

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

**MARKING OBJECT VIRTUALIZATION
INTELLIGENCE, LLC,**

Plaintiff,

v.

FIRST DATA CORPORATION,

Defendant.

Civil Action No. _____

JURY TRIAL DEMANDED

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.: 6,802,006 (“the ‘006 patent”); 6,510,516 (“the ‘516 patent”); and 7,650,504 (“the ‘504 patent”) (collectively, the “patents-in-suit” or the “MOV Intelligence Patents”). Defendant First Data Corporation (“First Data” 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.*

INTRODUCTION

1. MOV Intelligence and its wholly-owned subsidiary, MOV Global Licensing LLC (“MOV Global Licensing”) pursues the reasonable royalties owed for First Data’s unauthorized use of patented groundbreaking technology both here in the United States and throughout Europe. MOV Intelligence and its subsidiaries were assigned the rights to these patented technologies by Rovi Corporation (“Rovi”).¹

2. The patents-in-suit, their underlying patent applications, and foreign counterparts have been cited by over 225 issued United States patents and published patent applications. First

¹ On April 29, 2016, Rovi Corporation acquired TiVo, Inc. The combined company operates under the name TiVo, Inc.

Data has cited the '516 patent as relevant prior art in the prosecution history of 62 of First Data's issued patents and published patent applications.²

3. Rovi Corporation was a pioneer and leader in protecting computer technology, including digital rights management ("DRM") and digital watermarking systems. Rovi assigned MOV Intelligence rights to over 233 patents including many of John O. Ryan's, the founder of Rovi predecessor Macrovision, groundbreaking patents.³

THE PARTIES

MARKING OBJECT VIRTUALIZATION INTELLIGENCE, LLC

4. 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.

5. 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).⁴ MOV Intelligence Global Licensing, LLC is a corporation organized under the laws of Delaware.

² See U.S. Patent Nos. 6,789,189; 6,820,199; 6,820,202; 6,851,054; 6,892,302; 6,915,430; 6,938,156; 6,950,940; 6,952,773; 6,957,336; 6,959,381; 6,978,369; 6,983,368; 7,010,691; 7,028,185; 7,032,112; 7,047,414; 7,047,416; 7,082,533; 7,096,354; 7,143,284; 7,490,239; 7,593,527; 7,693,277; 7,784,106; 7,831,519; 7,869,593; 7,936,869; 8,620,814; and U.S. Patent Application Nos. 2002/0026575; 2003/0095665; 2003/0097561; 2003/0097562; 2003/0097565; 2003/0097569; 2003/0097570; 2003/0097573; 2003/0101136; 2003/0101344; 2003/0115151; 2003/0115463; 2003/0126437; 2003/0126438; 2003/0126439; 2003/0131234; 2003/0131235; 2004/0030901; 2005/0005117; 2005/0005123; 2005/0044373; 2005/0137986; 2006/0153364; 2006/0153365; 2006/0153366; 2006/0153367; 2006/0153368; 2006/0153369; 2006/0153370; 2006/0153371; 2006/0156012; 2006/0156013; 2007/0078781.

³ See U.S. Patent Nos. 6,381,367; 7,764,790; 6,701,062; 8,014,524; German Patent Nos. DE60001837 and DE60001837D1; Chinese Patent No. CN1186941C; Canadian Patent No. CA2379992C; European Patent No. EP1198959B1; and Japanese Patent No. JP4387627B2.

⁴ Wolfram Schrag, *EU-Patent steht auf der Kippe*, BR.COM NACHRICHTEN (Augt 2016).

