

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

**MARKING OBJECT VIRTUALIZATION
INTELLIGENCE, LLC,**

Plaintiff,

v.

**ARRIS GROUP, INC. AND
ARRIS INTERNATIONAL, PLC.**

Defendants.

Civil Action No. 2:16-cv-01045

JURY TRIAL DEMANDED

AMENDED COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Marking Object Virtualization Intelligence, LLC (“MOV Intelligence” or “Plaintiff”), by and through its attorneys, brings this action and makes the following allegations of patent infringement relating to U.S. Patent Nos.: 6,553,127 (“the ‘127 patent”); 7,200,230 (“the ‘230 patent”); 6,802,006 (“the ‘006 patent”); 7,650,504 (“the ‘504 patent”); and 6,931,536 (“the ‘536 patent”) (collectively, the “patents-in-suit” or the “MOV Intelligence Patents”). Defendants ARRIS Group Inc. and ARRIS International, plc (collectively, “ARRIS” or “Defendant”) infringes each of the patents-in-suit in violation of the patent laws of the United States of America, 35 U.S.C. § 1 *et seq.*

THE PARTIES

MARKING OBJECT VIRTUALIZATION INTELLIGENCE, LLC

1. Marking Object Virtualization Intelligence, LLC (“MOV Intelligence”) is a Texas limited liability company with its principal place of business located at 903 East 18th Street, Suite 217, Plano, Texas 75074. MOV Intelligence is committed to advancing the current state of DRM and watermarking technologies.

2. MOV Intelligence Global Licensing, LLC (“MOV Global Licensing”) is a wholly-owned subsidiary of MOV Intelligence and assists in the licensing of MOV Intelligence’s patents in territories outside the United States with a focus on the European Union (and the

United Kingdom). MOV Intelligence Global Licensing, LLC is a corporation organized under the laws of Delaware.

ARRIS GROUP, INC. AND ARRIS INTERNATIONAL, PLC

3. On information and belief, ARRIS Group, Inc. is a Delaware corporation with its principal place of business at 3871 Lakefield Drive, Suwanee, Georgia 30024. ARRIS may be served through its registered agent Corporation Service Company, 211 E. 7th Street, Suite 620, Austin, Texas 78701.

4. On information and belief, ARRIS International. plc is an English public liability company with a principal place of business at 3871 Lakefield Drive, Suwanee, Georgia 30024.

JURISDICTION AND VENUE

5. This action arises under the patent laws of the United States, Title 35 of the United States Code. Accordingly, this Court has exclusive subject matter jurisdiction over this action under 28 U.S.C. §§ 1331 and 1338(a).

6. Upon information and belief, this Court has personal jurisdiction over ARRIS in this action because ARRIS has committed acts within the Eastern District of Texas giving rise to this action and has established minimum contacts with this forum such that the exercise of jurisdiction over ARRIS would not offend traditional notions of fair play and substantial justice. ARRIS, directly and/or through subsidiaries or intermediaries (including distributors, retailers, and others), has committed and continues to commit acts of infringement in this District by, among other things, offering to sell and selling products and/or services that infringe the patents-in-suit. In addition, Defendant ARRIS is registered to do business in the State of Texas.

7. Venue is proper in this district under 28 U.S.C. §§ 1391(b)-(d) and 1400(b). ARRIS is registered to do business in Texas, and upon information and belief, has transacted business in the Eastern District of Texas and has committed acts of direct and indirect infringement in the Eastern District of Texas. Plaintiff MOV Intelligence is not owned or controlled by Rovi Corporation or any affiliate of Rovi Corporation.

THE ASSERTED PATENTS

U.S. PATENT NO. 6,553,127

8. U.S. Patent No. 6,553,127 (the “’127 patent”), entitled Method and Apparatus for Selective Block Processing, was filed on November 18, 1998, and claims priority to May 20, 1998. MOV Intelligence is the owner by assignment of all right, title, and interest in the ‘127 patent. A true and correct copy of the ‘127 patent is attached hereto as Exhibit A.

U.S. PATENT NO. 7,200,230

9. U.S. Patent No. 7,200,230 (the “’230 patent”), entitled System and Method for Controlling and Enforcing Access Rights to Encrypted Media, was filed January 15, 2001, and claims priority to April 6, 2000. MOV Intelligence is the owner by assignment of all right, title, and interest in the ‘230 patent. A true and correct copy of the ‘230 patent is attached hereto as Exhibit B.

