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

SOVERAIN IP, LLC, ***Plaintiff,*** v. **DIRECTV, LLC.** ***Defendant.***	**Civil Action No._____** **JURY TRIAL DEMANDED**

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Soverain IP, LLC ("Soverain" or "Plaintiff"), by and through its attorneys, brings this action and makes the following allegations of patent infringement relating to U.S. Patent No.: 9,900,305 ("the '305 patent") (the "patent-in-suit" or the "Soverain Patent"). Defendant DirecTV, LLC ("DirecTV" or "Defendant") infringes the patent-in-suit in violation of the patent laws of the United States of America, 35 U.S.C. § 1 *et seq*.

INTRODUCTION

1. This case arises from DirecTV's infringement of Soverain's network access and computer monitoring patent portfolio. Soverain is the owner by assignment and exclusive licensee to twenty-five issued United States patents, multiple pending patent applications,[1] and numerous foreign patent assets.[2]

2. The patent asserted in this case arose from the innovative work of Open Market, Inc. ("Open Market"), an innovative tech firm that in 1993 developed groundbreaking technologies for the then-nascent Internet.

[1] *See* U.S. Patent App. Nos. 11/971,361; 12/109,443; 14/047,547.

[2] *See e.g.*, JP 4485548, JP 3762882B2, EP 0803105B1, DE 69633564T2.

3. Specifically, U.S. Patent No. 9,900,305 which issued on February 20, 2018, is entitled, *Internet Server Access Control and Monitoring Systems.* The '305 patent and its related patents underwent extensive review by the United States Patent and Trademark Office. The United States Patent and Trademark Office found the claims of the '305 patent patentable after considering 674 prior art references. The '305 patent family has been cited by over 1,900 issued patents and published patent applications. Further, the '305 patent family has been cited in 109 patents and published patent applications assigned to entities affiliated with DirecTV, including U.S. Patent Nos. 7,609,686 and 7,890,586.

4. Concurrent to the filing of the above captioned case, Soverain is seeking damages based on AT&T Services, Inc.'s infringement of U.S. Patent Nos. 7,191,447 ("the '447 patent"); 8,606,900 ("the '900 patent"); and 5,708,780 ("the '780 patent"). *See Soverain IP, LLC v. AT&T Inc. et al.,* Case No. 2-17-cv-00293 (E.D. Tex.).

5. The current assertion of the '305 patent arises specifically from DirecTV's sale and provision of its Genie Versions: HR44-500, HR54-500, and HR54R1-500. Based on representations made by DirecTV's corporate parent AT&T, Inc. Soverain is bringing this case as a separate action. AT&T has represented to the Court that AT&T Services, Inc. and its subsidiaries must be treated as separate and distinct entities. Specifically, DirecTV's corporate parent, AT&T, Inc., stated:

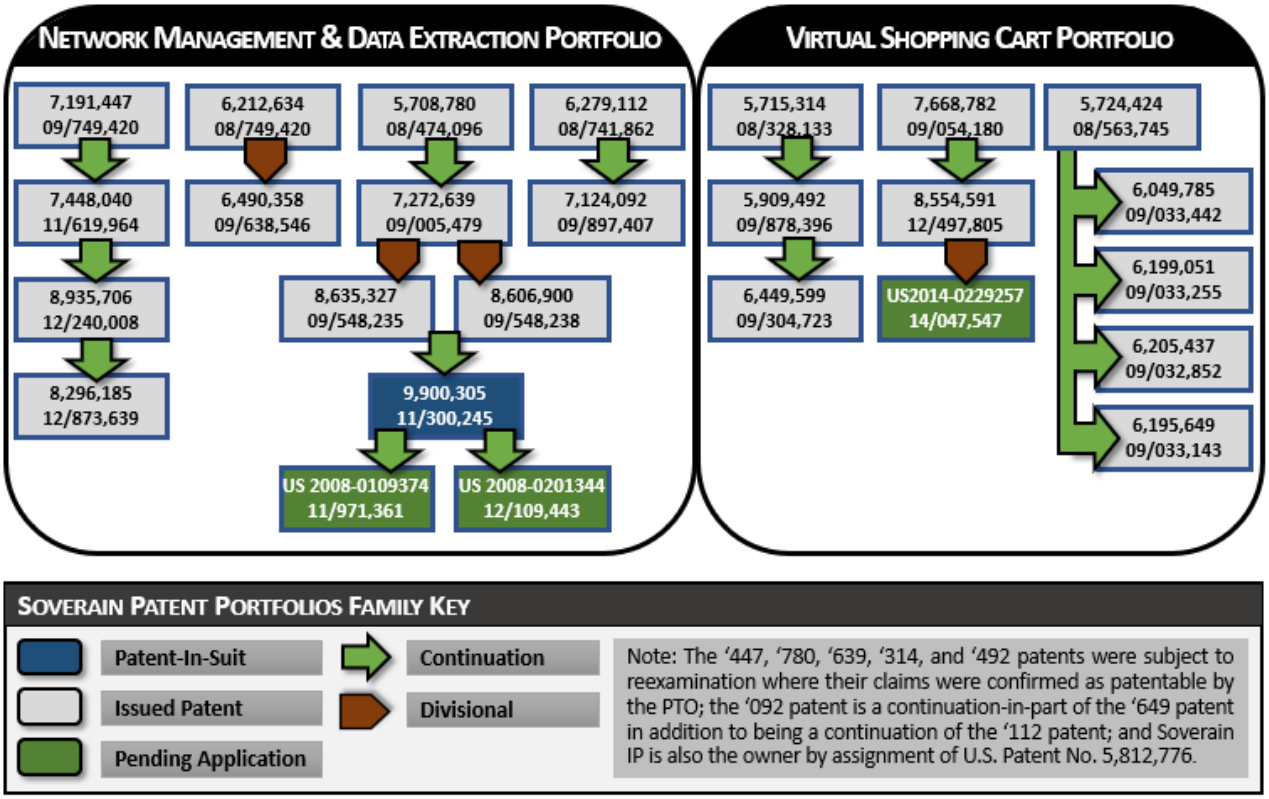
- "AT&T Inc.'s subsidiaries, including AT&T Services, maintain their own independent corporate, partnership, or limited liability company status, identity, and structure." *Soverain IP, LLC, v. AT&T Inc. et al.,* Case No. 17-cv-00293, Dkt. No. 18 at 6 (E.D. Tex. June 19, 2017).

- "AT&T respects the separate corporate identities of each of its subsidiaries and affiliates." Case No. 17-cv-00293, Dkt. No. 26 at 13-14 (E.D. Tex. July 18, 2017).
- "AT&T Inc.'s subsidiaries, including AT&T Services, Inc., each keep accounting and finances separate from each other and from AT&T Inc." Case No. 17-00293, Dkt. No. 26-1 at 2 (E.D. Tex. July 28. 2017) (declaration of Gary L. Long director in the Accounting Department of AT&T Services, Inc.).

6. Open Market was founded at a time when conducting commercial transactions over the Internet was in its beginning stages. Previous uses of the Internet had largely been limited to academic research and military defense work.

7. Professor David K. Gifford of the Massachusetts Institute of Technology, co-founder of Open Market, and inventor of fourteen of the Soverain patents, recognized the potential of enabling secure transactions over computer networks. Professor Gifford and other Open Market employees raced against other companies to bring one of the first secure transaction management systems to market. With the technology developed, Open Market filed for the patents that would comprise the two Soverain Patent Portfolios.

8. Open Market's groundbreaking inventions led to the issuance of patents that comprise two technology portfolios: (1) the virtual shopping cart portfolio and (2) the network management and data extraction portfolio. The below diagram shows Soverain's patents, pending patent applications, and the Soverain patent DirecTV infringes.



SOVERAIN'S LANDMARK DATA EXTRACTION AND NETWORK TECHNOLOGIES

9. Open Market's flagship Internet transaction product, the Open Market Transact system ("Transact") offered a full suite of software technologies, including content management, authorization protocols, and customer relationship management. Transact contained functionality for separating the management of transactions from the management of content, allowing companies to manage transactions securely and centrally using content located on multiple distributed Web servers.

10. In 1995, Open Market began commercial shipment of Transact.[3] Transact was quickly embraced by the market, and its early customers included: Novell,[4] Sprint,[5] Disney,[6] AT&T,[7] and Hewlett-Packard.[8] In March of 1996, the New York Times described Open Market's transaction management products as being adopted by Time Warner, Banc One, and First Union.