6. Rovi assigned the following patents to MOV Intelligence: U.S. Patent Nos. 7,299,209; 6,510,516; 6,802,006; 7,650,504; 6,813,640; 7,650,418; 7,200,230; 7,124,114; 6,381,367; 6,374,036; 6,360,000; 6,553,127; 6,701,062; 6,594,441; 7,764,790; 8,014,524; 6,931,536; and International Patent Nos. DE60047794; DE60148635.8; DE60211372.5; DE69901231.7-08; DK1047992; EP1047992; EP1303802; EP1332618; EP1444561; ES1047992; FR1047992; FR1303802; FR1332618; FR1444561; GB1047992; GB1303802; GB1332618; GB1444561; GR3040059; IE1047992; IE1444561; IT1047992; NL1047992; NL1444561; PT1047992; and SE1047992.

7. MOV Intelligence has the right to sublicense the following international patent assets: AT1020077; AT1198959; AT1080584; ATE232346; AT1020077; AU729762; AU741281; AU753421; AU743639; AU714103; AU729762; AU2002351508; AU765747; AU2000263715; BE1020077; BE1198959; BE1020077; BE1080584; BE900498; BRPI 9812908-2; BR9709332.7; BRPI 9812908-2; CA2305254; CA2332546; CA2379992; CA2305254; CA2332548; CA2557859; CA2252726; CA2462679; CA2315212; CA2416304; CA2425115; CH1020077; CH1080584; CH900498; CH1020077; CH1047992; CNZL98809610.2; CNZL99806376.2; CNZL00811179.0; CNZL98809610.2; CNZL99806377.0; CNZL97194746.5; CNZL02820738.6; CNZL99802008.7; CNZL00819775.X; CNZL200510089437; DE69807102.608; DE60001837.7; DE69908352.4-08; DE69718907.4-08; DE69807102.608; DK1020077; DK1080584; DK1198959; DK1020077; DK900498; EP1020077; EP1198959; EP1080584; EP900498; EP1020077; ES1020077; ES1198959; ES1080584; ESES2191844; ES1020077; FI1020077; FI1080584; FI1020077; FI900498; FR1020077; FR1198959; FR1080584; FR900498; FR1020077; GB1020077; GB1198959; GB1080584; GB900498; GB1020077; GR3041381; GR3045620; GR3043304; GR3041381; HK1028696; HKHK1035625; HK1028696; HK1035282; HK1018562; HKHK1069234; HKHK1057115; HK1083653B; IE1020077; IE1198959; IE1020077; IE1080584; IE900498; IL135498; IL139543; IL148002; IL135498; IL139544; IN201442; IN220504; IN201442; IN207829; IT1020077; IT1080584; IT900498; IT1020077; JP4139560;

JP4263706; JP4387627; JP4551617; JP4139560; JP4263706; JP3542557; JP4627809;
JP4698925; JP4366037; JP4307069; KR374920; KR422997; KR761230; KR374920;
KR362801; KR478072; KR689648; KR539987; KR752067; KR728517; KR593239;
MX223464; MX231725; MX226464; MX223464; MX212991; MX214637; MX237690;
MX240845; MYMY-123159-A; MYMY-123159-A; NL1020077; NL1198959; NL1080584;
NL900498; NL1020077; NZ503280; NZ507789; NZ503280; NZ532122; PT1010077;
PT1198959; PT1080584; PT900498; PT1010077; RU2195084; RU2216121; RU2251821;
RU2195084; RU2208301; RU2258252; SE1020077; SE1198959; SE1080584; SE900498;
SE1020077; SG71485; SG76965; SG86547; SG76964; SG71485; TWNI117461; TWNI-
124303; TWNI-130428; TWNI1600674; TWNI-162661; TWNI-202640; TWNI117461; TWNI-
130754; and TWNI-184111.

FIRST DATA CORPORATION

8. Plaintiff First Data Corporation (“First Data”) is a corporation organized and existing under the laws of the State of Delaware with its principal place of business at 5565 Glenridge Connector NE, Suite 2000, Atlanta, GA 30342.

9. On information and belief, First Data conducts business operations within the Eastern District of Texas. First Data maintains offices throughout the state of Texas including locations in Dallas, Austin, Houston, San Antonio, and McAllen.