U.S. PATENT NO. 6,802,006

10. U.S. Patent No. 6,802,006 (the “’006 patent”), entitled System and Method of Verifying the Authenticity of Dynamically Connectable Executable Images, was filed on July 22, 1999, and claims priority to January 15, 1999. MOV Intelligence is the owner by assignment of all right, title, and interest in the ‘006 patent. A true and correct copy of the ‘006 patent is attached hereto as Exhibit C.

U.S. PATENT NO. 7,650,504

11. U.S. Patent No. 7,650,504 (the “’504 patent”), entitled System and Method of Verifying the Authenticity of Dynamically Connectable Executable Images, was filed on August 23, 2004, and claims priority to July 22, 1999. MOV Intelligence is the owner by assignment of all right, title, and interest in the ‘504 patent. A true and correct copy of the ‘504 patent is attached hereto as Exhibit D.

U.S. PATENT NO. 6,931,536

12. U.S. Patent No. 6,931,536 (the “’536 patent”), entitled Enhanced Copy Protection of Proprietary Material Employing Multiple Watermarks, was filed on March 6, 2001. MOV Intelligence is the owner by assignment of all right, title, and interest in the ‘536 patent. A true and correct copy of the ‘536 patent is attached hereto as Exhibit E.

COUNT I
INFRINGEMENT OF U.S. PATENT NO. 6,553,127

13. MOV Intelligence references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.

14. ARRIS designs, makes, uses, sells, and/or offers for sale in the United States products and/or services for digital rights management.

15. ARRIS designs, makes, sells, offers to sell, imports, and/or uses the ARRIS SECUREMEDIA The Encryptonite ONE System (the “ARRIS ‘127 Products”).

16. On information and belief, one or more ARRIS subsidiaries and/or affiliates use the ARRIS ‘127 Products in regular business operations.

17. On information and belief, one or more of the ARRIS ‘127 Products include watermarking technology.

18. On information and belief, one or more of the ARRIS ‘127 Products enable detecting a watermark embedded in selected blocks of a watermarked data stream having a plurality of data elements.

19. On information and belief, the ARRIS ‘127 Products are available to businesses and individuals throughout the United States.

20. On information and belief, the ARRIS ‘127 Products are provided to businesses and individuals located in the Eastern District of Texas.

21. On information and belief, the ARRIS ‘127 Products enable the detection or placement of a watermark in a data stream.

22. On information and belief, the ARRIS '127 Products comprise a system wherein the watermark is placed in a data stream based on a texture criterion that measures a variation of a selected characteristic associated with each data element of the watermarked data stream. For example, on information and belief, the ARRIS comprises a communication interface to, and is configured to divide the watermarked data stream into a plurality of equally sized blocks as chosen arbitrarily in the embedding process.

23. On information and belief, the ARRIS '127 Products enable selecting only the blocks that meet substantially similar texture criterion as that used in selecting the blocks for embedding the watermark.

24. On information and belief, the ARRIS '127 Products enable detecting the watermark only in the blocks that were embedded with the watermark and were selected by the selecting step thereby decreasing the time and number of operations necessary to process a given number of blocks.

25. On information and belief, the ARRIS '127 Products enable the placement of a watermark in a data stream wherein the data stream is a video stream.

26. On information and belief, the ARRIS '127 Products enable embedding a watermark in blocks that meet a substantially similar textual criteria.

27. On information and belief, the ARRIS '127 Products contain functionality for embedding a watermark only in portions of the data stream whose spectral energy exceeds a predetermined threshold according to a texture criterion, to create a watermarked data stream.

28. On information and belief, the ARRIS '127 Products enable the detection of a watermark.

29. On information and belief, the ARRIS '127 Products enable dividing a data stream into the selected blocks of substantially similar texture criterion.

30. On information and belief, one or more of the ARRIS '127 Products enable selecting a block of content from a data stream.

31. On information and belief, ARRIS has directly infringed and continues to directly infringe the '127 patent by, among other things, making, using, offering for sale, and/or selling digital content protection technology, including but not limited to the ARRIS '127 Products, which include infringing watermarking technologies. Such products and/or services include, by way of example and without limitation, the ARRIS SECUREMEDIA The Encryptonite ONE System.

32. By making, using, testing, offering for sale, and/or selling watermarking products and services, including but not limited to the ARRIS '127 Products, ARRIS has injured MOV Intelligence and is liable to MOV Intelligence for directly infringing one or more claims of the '127 patent, including at least claim 10, pursuant to 35 U.S.C. § 271(a).

33. On information and belief, ARRIS also indirectly infringes the '127 patent by actively inducing infringement under 35 USC § 271(b).