> Open Market will be competing with Netscape's I-Store and Merchant Server of Microsoft. Besides Time Warner, Open Market has signed several big customers including Banc One, First Union Bank, Hewlett-Packard, Digital Equipment and Bloomberg, the financial publisher. Time Warner has been offering electronic versions of Time, People, Sports Illustrated, Money and other publications free on its Pathfinder Web site.[9]

11. By the late 1990s, Transact was an established market leader in e-commerce technology, commanding dominant market share of the transactional software market against

---

[3] Ellis Booker, *Internet Security Boosted*, COMPUTERWORLD at 14 (April 17, 1995) ("Last month, Open Market became the first vendor to release a Web server that supports both SHT'I'P and SSL.").

[4] Jessica Davis, *Novell, Open Market Ink Deal*, INFOWORLD at 6 (March 25, 1996) ("Novell has licensed OM-SecureLink commerce server software for the Internet and plans to integrate OM-SecureLink with Novell's Web server by the third quarter.").

[5] *Sprint Chooses Open Market's Transact as Key Offering of its E-Commerce Services*, PRESS RELEASE (September 27, 2000) ("Sprint will host Transact and offer its functionality as a service for these enterprise sites.").

[6] Eric Nee, *Surf's Up*, FORBES ONLINE (July 27, 1998), available at: https://www.forbes.com/forbes/1998/0727/6202106a.html ("Today Open Market is a leading supplier of Internet commerce software. More than 1,000 Web sites use Open Market software to transact business. Its clients include Disney, which sells on the Internet everything you can buy in one of its shopping mall stores, and Analog Devices, which allows engineers to find and order examples of integrated circuits on its Web site.").

[7] Jeff Symoens, *Transact 3.0: Scalable Solution*, INFOWORLD at 68 (September 8, 1997) ("AT&T is using Transact as part of SecureBuy, a service that gives merchants the infrastructure to run an electronic store on the internet.").

[8] *HP And Open Market Offer Mission-Critical E-Commerce Services*, HP OPEN MARKET PRESS RELEASE (November 18, 1998) ("Open Market is the first member of HP`s Domain Commerce alliance program to integrate HP`s MC/ServiceGuard with its products.").

[9] Glenn Rifkin, *Open Market Hopes It'll be Next Netscape*, N.Y. TIMES (March 4, 1996).

companies like Microsoft and IBM.[10]

12. The following collection of news articles shows some of the headlines that Open Market's Transact product garnered in the computer industry press from 1996 to 2000.

Sandy Reed, *First-Ever Review of I-commerce System Right For New Section Debut*, INFOWORLD at 73 (September 8, 1997); Matthew Nelson, *Open Market adds Object Support to I-commerce Product*, INFOWORLD at 58 (February 16, 1998.); Ellen Messmer, *Open Market to Liven Up Web-Based Publishing*, NETWORK WORLD at 16 (November 9, 1998); Mitch Wagner, *Open market Upgrade Will Support Big Business On 'Net*, COMPUTERWORLD at 8 (December 9, 1996); Ellen Messmer, *Open Market to Debut e-Comm Tools*, NETWORK WORLD at 12 (March 27, 2000); Kim Nash, *Open Market Aids Web Site Upkeep*, COMPUTERWORLD at 12 (March 11, 1996).

[10] Eric Nee, *Surf's Up*, FORBES ONLINE (July 27, 1998); *3 Big New Customers for Open Market, Inc.*, N.Y. TIMES (April 24, 1995) ("Open Market Inc. will announce today that three major media companies will use its software and services to provide content and conduct business on the Internet. A privately held company based in Cambridge, Mass., Open Market said it had signed agreements to provide technology to the Tribune Company, Advance Publications and the Time Inc. unit of Time Warner.").

13. The inventors of the Soverain Patents include Open Market's founders and engineers. The inventors of the Soverain Patents comprise:

14. Professor David K. Gifford is a professor of electrical engineering and computer science at the Massachusetts Institute of Technology ("MIT") and co-founder of Open Market. Mr. Gifford has been a member of the MIT faculty since 1982 and leads the Programming Systems Research Group at the MIT Laboratory for Computer Science. Professor Gifford is a named inventor on fourteen of Soverain's issued patents.[11]

15. Professor Gifford is the author of over one hundred journal articles and his research areas focus on programming language development; information discovery, retrieval, and distribution; and computation using biological substrates. Professor Gifford earned his S.B. in 1976 from MIT and his M.S. and Ph.D. in electrical engineering from Stanford.

16. Professor Gifford was elected as a fellow by the Association for Computing Machinery, for "contributions to distributed systems, e-commerce and content distribution."[12]

17. Dr. Lawrence Stewart was Open Market's Chief Technology Officer. Dr. Stewart is the co-inventor of nine of Soverain's patents.[13] Dr. Stewart previously held positions at Xerox Palo Alto Research Center ("PARC") and Digital Equipment Corporation. Recently, when writing about his role as a co-inventor of Soverain's patents, Dr. Stewart described the intellectual effort behind the inventions.

> The relevant source code of the Open Marketplace system as of October 1994 was included with the patent application for anyone to read – over 50 printed pages of

[11] *See* U.S. Patent Nos. 4,845,658; 5,812,776; 5,724,424; 6,279,112; 6,205,437; 6,195,649; 6,199,051; 6,049,785; 7,191,447; 7,124,092; 7,448,040; 8,935,706; 8,554,591; and 8,286,185.

[12] *Gifford Named ACM Fellow*, MIT COMPUTER SCIENCE AND ARTIFICIAL INTELLIGENCE LABORATORY NEWS (December 13, 2011), available at: https://www.csail.mit.edu/node/1651.

[13] *See* U.S. Patent Nos. 7,272,639; 6,449,599; 8,635,327; 8,606,900; 8,554,591; 5,715,314; 5,708,780; 5,909,492; and 7,668,782.

> code. In other words, ***Open Market showed that these inventions weren't just a theory but an actual working system.*** Open Market submitted the source code to the Patent Office on microfiche since there was no way to submit machine readable appendices back in 1994.[14]

Dr. Stewart received an S.B. in Electrical Engineering from MIT in 1976, followed by M.S. and Ph.D. degrees from Stanford University in 1977 and 1981, respectively. Dr. Stewart is also the author (with fellow Soverain patent inventor Winfield Treese) of the computer science textbook, *Designing Systems for Internet Commerce* (Addison-Wesley, 2002).

18. Dr. John R. Ellis was Open Market's Architect and Technical Lead. Dr. Ellis subsequently was the Senior Vice President of Engineering at AltaVista Internet and has held positions at Xerox PARC and Amazon.com. Dr. Ellis is a named inventor of four Soverain patents.[15] Dr. Ellis holds a Ph.D. from Yale University and BSE from Princeton University.

19. Dr. Daniel Earl Geer, Jr. served as Director of, Engineering at Open Market and named inventor of two Soverain Patents.[16] Dr. Geer was the former President of USENIX, the advanced computing systems association and served as Chief Scientist at Verdasys, Inc. and Digital Guardian, Inc. Dr. Geer holds degrees from Harvard University and MIT.

20. Winfield Treese was previously the Associate Director of the Hariri Institute for Computing at Boston University. Mr. Treese served as Open Market's Vice President of Technology where he was responsible for the security architecture of Open Market's products. Mr. Treese is a named inventor of eight Soverain patents.[17] Mr. Treese was the chair of the

---

[14] Lawrence Steward, *The CAFC Got It Wrong in Soverain v. Newegg*, IPWATCHDOG.COM WEBSITE (December 30, 2013), available at: http://www.ipwatchdog.com/2013/12/30/the-cafc-got-it-wrong/id=47141/ (emphasis added).

[15] *See* U.S. Patent Nos. 7,448,040; 8,935,706; 8,286,185; and 7,191,447.

[16] *See* U.S. Patent Nos. 6,490,358 and 6,212,634.

[17] *See* U.S. Patent Nos. 7,448,040; 8,935,706; 8,286,185; 5,708,780; 7,272,639; 8,635,327; 8,606,900; and 7,191,447.

Transport Layer Security (TLS) Working Group of the Internet Engineering Task Force (IETF), the Internet standard successor to SSL. Mr. Treese also chaired the 8th USENIX Security Symposium. Mr. Treese is the co-author of the book *Designing Systems for Internet Commerce* (Addison-Wesley, 2002).