JURISDICTION AND VENUE

10. 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).

11. Upon information and belief, this Court has personal jurisdiction over First Data in this action because First Data 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 First Data would not offend traditional notions of fair play and substantial

justice. First Data, 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 First Data is registered to do business in the State of Texas.

12. Venue is proper in this district under 28 U.S.C. §§ 1391(b)-(d) and 1400(b). First Data 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.

MOV INTELLIGENCE’S LANDMARK INVENTIONS

13. The groundbreaking inventions in DRM and digital watermarking taught in the patents-in-suit were pioneered by Rovi. Rovi, established in 1983 under the name Macrovision, was a trailblazing technology company focused on inventing and bringing to market fundamental technologies designed to allow producers and distributors of film and music to widely distribute their products while simultaneously protecting their art from unauthorized copying.⁵ Macrovision’s copy protection technology became so important to content creators that Congress specifically regulated the manufacture and sale of technology that was incompatible with Macrovision’s copy protection technology. *See* 17 U.S.C. § 1201(k)(1) (“unless such recorder conforms to the automatic gain control copy control technology”).⁶ Rovi broadened its focus to include copy protection and DRM for other media,⁷ including computer executables, firmware, operating system images, watermarking, and encryption.

⁵ Aljean Harmetz, *Cotton Club Cassettes Coded to Foil Pirates*, N.Y. TIMES (April 24, 1985).

⁶ *See also* David Nimmer, *Back from the Future: A Proleptic Review of the Digital Millennium Copyright Act*, 16 BERKELEY TECH. L.J. 855, 862 (2001) (The DMCA “contains a welter of corporation-specific features, relating to Macrovision Corp. The features in question relate to section 1201’s controls on consumer analog devices.”) (citations omitted).

⁷ *See* Michael Arnold et al., TECHNIQUES AND APPLICATIONS OF DIGITAL WATERMARKING AND CONTENT PROTECTION 203 (2002) (Describing Rovi’s Cact Data Shield product which by 2002 had been used in over 100 million compact discs. “This scheme [Rovi Cact Data Shield] operates by inserting illegal data values instead of error-correcting codes.”); *see also* *Rovi SafeDisc Copy*

14. MOV Intelligence's patent portfolio, which includes more than 233 issued patents worldwide, is a direct result of Rovi's substantial investment in research and development. The asserted MOV Intelligence patents are reflective of this history of innovation, embodying a number of firsts in the development of DRM and watermarking technologies.

15. MOV Intelligence long-term financial success depends in part on its ability to establish, maintain, and protect its proprietary technology through patents. Defendant's infringement presents significant and ongoing damage to MOV Intelligence's business. First Data, in an effort to expand its product base and profit from the sale of patented technology, has chosen to incorporate MOV Intelligence's fundamental technology without a license or payment.

THE ASSERTED PATENTS

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

16. 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 the '006 patent. A true and correct copy of the '006 patent is attached hereto as Exhibit A. The '006 patent claims specific methods and systems for verifying the authenticity of executable images. The system includes a validator that determines a reference digital signature for an executable image using the contents of the executable image excluding those portions of the executable that are fixed-up by a program loader. The validator then, subsequent to the loading of the executable image, determines an authenticity digital signature to verify that the executable image has not been improperly modified.

Protection Overview, MACROVISION CORPORATION DATASHEET at 2 (1999) ("SafeDisc incorporates a unique authentication technology that prevents the re-mastering of CD-ROM titles and deters attempts to make unauthorized copies. The SafeDisc authentication process ensures that consumers will only be able to play original discs. The user is forced to purchase a legitimate copy."); Kirby Kish, MACROSAFE SYSTEM: A SOLUTION FOR SECURE DIGITAL MEDIA DISTRIBUTION at 7 (January 2002) (showing the architecture of the MacroSafe system and use of a DRM Server and Key Escrow Server).

