 U.S.C. § 271(b))**

104. Based on the information presently available to Virginia Innovation Sciences, absent discovery, and in the alternative to direct infringement, Virginia Innovation Sciences contends that Defendants have indirectly infringed, and continue to indirectly infringe, one or more claims of the '398 patent by inducing direct infringement by users who use the HDTV Adapters in conjunction with the Galaxy S4, Galaxy Victory, Galaxy Express, Galaxy Note II, Galaxy Note 3, and Galaxy S Relay.

105. Based on the information presently available to Virginia Innovation Sciences, absent discovery, and in the alternative to direct infringement, Virginia Innovation Sciences contends that Defendants have indirectly infringed, and continue to indirectly infringe, one or more claims of the '398 patent by inducing direct infringement by users who use the Smart Dock Multimedia Hub in conjunction with the Galaxy S4, the Galaxy Note II, or the Galaxy Note 3.

106. Based on the information presently available to Virginia Innovation Sciences, absent discovery, and in the alternative to direct infringement, Virginia Innovation Sciences contends that Defendants have indirectly infringed, and continue to indirectly infringe, one or more claims of the '398 patent by inducing direct infringement by users who use smartphones that support video output using MHL. Such devices include, but are not limited to the Galaxy



S4, the Galaxy Victory, the Galaxy Express, the Galaxy Note II, the Galaxy Note 3, and the Galaxy S Relay.

107. Based on the information presently available to Virginia Innovation Sciences, absent discovery, and in the alternative to direct infringement, Virginia Innovation Sciences contends that Defendants have indirectly infringed, and continue to indirectly infringe, one or more claims of the '398 patent by inducing direct infringement by users who use the Samsung Galaxy Tab HDTV Adapter in conjunction with Samsung tablets. Such tablets include, but are not limited to, the Galaxy Note 10.1 and the Galaxy Tab 2 10.1.

108. Based on the information presently available to Virginia Innovation Sciences, absent discovery, and in the alternative to direct infringement, Virginia Innovation Sciences contends that Defendants have indirectly infringed, and continue to indirectly infringe, one or more claims of the '398 patent by inducing direct infringement by users who use tablets that support video output using MHL. Such devices include, but are not limited to the Galaxy Tab 2 10.1, the Galaxy Note 10.1, the Galaxy Tab 3 7.0, the Galaxy Tab 3 8.0, and the Galaxy Tab 3 10.1.

109. Defendants have had knowledge of the '398 patent and the infringing nature of their activities at least since October 23, 2012, when Virginia Innovation Sciences effected service of the Original Complaint in *Virginia Innovation Sciences, Inc. v. Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., and Samsung Telecommunications America LLC*, Civil Action No. 2:12-cv-548 (E.D. Va).

110. On information and belief, despite having knowledge of the '398 patent, Defendants have specifically intended for persons who acquire and use Samsung HDTV Adapters, docking stations, smartphones, and tablets, including Defendants' customers, to

acquire and use such devices in such a way that infringes the '398 patent, including at least claims 1, 2, 3, 5, 8, 9, 14, 15, 16, 17, 20, 21, 22, 23, 24, 27, 28, 31, 32, 33, 34, 35, 36, 37, 38, 40, 41, 42, 43, 46, 47, 48, 51, 52, 53, 54, 55, 56, 58, 59, 60, 61, 62, 63, 64, 65, and Defendants knew or should have known that their actions were inducing infringement.

111. Defendants instruct users to use the Samsung HDMI Smart Adapter in a manner that infringes the '398 patent by providing an instruction and/or user manual with the Samsung HDMI Smart Adapter. Defendants instruct users to use the Samsung HDTV Smart Adapter in a manner that infringes the '398 patent by providing an instruction and/or user manual with the Samsung HDTV Smart Adapter. And Defendants instruct users to use the Samsung Galaxy Tab HDTV Adapter in a manner that infringes the '398 patent by providing an instruction and/or user manual with the Samsung Galaxy Tab HDTV Adapter.

112. Furthermore, Defendants have not implemented a design around or otherwise taken any remedial action with respect to the '398 patent. In accordance with Fed. R. Civ. P. 11(b)(3), Virginia Innovation Sciences will likely have additional evidentiary support after a reasonable opportunity for discovery on this issue.