SOVERAIN'S TRANSACT SYSTEM

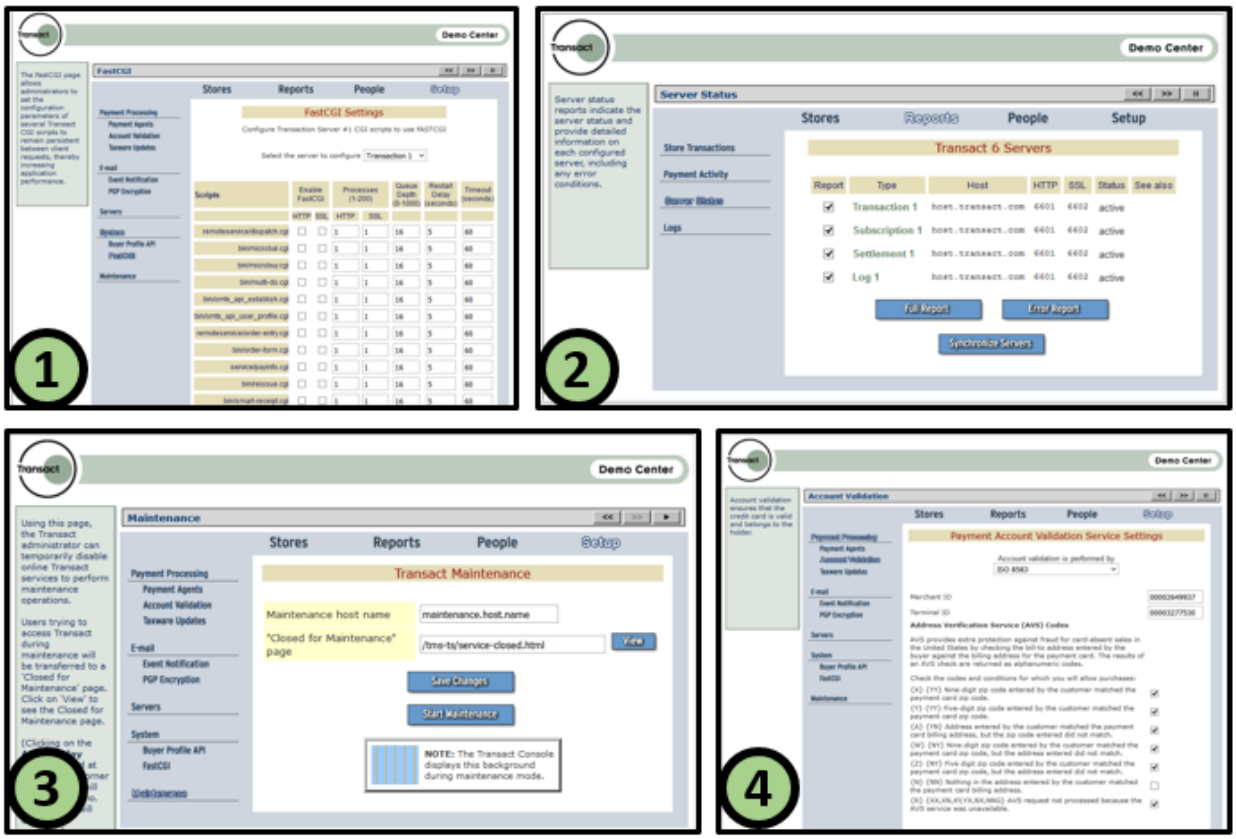
21. From 1996 through 2000, Open Market's product, Transact, was a leader in the e-commerce field, holding the majority of the global market for transaction management systems.[18] When the first Soverain patents issued in 1998, Open Market was hailed for its "secure, robust, distributed architecture." Jeff Symoens, *Transact 3.0: Scalable Solution*, INFOWORLD at 63 (September 8, 1998). Gary Eichorn, chief executive officer of Open Market, stated that Open Market was selling its "transaction engine to telecommunications companies, banks and Internet service providers. They're then offering commerce services to smaller companies." HOTSEAT: GARY EICHORN, CEO OF OPEN MARKET, DESCRIBES HOW TRANSACTIONS WILL HIT THE WEB, InfoWorld at 47 (March 17, 1997).

22. Transact provided an end-to-end solution for secure transaction management over the Internet. Transact included the following components: (1) a transaction server for managing orders, (2) a subscription server for security and authentication by managing access to digital content, (3) a log server for secure management of log entries, and (4) a settlement server for managing the authorization of transactions. A review of Transact in InfoWorld magazine stated, "if you're comfortable with Transact's $125,000 opening price tag, it offers an exceptional

[18] *Investors Bid Up Internet Stock*, N.Y. TIMES (May 24, 1996) (In May 1996, Open Market made an initial public offering valuing the company at $1.2 billion.).

architecture and a strong feature set that will handle back-end transaction processing." Jeff Symoens, *Transact 3.0: Scalable Solution*, INFOWORLD at 63 (September 8, 1998).

23. The following images of Soverain's Transact product show: (1) FastCGI configuration screen for keeping application processes running between requests (unlike CGI the system did not require extra overhead by requiring the system start a new process and initializing an application each time a request is made on the system); (2) a server status screen for monitoring the status of multiple hosts running Transact; (3) a maintenance screen for managing system maintenance; and (4) an account validation service setting screen for managing transaction security and authentication.



A COLLECTION OF IMAGES OF THE OPEN MARKET TRANSACTION SYSTEM (the numbered annotations correspond to the (1) FastCGI settings, (2) server status screen, (3) Transact maintenance settings, and (4) account validation settings).

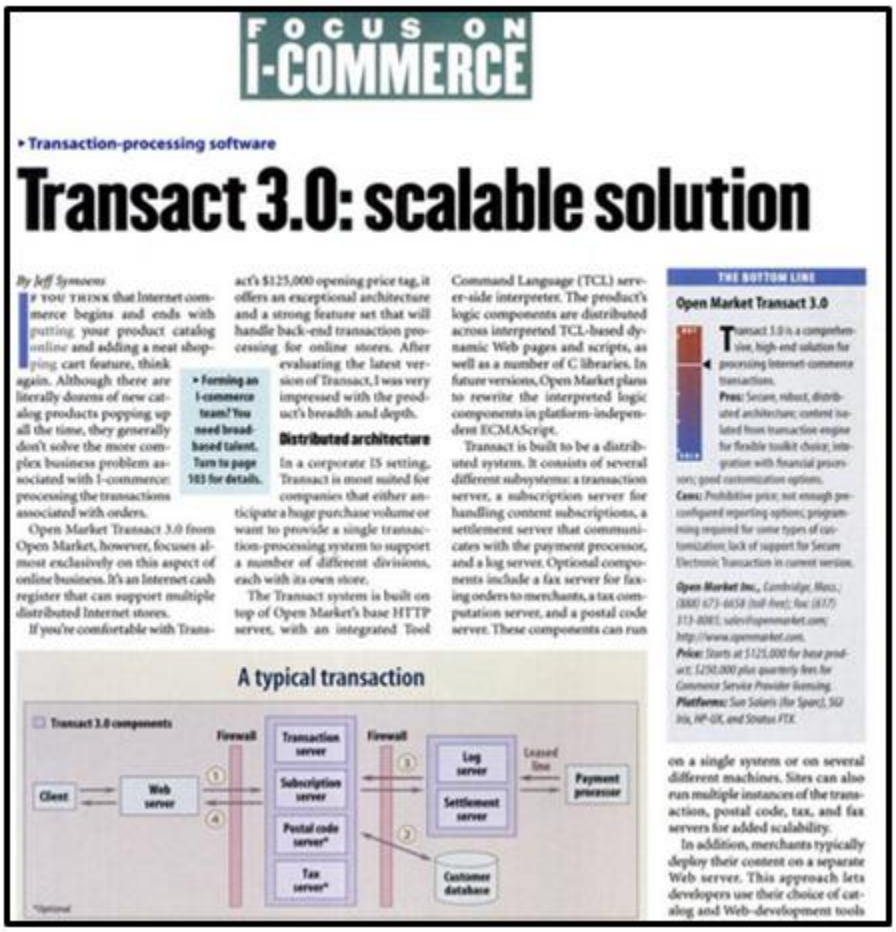
24. As the 2000s approached, larger technology companies entered the transaction management field; the dot-com bubble then burst.[19] As a result, Open Market went through a restructuring and was purchased by Divine interVentures, Inc. ("Divine") for approximately $70 million in 2001.[20] As a result of the purchase, Divine acquired Open Market's patent portfolio and its Transact software product.