17. The '006 patent has been cited by over 86 issued United States patents and published patent applications as relevant prior art. Specifically, patents issued to the following companies have cited the '006 patent as relevant prior art:

- Intertrust Technologies Corporation
- International Business Machines Corporation
- Intel Corporation
- Microsoft Corporation
- Check Point Software Technologies, Inc.
- Nokia Corporation
- Ipass, Inc.
- Nytell Software LLC
- Amazon Technologies, Inc.
- Panasonic Corporation
- Matsushita Electric Ind. Co. Ltd.
- NXP B.V. (now Cisco Systems, Inc.)
- Intel Corporation
- Hewlett-Packard Development Company, L.P.
- Apple, Inc.
- Lockheed Martin Corporation
- Symantec Corporation
- Zone Labs, Inc.

18. The '006 patent claims a technical solution to a problem unique to computer systems: verifying and authenticating executable images.

U.S. PATENT NO. 6,510,516

19. U.S. Patent No. 6,510,516 (the “'516 patent”), entitled “System and Method for Authenticating Peer Components,” was filed on January 15, 1999, and claims priority to January 16, 1998. MOV Intelligence is the owner by assignment of the '516 patent. A true and correct copy of the '516 patent is attached hereto as Exhibit B. The '516 patent claims specific methods and systems for controlling the usage of data objects in component object systems. According to the invention, each data object includes a peer list that defines one or more peer data objects that are required by the data object. Upon receipt of a data object, the system verifies the integrity of the data object. Further, the system identifies the integrity of the peer data objects.

20. The '516 patent family has been cited by over 108 issued United States patents and published patent applications as relevant prior art. Specifically, patents issued to the following companies have cited the '516 patent as relevant prior art:

- America Online, Inc.
- LG Electronics, Inc.
- Microsoft Corporation
- Samsung Electronics Co., Ltd.
- First Data Corporation
- International Business Machines Corporation
- Pixar, Inc. (now a subsidiary of the Walt Disney Company)
- Adobe Systems Incorporated
- The Western Union Company
- Verizon Communications, Inc.
- JPMorgan Chase & Co.
- Electronics and Telecommunications Research Institute (ETRI)
- Siemens Medical Solutions USA, Inc.

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

21. 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 the '504 patent. A true and correct copy of the '504 patent is attached hereto as Exhibit C. The '504 patent claims specific methods and systems for verifying the authenticity of executable images. The systems and methods taught in the '504 patent incorporate a validator that determines a reference digital signature for an executable image using the contents of the executable image excluding those portions of the executable that are fixed-up by a program loader. The validator then, subsequent to the loading of the executable image, determines an authenticity digital signature to verify that the executable image has not been improperly modified. In addition, the validator ensures that each of the pointers in the executable image have not been improperly redirected.

22. The '504 patent and its underlying application have been cited by over 31 issued United States patents and published patent applications as relevant prior art. Specifically, patents issued to the following companies have cited the '504 patent as relevant prior art:

- Qualcomm Incorporated
- Intel Corporation
- Micro Beef Technologies, Ltd
- Microsoft Corporation
- Apple, Inc.
- Symantec Corporation
- Samsung Electronics Co., Ltd.
- Cybersoft Technologies, Inc.
- Electronics and Telecommunications Research Institute (ETRI)

23. The '504 patent claims a technical solution to a problem unique to the transmission of digital information over a network: verifying the identity of a software application in a dynamic loading environment. In particular, the system determines 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.

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

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

25. First Data 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.

26. First Data designs, makes, sells, offers to sell, imports, and/or uses the First Data TransArmor Solution Service (the "First Data '006 Product(s)").

27. On information and belief, one or more First Data subsidiaries and/or affiliates use the First Data '006 Products in regular business operations.