34. On information and belief, ARRIS had knowledge of the '127 patent since at least January 2015, when U.S. Patent No. 8,565,472 was assigned to ARRIS. U.S. Patent No. 8,565,472 cites the '127 patent as prior art. Alternatively, ARRIS had knowledge of the '127 patent since at least January 2015, when U.S. Patent No. 8,340,343 was assigned to ARRIS. U.S. Patent No. 8,340,343 cites the '127 patent as prior art. Alternatively, ARRIS had knowledge of the '127 patent since at least January 2015, when U.S. Patent No. 8,538,069 was assigned to ARRIS. U.S. Patent No. 8,538,069 cites the '127 patent as prior art. Alternatively, ARRIS had knowledge of the '127 patent since at least service of this Complaint or shortly thereafter, and on information and belief, ARRIS knew of the '127 patent and knew of its infringement, including by way of this lawsuit.

35. On information and belief, ARRIS intended to induce patent infringement by third-party customers and users of the ARRIS '127 Products and had knowledge that the inducing acts would cause infringement or was willfully blind to the possibility that its inducing acts would cause infringement. ARRIS specifically intended and was aware that the normal and customary use of the accused products would infringe the '127 patent. ARRIS performed the

acts that constitute induced infringement, and would induce actual infringement, with knowledge of the '127 patent and with the knowledge that the induced acts would constitute infringement. For example, ARRIS provides the ARRIS '127 Products that have the capability of operating in a manner that infringe one or more of the claims of the '127 patent, including at least claim 10, and ARRIS further provides documentation and training materials that cause customers and end users of the ARRIS '127 Products to utilize the products in a manner that directly infringe one or more claims of the '127 patent. By providing instruction and training to customers and end-users on how to use the ARRIS '127 Products in a manner that directly infringes one or more claims of the '127 patent, including at least claim 10, ARRIS specifically intended to induce infringement of the '127 patent. On information and belief, ARRIS engaged in such inducement to promote the sales of the ARRIS '127 Products, e.g., through ARRIS user manuals, product support, marketing materials, and training materials to actively induce the users of the accused products to infringe the '127 patent. Accordingly, ARRIS has induced and continues to induce users of the accused products to use the accused products in their ordinary and customary way to infringe the '127 patent, knowing that such use constitutes infringement of the '127 patent.

36. The '127 patent is well-known within the industry as demonstrated by the over 140 citations to the '127 patent in published patents and patent applications assigned to technology companies and academic institutions. Moreover, ARRIS had knowledge of the '127 patent since at least January 2015, when U.S. Patent No. 8,565,472 was assigned to ARRIS. U.S. Patent No. 8,565,472 cites the '127 patent as prior art. Alternatively, ARRIS had knowledge of the '127 patent since at least January 2015, when U.S. Patent No. 8,340,343 was assigned to ARRIS. U.S. Patent No. 8,340,343 cites the '127 patent as prior art. Alternatively, ARRIS had knowledge of the '127 patent since at least January 2015, when U.S. Patent No. 8,538,069 was assigned to ARRIS. U.S. Patent No. 8,538,069 cites the '127 patent as prior art.

37. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '127 patent.

38. As a result of ARRIS's infringement of the '127 patent, MOV Intelligence has suffered monetary damages, and seeks recovery in an amount adequate to compensate for ARRIS's infringement, but in no event less than a reasonable royalty for the use made of the invention by ARRIS together with interest and costs as fixed by the Court.

COUNT II
INFRINGEMENT OF U.S. PATENT NO. 7,200,230

39. MOV Intelligence references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.

40. ARRIS designs, makes, uses, sells, and/or offers for sale in the United States products and/or services for digital rights management.

41. ARRIS designs, makes, sells, offers to sell, imports, and/or uses ARRIS SECUREMEDIA HLS+ (the "ARRIS '230 Products").

42. On information and belief, one or more ARRIS subsidiaries and/or affiliates use the ARRIS '230 Products in regular business operations.

43. On information and belief, one or more of the ARRIS '230 Products include digital rights management technology.

44. On information and belief, one or more of the ARRIS '230 Products enable associating a user program key with a user program configured to run on a user data processor.

45. On information and belief, the ARRIS '230 Products are available to businesses and individuals throughout the United States.

46. On information and belief, the ARRIS '230 Products are provided to businesses and individuals located in the Eastern District of Texas.

47. On information and belief, the ARRIS '230 Products enable determining whether the use of the data object is to be restricted to a particular user data processor.

48. On information and belief, the ARRIS '230 Products comprise a system wherein a machine key device is associated with the particular user data processor. Further, the machine

key device is accessible by the user program, and the machine key device maintains a portion of a machine key.