25. Divine was a venture capital investment company founded in May 1999. Divine focused on "professional services, Web-based technology, and managed services." *Id.* At its peak, Divine employed approximately 3,000 people in more than 20 locations worldwide and offered approximately 50 software products.

26. In 2003, Transact was acquired by Soverain Software. Soverain Software also acquired the patents from the original Open Market inventors and innovators.

[19] *See* Editorial, *The Dot-Com Bubble Bursts*, N.Y. TIMES, Dec. 24, 2000, at WK8 (describing the aftermath of the dot-com bubble bursting).

[20] *Divine to Buy Open Market*, NETWORK WORLD at 8 (August 20, 2001) ("Professional services and software company Divine last week agree to buy struggling Open Market in a stock deal work about $59 million.").



FOCUS ON I-COMMERCE

▸ Transaction-processing software

Transact 3.0: scalable solution

By Jeff Symoens

IF YOU THINK that Internet commerce begins and ends with putting your product catalog online and adding a neat shopping cart feature, think again. Although there are literally dozens of new catalog products popping up all the time, they generally don't solve the more complex business problem associated with I-commerce: processing the transactions associated with orders.

Open Market Transact 3.0 from Open Market, however, focuses almost exclusively on this aspect of online business. It's an Internet cash register that can support multiple distributed Internet stores.

If you're comfortable with Transact's $125,000 opening price tag, it offers an exceptional architecture and a strong feature set that will handle back-end transaction processing for online stores. After evaluating the latest version of Transact, I was very impressed with the product's breadth and depth.

▸ Forming an I-commerce team? You need broad-based talent. Turn to page 103 for details.

Distributed architecture

In a corporate IS setting, Transact is most suited for companies that either anticipate a huge purchase volume or want to provide a single transaction-processing system to support a number of different divisions, each with its own store.

The Transact system is built on top of Open Market's base HTTP server, with an integrated Tool Command Language (TCL) server-side interpreter. The product's logic components are distributed across interpreted TCL-based dynamic Web pages and scripts, as well as a number of C libraries. In future versions, Open Market plans to rewrite the interpreted logic components in platform-independent ECMAScript.

Transact is built to be a distributed system. It consists of several different subsystems: a transaction server, a subscription server for handling content subscriptions, a settlement server that communicates with the payment processor, and a log server. Optional components include a fax server for faxing orders to merchants, a tax computation server, and a postal code server. These components can run on a single system or on several different machines. Sites can also run multiple instances of the transaction, postal code, tax, and fax servers for added scalability.

In addition, merchants typically deploy their content on a separate Web server. This approach lets developers use their choice of catalog and Web-development tools

A typical transaction

Transact 3.0 components

Client, Web server, Firewall, Transaction server, Subscription server, Postal code server*, Tax server*, Firewall, Log server, Settlement server, Leased line, Payment processor, Customer database

*Optional

THE BOTTOM LINE

Open Market Transact 3.0

Transact 3.0 is a comprehensive, high-end solution for processing Internet-commerce transactions.

Pros: Secure, robust, distributed architecture; content isolated from transaction engine for flexible toolkit choice; integration with financial processors; good customization options.

Cons: Prohibitive price; not enough preconfigured reporting options; programming required for some types of customization; lack of support for Secure Electronic Transaction in current version.

Open Market Inc., Cambridge, Mass.; (888) 673-6658 (toll-free); fax (617) 373-8301; sales@openmarket.com; http://www.openmarket.com.

Price: Starts at $125,000 for base product; $250,000 plus quarterly fees for Commerce Service Provider licensing.

Platforms: Sun Solaris (for Sparc), SGI Irix, HP-UX, and Stratus FTX.

Jeff Symoens, *Transact 3.0: Scalable Solution*, INFOWORLD at 63 (September 8, 1998) ("Transact 3.0 is a comprehensive, high-end solution for processing Internet-commerce transactions. Pros: Secure, robust, distributed architecture.").

SOVERAIN'S PATENT PORTFOLIO

27. Soverain's patents and published patent applications have been cited in over 6,000 issued United States patents and published patent applications as prior art before the United States Patent and Trademark Office.[21] Companies whose patents and patent applications cite the Soverain patents include: Microsoft Corporation, Oracle Corporation, Facebook, Inc., AT&T, Inc., International Business Machines Corporation, Dell, Inc., etc.

[21] The over 6,000 forward citations to the Soverain Patents do not include patent applications that were abandoned prior to publication in the face of the Soverain Patents.

28. It is difficult today to recall a time before Soverain's patented technology had become part of the platform used to operate many websites. But prior to the mid to late 1990's, when the applications leading to the patents in suit were filed, nothing like the patented functionality had been devised, let alone implemented. The simplicity and intuitive features of the patented technology soon became apparent. Almost overnight, companies abandoned older technologies that often-required customers to dial in directly to specific sites, shop for products using function codes or other keypad commands, and fax or phone in orders rather than complete transactions online.

The above images show major Internet properties contemporaneous (and later) to the inventions conceived in the Soverain patents, including: (1) Microsoft.com (August 1995), (2) Amazon.com (July 1995), and (3) Apple.com (July 1997).

29. The Soverain network management and data extraction patent portfolio includes technology that allows companies to streamline and secure the single sign-on process, extract data from hosts over a network, and authenticate and encrypt data using asymmetric keys.

30. Soverain has maintained and developed the Open Market patent portfolio, which now consists of over 50 issued and pending U.S. and international patents covering key aspects of e-commerce technology.

Open Market wins three I-commerce patents

■ Company to pursue licensing fees

By Matthew Nelson and Dylan Tweney

OPEN MARKET has been granted three patents that cover the basic building blocks of Internet-commerce sites.

The patents cover real-time processing of credit- and debit-card payments via the Internet, server-based electronic shopping carts, and digital authentication using URL-based session identifiers.

Open Market said that "many" I-commerce companies are now infringing on the patents, but "our strong preference will be to sell our software or to license the appropriate technology," said Gary Eichhorn, CEO at Open Market.

Companies that may be forced

Chris Stevens, a senior analyst at the Aberdeen Group, in Boston.

I-commerce vendors are not immediately worried about Open Market's claims.

THE WALL STREET JOURNAL.

By **Nick Wingfield** The Wall Street Journal Interactive Edition
Updated March 4, 1998 12:01 a.m. ET

SAN FRANCISCO -- Shares of Internet-software firm Open Market surged 15% on Tuesday following news that it has received several broad-ranging patents related to electronic commerce.

The Burlington, Mass. Company's stock rose 2 3/8 to 18 1/8 on the Nasdaq Stock Market. At one point Tuesday, the stock hit 18 3/8 – a 52-weel high.

Nick Wingfield, *Three Patents Lift Open Market as Observers Guess Their Worth*, WALL ST. J., Mar. 4, 1998 (reporting that one analyst stated: "The most important thing is that it will allow them to be acknowledged as a leader and be sought after for strategic relationships"); Matthew Nelson and Dylan Tweney, *Open Market Wins Three I-Commerce Patents*, INFOWORLD at 10 (March 9, 1998).

31. Confirming the value of Soverain patents, licensees have paid millions of dollars for a license to practice the technology taught in the Soverain patents. For example, Amazon.com, Inc. paid 40,000,000 dollars to license the Soverain patents.[22]

THE PARTIES

SOVERAIN IP, LLC

32. Soverain is a Texas limited liability company that owns the intellectual property rights to information management solutions that allow companies and individuals to manage Internet content, encrypt network-based information, and manage access to network based information. Like Defendant DirecTV, Soverain relies on its intellectual property for its financial viability.

33. DirecTV has placed great emphasis on obtaining patents for their own systems relating to the accused products.

> ***We believe that our growing portfolio of pending and issued patents are important assets.*** We presently hold over 2,300 issued patents worldwide relating to our past and present businesses, including over 1000 patents developed by, or otherwise relating to, the businesses of DIRECTV U.S. . . . We actively protect our important patents, trademarks and other intellectual property rights against unauthorized or improper use by third parties.

DIRECTV 2014 FORM 10-K at 29 (February 24, 2015) (emphasis added).

34. DirecTV's sale and distribution of products and services that infringe the patent-in-suit has caused and continues to cause injury to Soverain.