28. On information and belief, one or more of the First Data '006 Products include authentication technology.

29. On information and belief, one or more of the First Data '006 Products enable authenticating the identity of a software application in a dynamic loading environment. In particular, the First Data '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.

30. On information and belief, the First Data '006 Products are available to businesses and individuals throughout the United States.

31. On information and belief, the First Data '006 Products are provided to businesses and individuals located in the Eastern District of Texas.

32. On information and belief, the First Data '006 Products enable identifying one or more locations within the executable image, each of the identified locations being modified by a program loader.

33. On information and belief, the First Data '006 Products comprise a system wherein a reference digital signature is generated based on an executable image.

34. On information and belief, the First Data '006 Products generate a reference digital signature that excludes one or more locations in an executable image.

35. On information and belief, the First Data '006 Products are capable of storing the reference digital signature on a computer network.

36. On information and belief, the First Data '006 Products comprise systems and methods wherein an authenticity digital signature is generated based on an executable image.

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

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

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

40. On information and belief, the First Data '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 First Data '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).

41. On information and belief, the First Data '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 First Data '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.

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

43. On information and belief, the First Data '006 Products enable the detection of corrupted data in a computer image.

44. On information and belief, the First Data '006 Products enable the verification of the integrity of software images.

45. On information and belief, First Data 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 First Data '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 First Data TransArmor Solution Service.

46. By making, using, testing, offering for sale, and/or selling verification and authentication products and services, including but not limited to the First Data '006 Products, First Data 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).

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

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

49. On information and belief, First Data intended to induce patent infringement by third-party customers and users of the First Data '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. First Data specifically intended and was aware that the normal and customary use of the accused products would infringe the '006 patent. First Data 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, First Data provides the First Data '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 First Data further provides documentation and training materials that cause customers and end users of the First Data '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 First Data '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, First Data specifically intended to induce infringement of the '006 patent. On information and belief, First Data engaged in such inducement to promote the sales of the First Data '006 Products, *e.g.*, through First Data user manuals, product support, marketing materials, and training materials to actively induce the users of the accused products to infringe the '006 patent. Accordingly, First Data 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.

50. 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. Several of First Data's competitors have paid considerable licensing fees for their use of the technology claimed by the '006 patent. In an effort to gain an advantage over First Data's competitors by utilizing the same licensed technology without paying reasonable royalties, First Data infringed the '006 patent in a manner best described as willful, wanton, malicious, in bad faith, deliberate, consciously wrongful, flagrant, or characteristic of a pirate.

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

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

COUNT II
INFRINGEMENT OF U.S. PATENT NO. 6,510,516

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

54. First Data designs, makes, uses, sells, and/or offers for sale in the United States products and/or services for authenticating peer data objects.

55. First Data designs, makes, sells, offers to sell, imports, and/or uses the First Data Clover Mini; First Data Clover Station; and First Data Clover Mobile products (the "First Data '516 Product(s)").

56. On information and belief, one or more First Data subsidiaries and/or affiliates use the First Data '516 Products in regular business operations.

57. On information and belief, one or more of the First Data '516 Products include authentication technology.

58. On information and belief, one or more of the First Data '516 Products enable authenticating the identity of peers to a data object.

59. On information and belief, the First Data '516 Products are available to businesses and individuals throughout the United States.

60. On information and belief, the First Data '516 Products are provided to businesses and individuals located in the Eastern District of Texas.

61. On information and belief, the First Data '516 Products enable first data objects to contain or be linked to a description of one or more peer data objects that are required to be connected to the first data object before the data object can be accessed by the peer data objects.

62. On information and belief, the First Data '516 Products enable the use of a digital signature that identifies the provider of a data object.

63. On information and belief, the First Data '516 Products contain systems and methods that comprise reading from a data object a description of one or more peer data objects that is required for use of the data object.

64. On information and belief, the First Data '516 Products contain functionality for determining whether the data object is authorized to communicate with one or more peer data objects.