49. On information and belief, the ARRIS '230 Products enable encrypting a data object so the decryption of a first secure layer and a second secure layer of the encrypted data object requires the user program key and the machine key.

50. On information and belief, the ARRIS '230 Products enable determining whether the use of the data object is to be restricted to a particular user.

51. On information and belief, the ARRIS '230 Products provide for the designation and authentication of the identity of a user by whom the data object is to be used.

52. On information and belief, the ARRIS '230 Products enable associating a user key device with the particular user. Further, the ARRIS '230 Products enable the user key device to be made accessible by the user program. And, the user key device maintains a portion of a user key.

53. On information and belief, the ARRIS '230 Products contain functionality for encrypting a data object so the decryption of a third secure layer of the encrypted data object requires the user key.

54. On information and belief, the ARRIS '230 Products contain functionality wherein the third key used by the system for managing digital rights is the media access controller (MAC) address of the user data processor.

55. On information and belief, the ARRIS '230 Products provide for encryption of a data object so only a designated data processor can decrypt and use the data object.

56. On information and belief, the ARRIS '230 Products enable user specific digital rights management authorization and access.

57. On information and belief, ARRIS has directly infringed and continues to directly infringe the '230 patent by, among other things, making, using, offering for sale, and/or selling digital content protection technology, including but not limited to the ARRIS '230 Products,

which include infringing digital rights management technology. Such products and/or services include, by way of example and without limitation, ARRIS SECUREMEDIA HLS+.

58. By making, using, testing, offering for sale, and/or selling digital rights management products and services, including but not limited to the ARRIS '230 Products, ARRIS has injured MOV Intelligence and is liable to MOV Intelligence for directly infringing one or more claims of the '230 patent, including at least claim 39, pursuant to 35 U.S.C. § 271(a).

59. On information and belief, ARRIS also indirectly infringes the '230 patent by actively inducing infringement under 35 USC § 271(b).

60. On information and belief, ARRIS had knowledge of the '230 patent since at least November 2013 when U.S. Patent No. 8,577,041 issued. U.S. Patent No. 8,577,041 cites as prior art the U.S. Patent Application, U.S. Patent App. Publ. No. 2001/0029581, that led to the '230 patent. Alternatively, ARRIS had knowledge of the '230 patent since at least service of this Complaint or shortly thereafter, and on information and belief, ARRIS knew of the '230 patent and knew of its infringement, including by way of this lawsuit.

61. On information and belief, ARRIS intended to induce patent infringement by third-party customers and users of the ARRIS '230 Products and had knowledge that the inducing acts would cause infringement or was willfully blind to the possibility that its inducing acts would cause infringement. ARRIS specifically intended and was aware that the normal and customary use of the accused products would infringe the '230 patent. ARRIS performed the acts that constitute induced infringement, and would induce actual infringement, with knowledge of the '230 patent and with the knowledge that the induced acts would constitute infringement. For example, ARRIS provides the ARRIS '230 Products that have the capability of operating in a manner that infringe one or more of the claims of the '230 patent, including at least claim 39, and ARRIS further provides documentation and training materials that cause customers and end users of the ARRIS '230 Products to utilize the products in a manner that directly infringe one or more claims of the '230 patent. By providing instruction and training to customers and end-users

on how to use the ARRIS '230 Products in a manner that directly infringes one or more claims of the '230 patent, including at least claim 39, ARRIS specifically intended to induce infringement of the '230 patent. On information and belief, ARRIS engaged in such inducement to promote the sales of the ARRIS '230 Products, e.g., through ARRIS user manuals, product support, marketing materials, and training materials to actively induce the users of the accused products to infringe the '230 patent. Accordingly, ARRIS has induced and continues to induce users of the accused products to use the accused products in their ordinary and customary way to infringe the '230 patent, knowing that such use constitutes infringement of the '230 patent.

62. The '230 patent is well-known within the industry as demonstrated by the over 180 citations to the '230 patent family in published patents and published patent applications assigned to technology companies and academic institutions. ARRIS had knowledge of the '230 patent since at least November 2013 when U.S. Patent No. 8,577,041 issued. U.S. Patent No. 8,577,041 cites as prior art the U.S. Patent Application, U.S. Patent App. Publ. No. 2001/0029581, that led to the '230 patent.

63. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '230 patent.

64. As a result of ARRIS's infringement of the '230 patent, MOV Intelligence has suffered monetary damages, and seeks recovery in an amount adequate to compensate for ARRIS's infringement, but in no event less than a reasonable royalty for the use made of the invention by ARRIS together with interest and costs as fixed by the Court.