**INDIRECT INFRINGEMENT (CONTRIBUTORY - 35 U.S.C. § 271(c))**

113. Based on the information presently available to Virginia Innovation Sciences, absent discovery, and in the alternative to direct infringement, Virginia Innovation Sciences contends that Defendants have indirectly infringed, and continue to indirectly infringe, one or more claims of the '398 patent by contributing to the direct infringement by users who use the HDTV Adapters.

114. Defendants have had knowledge of the '398 patent and the infringing nature of their activities at least since October 23, 2012, when Virginia Innovation Sciences effected

service of the Original Complaint in *Virginia Innovation Sciences, Inc. v. Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., and Samsung Telecommunications America LLC*, Civil Action No. 2:12-cv-548 (E.D. Va). Despite this knowledge, Defendants have knowingly sold and continue to offer for sale HDTV Adapters even though such devices have no substantial noninfringing use. Such devices infringe the '398 patent, including at least claims 1, 2, 3, 5, 8, 9, 14, 15, 16, 17, 20, 21, 22, 23, 24, 27, 28, 31, 32, 33, 34, 35, 36, 37, 38, 40, 41, 42, 43, 46, 47, 48, 51, 52, 53, 54, 55, 56, 58, 59, 60, 61, 62, 63, 64, 65.

115. Virginia Innovation Sciences has been damaged as a result of Defendants' infringing conduct described in this Count. Defendants are, thus, liable to Virginia Innovation Sciences in an amount that adequately compensates Virginia Innovation Sciences for their infringements, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

## COUNT VI

### (WILLFUL INFRINGEMENT)

116. Upon information and belief, Defendants first offered the Galaxy S4, the Galaxy Victory, the Galaxy Express, the Galaxy Note II, the Galaxy Note 3, the Galaxy S Relay, the Galaxy Tab 2 10.1, the Galaxy Note 10.1, the Galaxy Tab 3 7.0, the Galaxy Tab 3 8.0, and the Galaxy Tab 3 10.1 (collectively, "the New Samsung Phones and Tablets") for sale sometime after October 23, 2012. Prior to this date, Defendants had knowledge of the VIS Patents. Further, Defendants knew or should have known that the New Samsung Phones and Tablets infringed the VIS Patents based on the allegations in the Original Complaint in *Virginia Innovation Sciences, Inc. v. Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., and Samsung Telecommunications America LLC*, Civil Action No. 2:12-cv-548 (E.D. Va).

Thus, upon release of the New Samsung Phones and Tablets, Samsung's infringement of the VIS Patents has been willful.

**JURY DEMAND**

Virginia Innovation Sciences requests a trial by jury pursuant to Rule 38 of the Federal Rules of Civil Procedure.

**PRAYER FOR RELIEF**

Virginia Innovation Sciences asks that the Court find in its favor and against Defendants, and that the Court grant Virginia Innovation Sciences the following relief:

- a. Judgment that one or more claims of the '492 patent, the '711 patent, the '268 patent, the '381 patent, the '733 patent, and/or the '398 patent have been infringed, either literally and/or under the doctrine of equivalents, by one or more Defendants;
- b. Judgment that one or more claims of the '492 patent, the '711 patent, the '268 patent, the '381 patent, the '733 patent, and/or the '398 patent have been willfully infringed, either literally and/or under the doctrine of equivalents, by one or more Defendants;
- c. Judgment that Defendants account for and pay to Virginia Innovation Sciences all damages and costs incurred by Virginia Innovation Sciences because of Defendants' infringing activities and other conduct complained of herein;
- d. Judgment that Defendants account for and pay to Virginia Innovation Sciences a reasonable, on-going, post judgment royalty because of Defendants' infringing activities and other conduct complained of herein;
- e. That Virginia Innovation Sciences be granted pre-judgment and post judgment interest on the damages caused by Defendants' infringing activities and other conduct complained of herein; and
- f. That Virginia Innovation Sciences be granted such other and further relief as the Court may deem just and proper under the circumstances.

**Dated: October 18, 2013**

VIRGINIA INNOVATION SCIENCES, INC.

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