65. On information and belief, the First Data '516 Products contain the capability to determine if the data object is authorized to communicate with one or more peer data objects.

66. On information and belief, the First Data '516 Products are capable of controlling the connection of the peer data objects to the data object.

67. On information and belief, the First Data '516 Products comprise systems and methods that connect a data object to peer data objects based upon authorization being granted.

Moreover, when authorization is granted for the connection of a data object to peer data objects the peer data objects can communicate with the data object and the data object can communicate with the peer data objects.

68. On information and belief, the First Data '516 Products support authenticating a data object where the data object is encrypted.

69. On information and belief, First Data has directly infringed and continues to directly infringe the '516 patent by, among other things, making, using, offering for sale, and/or selling data object authentication and verification technology, including but not limited to the First Data '516 Products, which include infringing verification and authentication technologies. Such products and/or services include, by way of example and without limitation, the First Data Clover Mini; First Data Clover Station; and First Data Clover Mobile products.

70. By making, using, testing, offering for sale, and/or selling authentication and verification products and services, including but not limited to the First Data '516 Products, First Data has injured MOV Intelligence and is liable to MOV Intelligence for directly infringing one or more claims of the '516 patent, including at least claims 1, 17, and 20, pursuant to 35 U.S.C. § 271(a).

71. On information and belief, First Data also indirectly infringes the '516 patent by actively inducing infringement under 35 USC § 271(b).

72. On information and belief, First Data had knowledge of the '516 patent since at least May 22, 2003. First Data cited the '516 patent in the following issued U.S. Patents and published patent applications: 6,789,189; 6,820,199; 6,820,202; 6,851,054; 6,892,302; 6,915,430; 6,938,156; 6,950,940; 6,952,773; 6,957,336; 6,959,381; 6,978,369; 6,983,368; 7,010,691; 7,028,185; 7,032,112; 7,047,414; 7,047,416; 7,082,533; 7,096,354; 7,143,284; 7,490,239; 7,593,527; 7,693,277; 7,784,106; 7,831,519; 7,869,593; 7,936,869; 8,620,814; 2002/0026575; 2003/0095665; 2003/0097561; 2003/0097562; 2003/0097565; 2003/0097569; 2003/0097570; 2003/0097573; 2003/0101136; 2003/0101344; 2003/0115151; 2003/0115463; 2003/0126437; 2003/0126438; 2003/0126439; 2003/0131234; 2003/0131235; 2004/0030901;

2005/0005117; 2005/0005123; 2005/0044373; 2005/0137986; 2006/0153364; 2006/0153365; 2006/0153366; 2006/0153367; 2006/0153368; 2006/0153369; 2006/0153370; 2006/0153371; 2006/0156012; 2006/0156013; and 2007/0078781.

73. Alternatively, First Data has had knowledge of the '516 patent since at least the service of this Complaint or shortly thereafter, and on information and belief, First Data knew of the '516 patent and knew of its infringement, including by way of this lawsuit.

74. On information and belief, First Data intended to induce patent infringement by third-party customers and users of the First Data '516 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. First Data specifically intended and was aware that the normal and customary use of the accused products would infringe the '516 patent. First Data performed the acts that constitute induced infringement, and would induce actual infringement, with knowledge of the '516 patent and with the knowledge that the induced acts would constitute infringement. For example, First Data provides the First Data '516 Products that have the capability of operating in a manner that infringe one or more of the claims of the '516 patent, including at least claims 1, 17, and 20, and First Data further provides documentation and training materials that cause customers and end users of the First Data '516 Products to utilize the products in a manner that directly infringe one or more claims of the '516 patent. By providing instruction and training to customers and end-users on how to use the First Data '516 Products in a manner that directly infringes one or more claims of the '516 patent, including at least claims 1, 17, and 20, First Data specifically intended to induce infringement of the '516 patent. On information and belief, First Data engaged in such inducement to promote the sales of the First Data '516 Products, e.g., through First Data user manuals, product support, marketing materials, and training materials to actively induce the users of the accused products to infringe the '516 patent. Accordingly, First Data 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 '516 patent, knowing that such use constitutes infringement of the '516 patent.