[22] Thom Weidlich, *Amazon.Com Set to Pay on Patents*, THE SEATTLE TIMES (August 12, 2005) ("Amazon.com, the world's largest Internet retailer, agreed to pay $40 million to Soverain Software to settle two lawsuits over patents related to online shopping.").

DIRECTV, LLC

35. DirecTV is a limited liability company organized and existing under the laws of California with its principal place of business at 2260 E. Imperial Hwy., El Segundo, CA 90245. DirecTV also maintains locations in Arlington, Longview, and Dallas.

36. DirecTV may be served via its registered agent, CT Corporation System, 1999 Bryan St. Suite 900 Dallas, Texas 75201.

37. On information and belief, DirecTV has offices in Texas where it sells, develops, and/or markets its infringing products, including:

- DirecTV has admitted that it does business in this judicial District and consented to jurisdiction in the Eastern District of Texas. "DIRECTV does not contest that venue is proper in this District." *Innovative Automation LLC v. DirecTV, LLC*, Case. No. 2-15-cv-00505, Dkt. No. 10 at 2 (E.D. Tex. June 8, 2015); *see also ContentGuard Holdings, Inc. v. DIRECTV, LLC*, Case No. 2-15-cv-00128, Dkt. No. 22 (E.D. Tex. June 26, 2015) ("DIRECTV does not contest that venue is proper in this District as to DIRECTV.").
- Maintaining offices in San Antonio, Frisco, Dallas, Longview, and Arlington.
- DirecTV is registered to do business in the State of Texas with Texas Taxpayer Number: 32047045052.
- DirecTV has received tax abatement grants and similar compensation from Texas municipalities and the State of Texas.
- Using events and venues in the State of Texas to launch products that infringe the patent-in-suit.
- Enabling advertising targeting using the infringing product based on DirecTV users being located in this District and other cities in Texas.
- DirecTV operates servers relating to the infringing products in Texas and specifically the Eastern District of Texas.

JURISDICTION AND VENUE

38. 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).

39. Upon information and belief, this Court has personal jurisdiction over DirecTV in this action because DirecTV 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 DirecTV would not offend traditional notions of fair play and substantial justice. Defendant DirecTV, 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 patent-in-suit. Moreover, DirecTV is registered to do business in the State of Texas, has offices and facilities in the State of Texas, and actively directs its activities to customers located in the State of Texas. Further, DirecTV maintains a continues place of business in this district.

40. Venue is proper in this district under 28 U.S.C. §§ 1391(b)-(d) and 1400(b). Defendant DirecTV is registered to do business in the State of Texas, has offices in the State of 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.

U.S. PATENT NO. 9,900,305
TECHNOLOGY BACKGROUND

41. U.S. Patent No. 9,900,305 ("the '305 patent") entitled, *Internet Server Access Control and Monitoring*, was filed on December 13, 2005, and issued on February 20, 2018. Soverain is the owner by assignment of the '305 patent. The '305 patent is subject to a term adjustment under 35 U.S.C. § 154(b) of 806 days. A true and correct copy of the '305 patent is

attached hereto as Exhibit A. The '305 patent claims specific methods and systems for controlling and access to a content server from a plurality of clients. In particular, the process described in the invention includes client-server sessions using a session identifier for controlling access to a content server.

42. The '305 patent teaches the use a "session identifier" to permit servers to recognize a series of inquiries (or "service requests") from the same client during a session, and to control and monitor the client's access to information on a content server.

43. The '305 patent family has been cited by 1,900 United States patents and patent applications as relevant prior art. Specifically, patents issued to the following companies have cited the '305 patent family as relevant prior art.

- International Business Machines Corporation (cited in 61 patents and patent applications)
- Microsoft Corporation (cited in 62 patents and patent applications)
- Oracle Corporation
- Amazon.com, Inc.
- ***AT&T Corp. (cited in 109 patents and patent applications)***
- Cisco Systems, Inc.
- Dell, Inc.
- eBay, Inc.
- First Data Corporation
- Google, Inc.
- Hewlett-Packard Company
- Level 3 Communications, LLC
- McAffe, Inc.
- Ricoh Co., Ltd.
- Yahoo!, Inc.
- Xerox Corporation
- NEC Corporation
- Goldman Sachs & Co.
- Facebook, Inc.
- Comcast Corporation
- Intel Corporation
- Akamai Technologies, Inc.

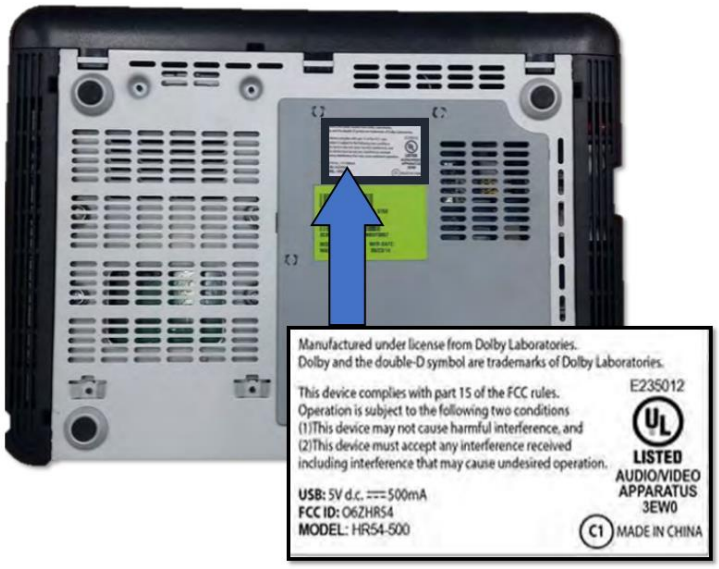
COUNT I
INFRINGEMENT OF U.S. PATENT NO. 9,900,305

44. Soverain references and incorporates by reference the preceding paragraphs of this Complaint as if fully set forth herein.

45. DirecTV designed, made, used, sold, and/or offered for sale in the United States products and/or services for processing service requests from a client to a server system through a network.

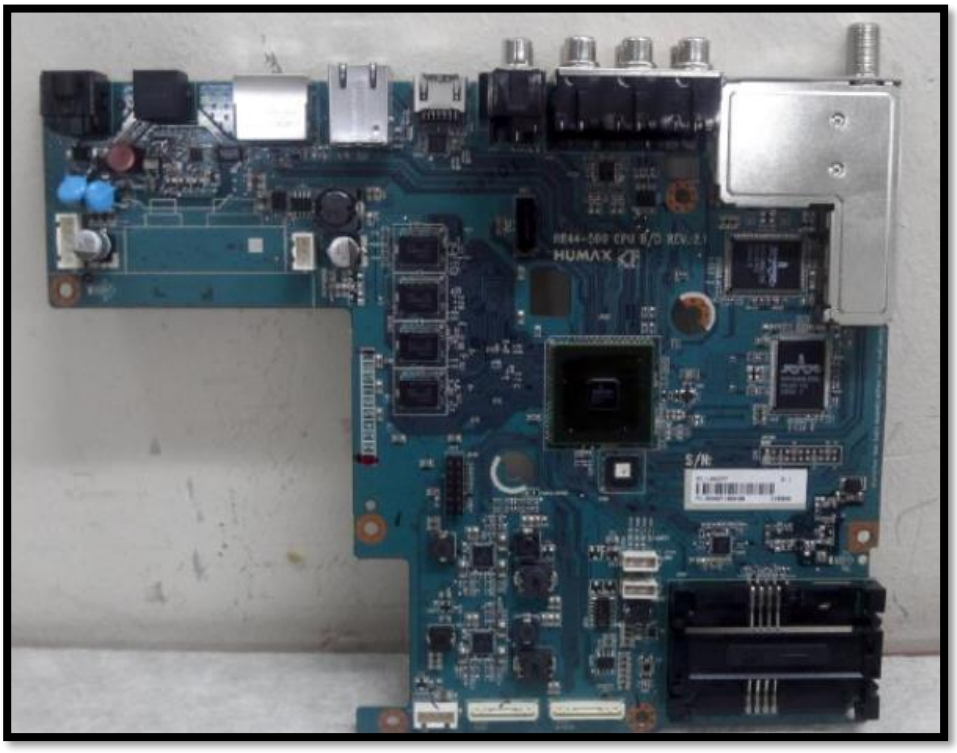
46. DirecTV designed, made, sold, offered to sell, imported, and/or used the DirecTV Genie Versions: HR44-500, HR54-500, and HR54R1-500 (collectively, the "DirecTV '305 Product(s)").