COUNT III
INFRINGEMENT OF U.S. PATENT NO. 6,802,006

65. MOV Intelligence references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.

66. ARRIS designs, makes, uses, sells, and/or offers for sale in the United States products and/or services for determining the authenticity of an executable image.

67. ARRIS designs, makes, sells, offers to sell, imports, and/or uses the ARRIS SECUREMEDIA The Encryptonite ONE System (the “ARRIS ‘006 Products”).

68. On information and belief, one or more ARRIS subsidiaries and/or affiliates use the ARRIS ‘006 Products in regular business operations.

69. On information and belief, one or more of the ARRIS ‘006 Products include authentication technology.

70. On information and belief, one or more of the ARRIS ‘006 Products enable authenticating the identity of a software application in a dynamic loading environment. In particular, the ARRIS ‘006 Products determine whether an executable image has been dynamically connected to another data object that has been tampered with subsequent to the execution of the software application.

71. On information and belief, the ARRIS ‘006 Products are available to businesses and individuals throughout the United States.

72. On information and belief, the ARRIS ‘006 Products are provided to businesses and individuals located in the Eastern District of Texas.

73. On information and belief, the ARRIS ‘006 Products enable identifying one or more locations within the executable image, each of the identified locations being modified by a program loader.

74. On information and belief, the ARRIS ‘006 Products comprise a system wherein a reference digital signature is generated based on an executable image.

75. On information and belief, the ARRIS ‘006 Products generate a reference digital signature that excludes one or more locations in an executable image.

76. On information and belief, the ARRIS ‘006 Products are capable of storing the reference digital signature on a computer network.

77. On information and belief, the ARRIS ‘006 Products comprise systems and methods wherein an authenticity digital signature is generated based on an executable image.

78. On information and belief, the ARRIS '006 Products comprise systems and methods that generate an authenticity digital signature that excludes one or more locations in an executable image.

79. On information and belief, the ARRIS '006 Products comprise systems and methods that determine whether the authenticity digital signature matches the reference digital signature.

80. On information and belief, the ARRIS '006 Products contain functionality that generates a warning if the reference digital signature does not match the authenticity digital signature.

81. On information and belief, the ARRIS '006 Products contain functionality wherein the digital signature is generated based on a first and second point in time. For example, one or more of the ARRIS '006 Products generate a reference digital signature at a first point in time. Subsequently, an authenticity digital signature is generated (at a second point in time).

82. On information and belief, the ARRIS '006 Products comprise a system and method that generates a digital signature based on a hash value. Specifically, the reference digital signature that is generated by the ARRIS '006 Products at a first point in time is based on a hash value. Later the authenticity digital signature is also generated based on a hash function that is used to check data integrity.

83. On information and belief, the ARRIS '006 Products comprise a system and method that can verify the identity a computer application.

84. On information and belief, the ARRIS '006 Products enable the detection of corrupted data in a computer image.

85. On information and belief, the ARRIS '006 Products enable the verification of the integrity of software images.

86. On information and belief, ARRIS has directly infringed and continues to directly infringe the '006 patent by, among other things, making, using, offering for sale, and/or selling content protection technology, including but not limited to the ARRIS '006 Products, which

includes technology for verifying the authenticity of a software image. Such products and/or services include, by way of example and without limitation, the ARRIS SECUREMEDIA The Encryptonite ONE System.

87. By making, using, testing, offering for sale, and/or selling verification and authentication products and services, including but not limited to the ARRIS '006 Products, ARRIS has injured MOV Intelligence and is liable to MOV Intelligence for directly infringing one or more claims of the '006 patent, including at least claims 1, 3, 14, and 15, pursuant to 35 U.S.C. § 271(a).

88. On information and belief, ARRIS also indirectly infringes the '006 patent by actively inducing infringement under 35 USC § 271(b).

89. On information and belief, ARRIS had knowledge of the '006 patent since at least service of this Complaint or shortly thereafter, and on information and belief, ARRIS knew of the '006 patent and knew of its infringement, including by way of this lawsuit.