75. The '516 patent is well-known within the industry as demonstrated by the over 108 citations to the '516 patent family in issued patents and published patent applications assigned to technology companies and academic institutions (*e.g.*, LG Electronics, Inc. and Siemens AG). Several of First Data's competitors have paid considerable licensing fees for their use of the technology claimed by the '516 patent. In an effort to gain an advantage over First Data's competitors by utilizing the same licensed technology without paying reasonable royalties, First Data infringed the '516 patent in a manner best described as willful, wanton, malicious, in bad faith, deliberate, consciously wrongful, flagrant, or characteristic of a pirate.

76. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the '516 patent.

77. As a result of First Data's infringement of the '516 patent, MOV Intelligence has suffered monetary damages, and seeks recovery in an amount adequate to compensate for First Data's infringement, but in no event less than a reasonable royalty for the use made of the invention by First Data together with interest and costs as fixed by the Court.

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

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

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

80. First Data designs, makes, sells, offers to sell, imports, and/or uses the First Data TransArmor Solution Service (the "First Data '504 Product(s)").

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

82. On information and belief, one or more of the First Data '504 Products include authentication technology.

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

84. On information and belief, one or more of the First Data '504 Products enable authenticating and verifying an executable image. In particular, the First Data '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.

85. On information and belief, the First Data '504 Products are available to businesses and individuals throughout the United States.

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

87. On information and belief, the First Data '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.

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

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

90. On information and belief, the First Data '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.

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

92. On information and belief, the First Data '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 First Data '504 Products excludes one or more pointers in need of fixing up.

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

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

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

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

97. On information and belief, the First Data '504 Products enable the detection of corrupted data in a computer image.

98. On information and belief, the First Data '504 Products enable the verification of the integrity of software images.

99. On information and belief, First Data 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 First Data '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 First Data TransArmor Solution Service.

100. By making, using, testing, offering for sale, and/or selling authentication and verification technologies and services, including but not limited to the First Data '504 Products, First Data 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).

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

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

103. On information and belief, First Data intended to induce patent infringement by third-party customers and users of the First Data '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. First Data specifically intended and was aware that the normal and customary use of the accused products would infringe the '504 patent. First Data 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, First Data provides the First Data '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 First Data further provides documentation and training materials that cause customers and end users of the First Data '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 First Data '504 Products in a manner that directly infringes one or more claims of the '504 patent, including at least claims 1 and 10, First Data specifically intended to induce infringement of the '504 patent. On information and belief, First Data engaged in such inducement to promote the sales of the First Data '504 Products, e.g., through First Data user manuals, product support, marketing materials, and training materials to actively induce the users of the accused products to infringe the '504 patent. Accordingly, First Data 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.

104. 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)). Several of First Data's competitors have paid considerable licensing fees for their use of the technology claimed by the '504 patent. In an effort to gain an advantage over First Data's competitors by utilizing the same licensed technology without paying reasonable royalties, First Data infringed the '504 patent in a manner best described as willful, wanton, malicious, in bad faith, deliberate, consciously wrongful, flagrant, or characteristic of a pirate.

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

106. As a result of First Data's infringement of the '504 patent, MOV Intelligence has suffered monetary damages, and seeks recovery in an amount adequate to compensate for First Data's infringement, but in no event less than a reasonable royalty for the use made of the invention by First Data 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 First Data has infringed, either literally and/or under the doctrine of equivalents, the '504 patent, the '006 patent, and the '516 patent;
- B. An award of damages resulting from First Data'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 29, 2016

Respectfully submitted,

/s/ Dorian S. Berger

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D. Jeffrey Rambin (TX Bar No. 00791478)

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