47. On information and belief, one or more DirecTV subsidiaries and/or affiliates used the DirecTV '305 Products in regular business operations.



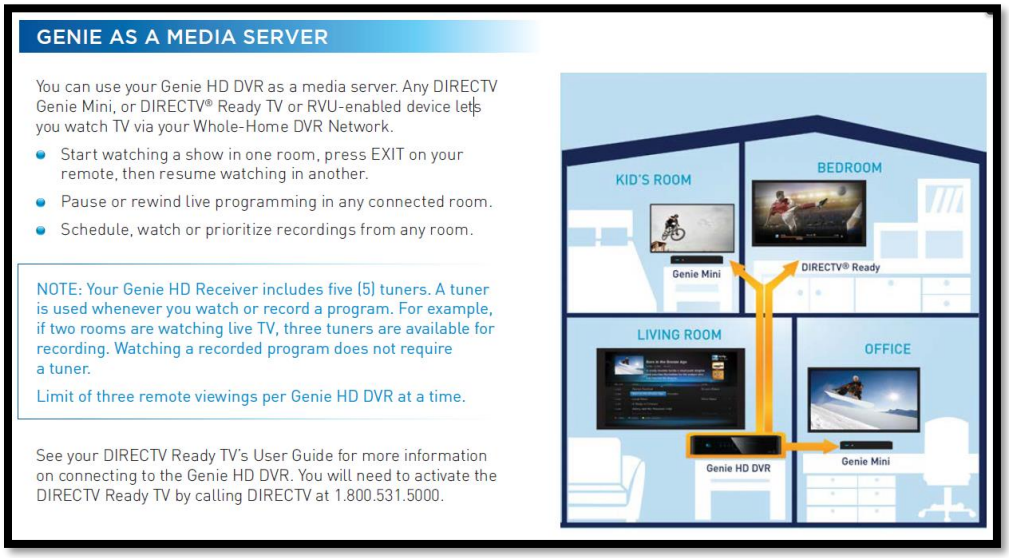
DIRECTV HR54-500 DIGITAL SATELLITE RECEIVER ID LABEL/LOCATION (2015) (identifying the infringing version of the product as DirecTV HR54-500).

48. On information and belief, one or more of the DirecTV '305 Products include technology for processing service requests from a client to server system through a network.



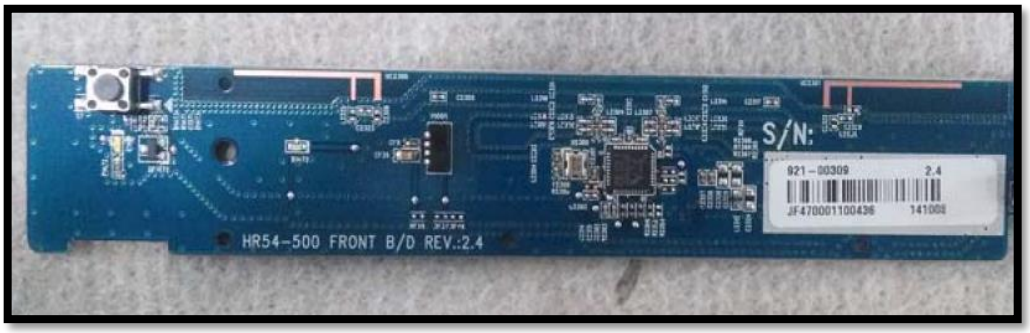
DIRECTV HR44-500 MAIN BOTTOM BOARD (2015) (used to process service requests).

49. On information and belief, the DirecTV '305 Products perform the step of controlling access to a content server from a plurality of clients.



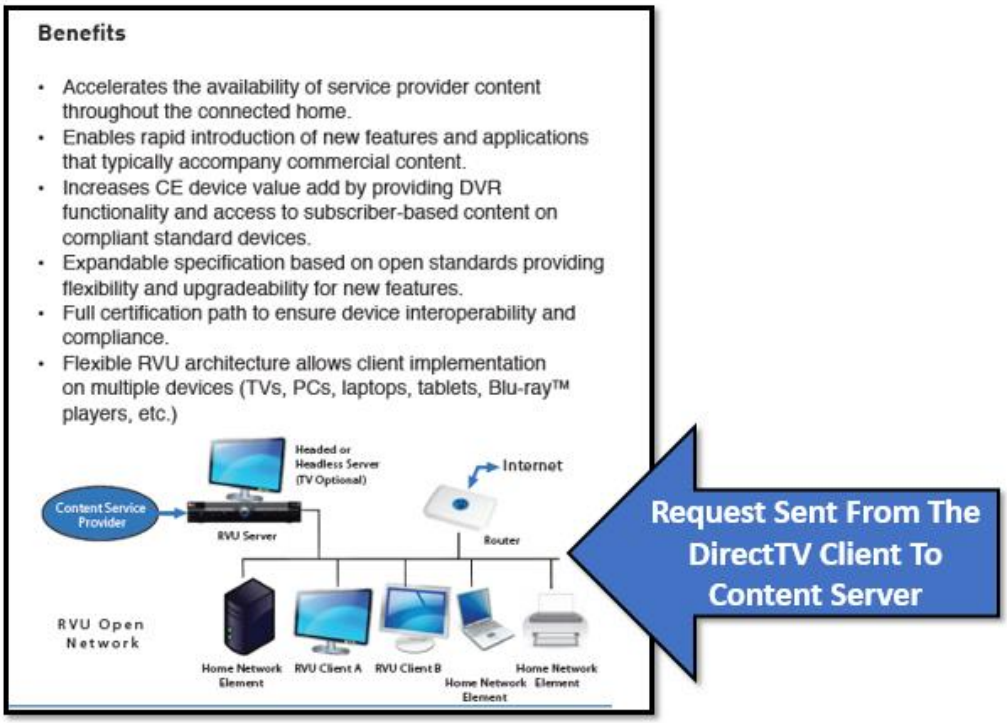
DIRECTV HR44-500 SATELLITE RECEIVER USER MANUAL at 105 (2013).

50. On information and belief, the DirecTV '305 Products perform a method of receiving an access request at a content management server. "RVU is a client/server-based technology that allows the television content viewer to experience a consistent server-generated user interface, providing support for DVR functionality while watching live or recorded programming on various consumer electronics (CE) devices." DIRECTV FIELD SERVICES TRAINING at 19 (November 21, 2011).



DIRECTV HR54-500 DIGITAL SATELLITE RECEIVER TEARDOWN INTERNAL PHOTOS (2015) (identifying the model as HR54-500).

51. On information and belief, the below excerpt from DirecTV's documentation shows that the DirecTV genie product connects to a content server.



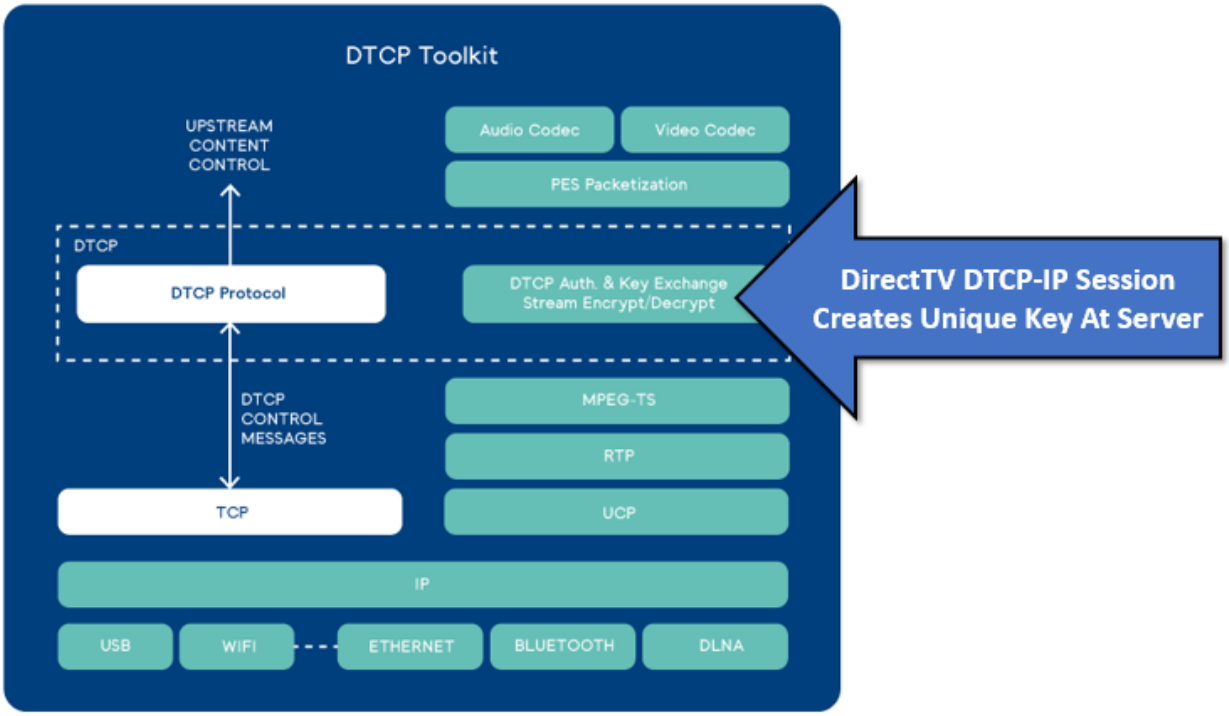
DIRECTV FIELD SERVICES TRAINING AT 6 (November 21, 2011) (annotations added).