90. On information and belief, ARRIS intended to induce patent infringement by third-party customers and users of the ARRIS '006 Products and had knowledge that the inducing acts would cause infringement or was willfully blind to the possibility that its inducing acts would cause infringement. ARRIS specifically intended and was aware that the normal and customary use of the accused products would infringe the '006 patent. ARRIS performed the acts that constitute induced infringement, and would induce actual infringement, with knowledge of the '006 patent and with the knowledge that the induced acts would constitute infringement. For example, ARRIS provides the ARRIS '006 Products that have the capability of operating in a manner that infringe one or more of the claims of the '006 patent, including at least claims 1, 3, 14, and 15, and ARRIS further provides documentation and training materials that cause customers and end users of the ARRIS '006 Products to utilize the products in a manner that directly infringe one or more claims of the '006 patent. By providing instruction and training to customers and end-users on how to use the ARRIS '006 Products in a manner that directly infringes one or more claims of the '006 patent, including at least claims 1, 3, 14, and 15, ARRIS

specifically intended to induce infringement of the '006 patent. On information and belief, ARRIS engaged in such inducement to promote the sales of the ARRIS '006 Products, *e.g.*, through ARRIS user manuals, product support, marketing materials, and training materials to actively induce the users of the accused products to infringe the '006 patent. Accordingly, ARRIS has induced and continues to induce users of the accused products to use the accused products in their ordinary and customary way to infringe the '006 patent, knowing that such use constitutes infringement of the '006 patent.

91. The '006 patent is well-known within the industry as demonstrated by the over 85 citations to the '006 patent in issued patents and published patent applications assigned to technology companies and academic institutions.

92. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '006 patent.

93. As a result of ARRIS's infringement of the '006 patent, MOV Intelligence has suffered monetary damages, and seeks recovery in an amount adequate to compensate for ARRIS's infringement, but in no event less than a reasonable royalty for the use made of the invention by ARRIS together with interest and costs as fixed by the Court.

COUNT IV
INFRINGEMENT OF U.S. PATENT NO. 7,650,504

94. MOV Intelligence references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.

95. ARRIS designs, makes, uses, sells, and/or offers for sale in the United States products and/or services for verifying the authenticity of executable images.

96. ARRIS designs, makes, sells, offers to sell, imports, and/or uses the ARRIS SECUREMEDIA The Encryptonite ONE System (the "ARRIS '504 Products").

97. On information and belief, one or more ARRIS subsidiaries and/or affiliates use the ARRIS '504 Products in regular business operations.

98. On information and belief, one or more of the ARRIS '504 Products include authentication technology.

99. On information and belief, one or more of the ARRIS '504 Products comprise systems and methods for determining the authenticity of an executable image.

100. On information and belief, one or more of the ARRIS '504 Products enable authenticating and verifying an executable image. In particular, the ARRIS '504 Products determine whether a software application that has been dynamically connected to another data object has been tampered with subsequent to the execution of the software application.

101. On information and belief, the ARRIS '504 Products are available to businesses and individuals throughout the United States.

102. On information and belief, the ARRIS '504 Products are provided to businesses and individuals located in the Eastern District of Texas.

103. On information and belief, the ARRIS '504 Products enable the use of a reference digital signature for an executable image. The reference digital signature uses the contents of the executable image excluding portions of the executable that are fixed-up by a program loader.

104. On information and belief, the ARRIS '504 Products comprise a system wherein a reference digital signature is generated based on an executable image.

105. On information and belief, the ARRIS '504 Products generate a reference digital signature that excludes one or more locations in an executable image.

106. On information and belief, the ARRIS '504 Products comprise systems and methods wherein subsequent to the loading of the executable image the '504 Products determine an authenticity digital signature to verify that the executable image has not been improperly modified.

107. On information and belief, the ARRIS '504 Products comprise systems and methods that generate an authenticity digital signature that excludes one or more locations in an executable image.

108. On information and belief, the ARRIS '504 Products are systems and methods that generate an authenticity digital signature after the executable image is loaded into memory. The authenticity digital signature which is generated by the ARRIS '504 Products excludes one or more pointers in need of fixing up;

109. On information and belief, the ARRIS '504 Products comprise systems and methods that determine whether the authenticity digital signature matches the reference digital signature.

110. On information and belief, the ARRIS '504 Products enable the generating of a reference digital signature prior to loading the executable image into memory. Specifically, the ARRIS '504 Products generate a reference digital signature that excludes one or more pointers from the reference digital signature.

111. On information and belief, the ARRIS '504 Products contain functionality wherein the digital signature is generated based on a first and second point in time.

112. On information and belief, the ARRIS '504 Products have the ability to compare the reference digital signature and the authenticity digital signature to perform an authenticity check.

113. On information and belief, the ARRIS '504 Products enable the detection of corrupted data in a computer image.

114. On information and belief, the ARRIS '504 Products enable the verification of the integrity of software images.

115. On information and belief, ARRIS has directly infringed and continues to directly infringe the '504 patent by, among other things, making, using, offering for sale, and/or selling content protection technology, including but not limited to the ARRIS '504 Products, which includes technology for verifying the authenticity of a software image. Such products and/or services include, by way of example and without limitation, the ARRIS SECUREMEDIA The Encryptonite ONE System.