52. On information and belief, the DirecTV '305 Products, in response to an access request from a DirecTV client device, generate a session identifier. The session identifier is placed in a DTLA-IP certificate that includes a plurality of data fields including an X.509 certificate.

> In addition to a full featured remote user interface that allows the user of a connect client device to navigate through user screens generated by a compatible RVU server, RVU technology provides Internet Protocol (IP) connectivity, service discovery built from UPnP and DLNA protocols, a remote commanding protocol, and industry standard media formats protected by DTCP-IP content protection.

Report of Working Group 4 to DSTAC, DSTAC WG4 REPORT at 99 (August 4, 2015) (stating that the DirecTV products enable DTCP-IP content protection).

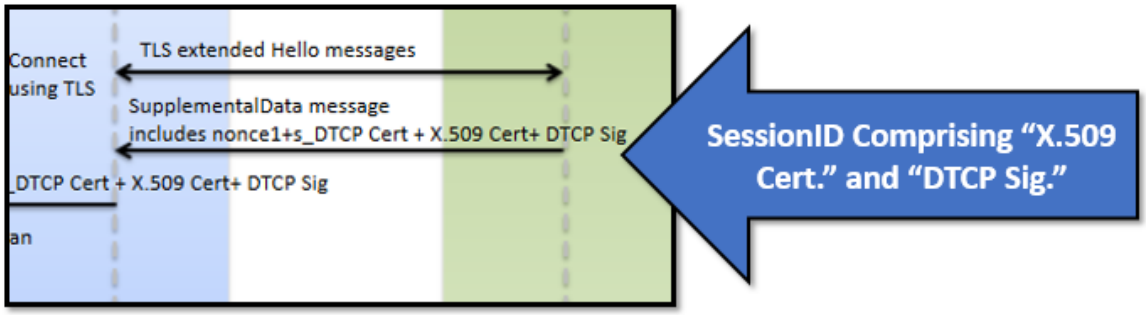
53. On information and belief, the DirecTV '305 Products create a unique session identifier.



DTCP-IP Overview, INSIDESECURE.COM WEBSITE (last visited March 2018), available at: https://www.insidesecure.com/Products/Content-Protection (annotations added).

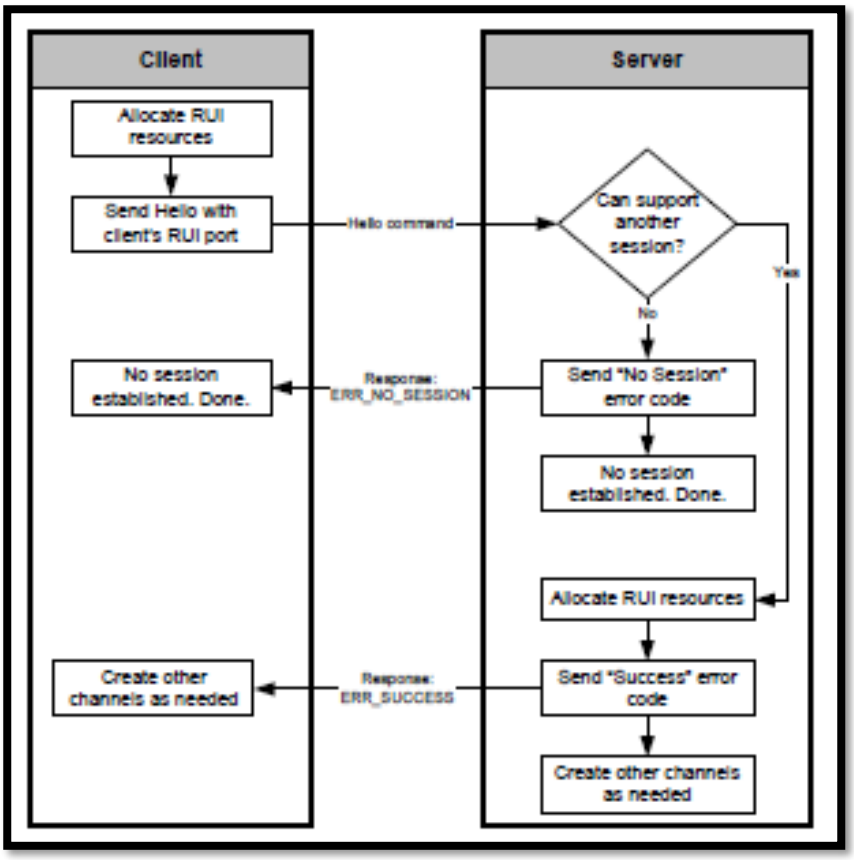
54. On information and belief, the DirecTV '305 Products generate a DTCP session identifier that includes "nonce1+s," "DTCP Cert," "X.509 Cert.," and "DTCP Sig" fields.

55. On information and belief, the DirecTV '305 Products generate a session identifier that includes a plurality of data fields that have information associated with the access request.



4K Network Security Proposal, UXTC TECHNICAL PLANNING GROUP PAPER at 20 (August 10, 2014).

56. On information and belief, the DirecTV '305 Products perform the step of transmitting the session identifier to the requesting client. The session identifier, which is encapsulated in a DTCP-IP request, enables the requesting client to access the content server. The below excerpt from the RVU Specification shows that the DirecTV session identifier is transmitted from the server to the client. The session identifier allows the DirecTV '305 product to generate a "Success Error Code" that will enable a client to access content.



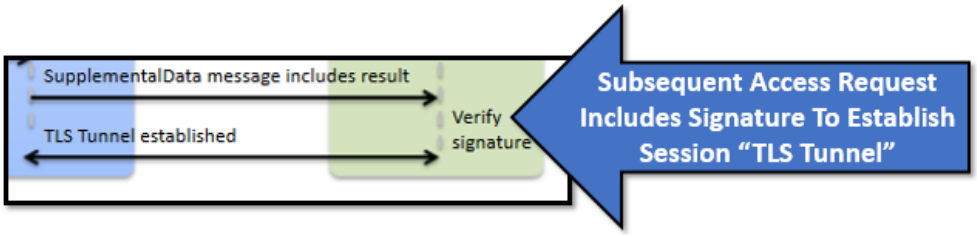
RVU PROTOCOL SPECIFICATION V.1.0 REV. 1.5.1 at 44 (May 28, 2014).

57. On information and belief, the DirecTV '305 Products enable client-server association wherein following discovery via the UPnP protocol, a DirecTV Genie device will be associated with an RVU server to establish subscriptions to state variables and to a session where the client can download content from the content server. This process is referred to as pairing in supporting documentation.

> ***3.2.1 Client-Server Association***
>
> Following discovery via UPnP, an RVU client associates itself with an RVU server to establish subscriptions to state variables and a session. This association is referred to as "pairing". Figure 3-2 shows server selection flow.
>
> [3.2.1-1] M: RVU-C
> An RVU client shall pair with one and only one RVU server at any time.