116. By making, using, testing, offering for sale, and/or selling authentication and verification technologies and services, including but not limited to the ARRIS '504 Products, ARRIS has injured MOV Intelligence and is liable to MOV Intelligence for directly infringing one or more claims of the '504 patent, including at least claims 1 and 10, pursuant to 35 U.S.C. § 271(a).

117. On information and belief, ARRIS also indirectly infringes the '504 patent by actively inducing infringement under 35 USC § 271(b).

118. On information and belief, ARRIS had knowledge of the '504 patent since at least service of this Complaint or shortly thereafter, and on information and belief, ARRIS knew of the '504 patent and knew of its infringement, including by way of this lawsuit.

119. On information and belief, ARRIS intended to induce patent infringement by third-party customers and users of the ARRIS '504 Products and had knowledge that the inducing acts would cause infringement or was willfully blind to the possibility that its inducing acts would cause infringement. ARRIS specifically intended and was aware that the normal and customary use of the accused products would infringe the '504 patent. ARRIS performed the acts that constitute induced infringement, and would induce actual infringement, with knowledge of the '504 patent and with the knowledge that the induced acts would constitute infringement. For example, ARRIS provides the ARRIS '504 Products that have the capability of operating in a manner that infringe one or more of the claims of the '504 patent, including at least claims 1 and 10, and ARRIS further provides documentation and training materials that cause customers and end users of the ARRIS '504 Products to utilize the products in a manner that directly infringe one or more claims of the '504 patent. By providing instruction and training to customers and end-users on how to use the ARRIS '504 Products in a manner that directly infringes one or more claims of the '504 patent, including at least claims 1 and 10, ARRIS specifically intended to induce infringement of the '504 patent. On information and belief, ARRIS engaged in such inducement to promote the sales of the ARRIS '504 Products, e.g., through ARRIS user manuals, product support, marketing materials, and training materials to

actively induce the users of the accused products to infringe the '504 patent. Accordingly, ARRIS has induced and continues to induce users of the accused products to use the accused products in their ordinary and customary way to infringe the '504 patent, knowing that such use constitutes infringement of the '504 patent.

120. The '504 patent is well-known within the industry as demonstrated by the over 30 citations to the '504 patent family in issued patents and published patent applications assigned to technology companies and academic institutions (*e.g.*, Apple, Inc. and Electronics and Telecommunications Research Institute (ETRI)).

121. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '504 patent.

122. As a result of ARRIS's infringement of the '504 patent, MOV Intelligence has suffered monetary damages, and seeks recovery in an amount adequate to compensate for ARRIS's infringement, but in no event less than a reasonable royalty for the use made of the invention by ARRIS together with interest and costs as fixed by the Court.

COUNT V
INFRINGEMENT OF U.S. PATENT NO. 6,931,536

123. MOV Intelligence references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.

124. ARRIS designs, makes, uses, sells, and/or offers for sale in the United States products and/or services for enhanced copy protection using multiple watermarks embedded in digital content.

125. ARRIS designs, makes, sells, offers to sell, imports, and/or uses ARRIS SECUREMEDIA HLS+ (the "ARRIS '536 Products").

126. On information and belief, one or more ARRIS subsidiaries and/or affiliates use the ARRIS '536 Products in regular business operations.

127. On information and belief, one or more of the ARRIS '536 Products include watermarking technology.

128. On information and belief, one or more of the ARRIS '536 Products contains functionality using two or more watermarks embedded in digital content for enhanced copy protection.

129. On information and belief, one or more of the ARRIS '536 Products enable detecting a watermark embedded in selected blocks of a watermarked data stream having a plurality of data elements.

130. On information and belief, the ARRIS '536 Products are available to businesses and individuals throughout the United States.

131. On information and belief, the ARRIS '536 Products are provided to businesses and individuals located in the Eastern District of Texas.

132. On information and belief, the ARRIS '536 Products enable the detection or placement of a watermark in data.

133. On information and belief, the ARRIS '536 Products comprise a system wherein a first watermark is to be processed by programmable and non-programmable devices configured to process the first watermark for copy protection of the proprietary material.

134. On information and belief, the ARRIS '536 Products enable looking for and processing the second watermark for copy protection of the proprietary material upon failing to detect the first watermark.

135. On information and belief, the ARRIS '536 Products enable searching for a first watermark embedded in digital content.

136. On information and belief, the ARRIS '536 Products contain functionality wherein if the first watermark is detected, the '536 Products process the first watermark for copy protection of the digital content. The '536 Products also contain functionality wherein if the first watermark is not detected, the ARRIS '536 Products will search for a second watermark in the digital content.

137. On information and belief, the ARRIS '536 Products enable the processing of a second watermark for copy protection of the digital content if a second watermark is detected.

138. On information and belief, the ARRIS '536 Products enable the detection of a watermark.

139. On information and belief, ARRIS has directly infringed and continues to directly infringe the '536 patent by, among other things, making, using, offering for sale, and/or selling digital content protection technology, including but not limited to the ARRIS '536 Products, which include infringing watermarking technologies. Such products and/or services include, by way of example and without limitation, ARRIS SECUREMEDIA HLS+.

140. By making, using, testing, offering for sale, and/or selling watermarking products and services, including but not limited to the ARRIS '536 Products, ARRIS has injured MOV Intelligence and is liable to MOV Intelligence for directly infringing one or more claims of the '536 patent, including at least claims 25 and 35, pursuant to 35 U.S.C. § 271(a).

141. On information and belief, ARRIS also indirectly infringes the '536 patent by actively inducing infringement under 35 USC § 271(b).

142. On information and belief, ARRIS had knowledge of the '536 patent since at least service of this Complaint or shortly thereafter, and on information and belief, ARRIS knew of the '536 patent and knew of its infringement, including by way of this lawsuit.

143. On information and belief, ARRIS intended to induce patent infringement by third-party customers and users of the ARRIS '536 Products and had knowledge that the inducing acts would cause infringement or was willfully blind to the possibility that its inducing acts would cause infringement. ARRIS specifically intended and was aware that the normal and customary use of the accused products would infringe the '536 patent. ARRIS performed the acts that constitute induced infringement, and would induce actual infringement, with knowledge of the '536 patent and with the knowledge that the induced acts would constitute infringement. For example, ARRIS provides the ARRIS '536 Products that have the capability of operating in a manner that infringe one or more of the claims of the '536 patent, including at least claims 25

and 35, and ARRIS further provides documentation and training materials that cause customers and end users of the ARRIS '536 Products to utilize the products in a manner that directly infringe one or more claims of the '536 patent. By providing instruction and training to customers and end-users on how to use the ARRIS '536 Products in a manner that directly infringes one or more claims of the '536 patent, including at least claims 25 and 35, ARRIS specifically intended to induce infringement of the '536 patent. On information and belief, ARRIS engaged in such inducement to promote the sales of the ARRIS '536 Products, e.g., through ARRIS user manuals, product support, marketing materials, and training materials to actively induce the users of the accused products to infringe the '536 patent. Accordingly, ARRIS has induced and continues to induce users of the accused products to use the accused products in their ordinary and customary way to infringe the '536 patent, knowing that such use constitutes infringement of the '536 patent.

144. The '536 patent is well-known within the industry as demonstrated by the over 120 citations to the '536 patent in issued patents and published patent applications assigned to technology companies and academic institutions (*e.g.*, Sony Corporation and Sanyo Electric Co. Ltd.).

145. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '536 patent.

146. As a result of ARRIS's infringement of the '536 patent, MOV Intelligence has suffered monetary damages, and seeks recovery in an amount adequate to compensate for ARRIS's infringement, but in no event less than a reasonable royalty for the use made of the invention by ARRIS together with interest and costs as fixed by the Court.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff MOV Intelligence respectfully requests that this Court enter:

- A. A judgment in favor of Plaintiff MOV Intelligence that ARRIS has infringed, either literally and/or under the doctrine of equivalents, the '127

- patent, the '230 patent, the '006 patent, the '504 patent, and the '536 patent;
- B. An award of damages resulting from ARRIS's acts of infringement in accordance with 35 U.S.C. § 284;
 - C. A judgment and order finding that Defendant's infringement was willful, wanton, malicious, bad-faith, deliberate, consciously wrongful, flagrant, or characteristic of a pirate within the meaning of 35 U.S.C. § 284 and awarding to Plaintiff enhanced damages.
 - D. A judgment and order finding that this is an exceptional case within the meaning of 35 U.S.C. § 285 and awarding to Plaintiff its reasonable attorneys' fees against Defendant.
 - E. Any and all other relief to which MOV Intelligence may show itself to be entitled.

JURY TRIAL DEMANDED

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, MOV Intelligence requests a trial by jury of any issues so triable by right.

Dated: September 23, 2016

Respectfully submitted,

/s/ Dorian S. Berger
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