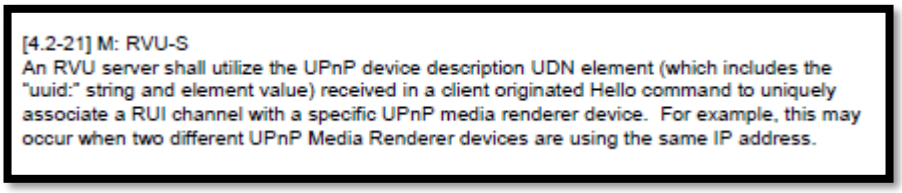
RVU PROTOCOL SPECIFICATION V.1.0 REV. 1.5.1 at 31 (May 28, 2014).

58. On information and belief, the DirecTV '305 Products perform the step of receiving a subsequent access request from the DirecTV Genie device at the DirecTV content server. The access request includes the X.509 and DTCP signature. This access request identifies the request from the client device as being part of a session of requests.



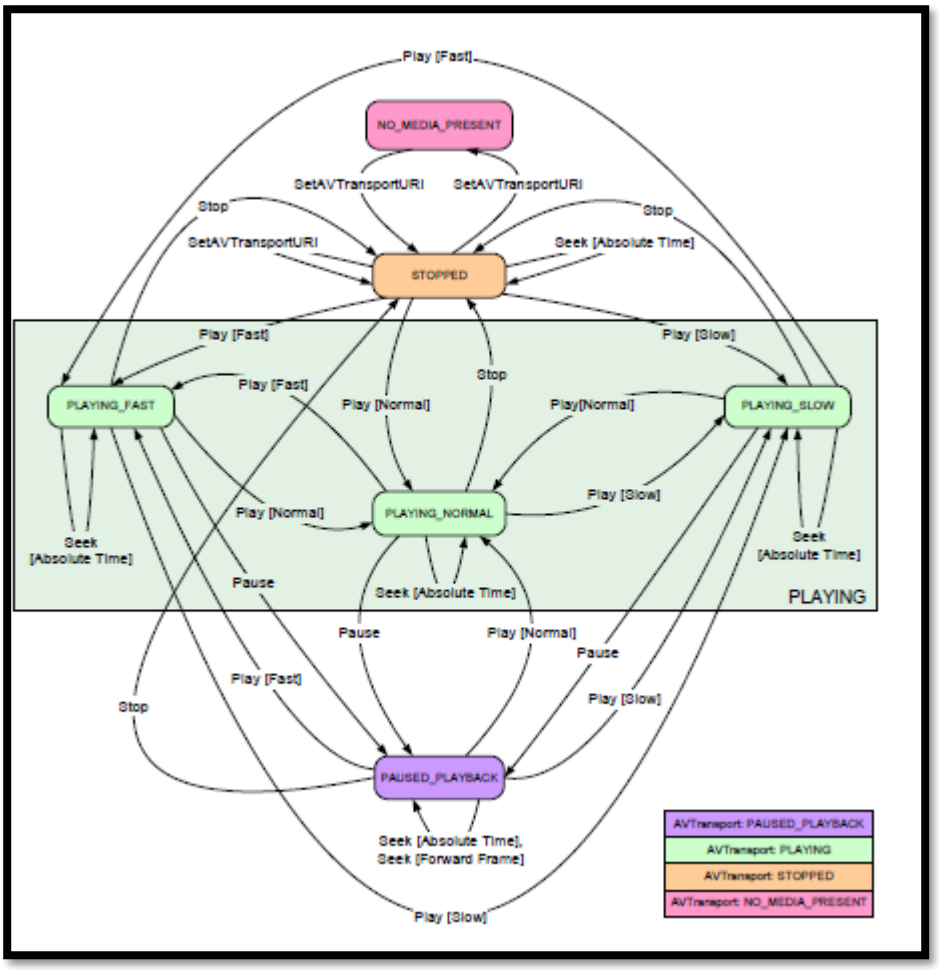
4K Network Security Proposal, UXTC TECHNICAL PLANNING GROUP PAPER at 20 (August 10, 2014).

59. On information and belief, the DirecTV '305 Products include a uuid string and element value.



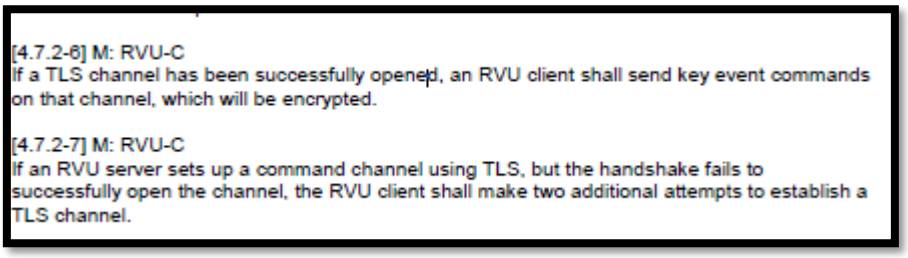
RVU PROTOCOL SPECIFICATION V.1.0 REV. 1.5.1 at 38 (May 28, 2014) (stating that the "RVU server shall utilize UPnP device utilize the UPnP device description UDN element (which includes the 'uuid:' string and element value) received in a client originated Hello command to uniquely associate a RUI channel with a specific UPnP media renderer device.").

60. On information and belief, the DirecTV '305 Products perform the step wherein once the session identifier has been exchanged between the DirecTV client and content server the transport and virtual playing states are supported as shown in the below diagram.



RVU PROTOCOL SPECIFICATION V.1.0 REV. 1.5.1 at 151 (May 28, 2014).

61. On information and belief, the DirecTV '305 Products perform the step wherein subsequent requests for access to the content server made by the DirecTV client device are validated using a second encryption key which acts as a second digital signature including secret key information. For example, encrypted streaming data is sent from the server to the DirecTV client using the DTCP copy link production which ensures that the content "remains secure throughout the RVU system." RVU PROTOCOL SPECIFICATION V.1.0 REV. 1.5.1 at 142 (May 28, 2014).

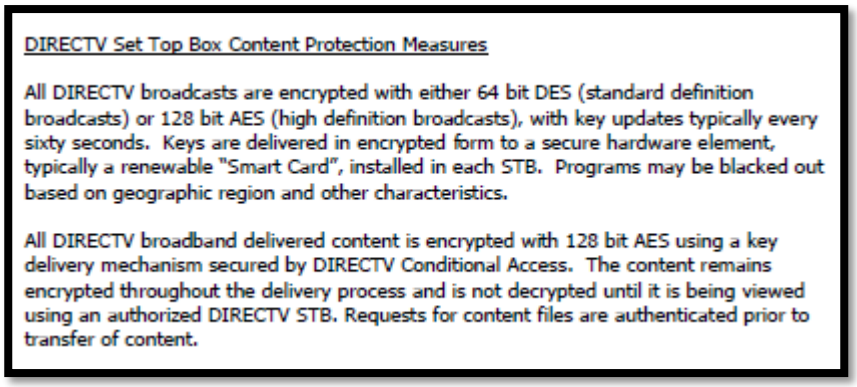


[4.7.2-6] M: RVU-C
If a TLS channel has been successfully opened, an RVU client shall send key event commands on that channel, which will be encrypted.

[4.7.2-7] M: RVU-C
If an RVU server sets up a command channel using TLS, but the handshake fails to successfully open the channel, the RVU client shall make two additional attempts to establish a TLS channel.

RVU PROTOCOL SPECIFICATION V.1.0 REV. 1.5.1 at 51 (May 28, 2014).

62. On information and belief, the DirecTV '305 Products support requests for content files that are authenticated for transfer of content.



DIRECTV Set Top Box Content Protection Measures

All DIRECTV broadcasts are encrypted with either 64 bit DES (standard definition broadcasts) or 128 bit AES (high definition broadcasts), with key updates typically every sixty seconds. Keys are delivered in encrypted form to a secure hardware element, typically a renewable "Smart Card", installed in each STB. Programs may be blacked out based on geographic region and other characteristics.

All DIRECTV broadband delivered content is encrypted with 128 bit AES using a key delivery mechanism secured by DIRECTV Conditional Access. The content remains encrypted throughout the delivery process and is not decrypted until it is being viewed using an authorized DIRECTV STB. Requests for content files are authenticated prior to transfer of content.

DirecTV Set Top Box Content Protection Description, DIRECTV PROPRIETARY PAPER at 2 (May 2014) ("Requests for content files are authenticated prior to transfer of content.").

63. On information and belief, the DirecTV '305 Products enable the use of a session identifier where the session identifier is a common session identifier and the server tracks a client request within a session of requests.

64. On information and belief, the DirecTV '305 Products have been provided, sold, and/or offered for sale to businesses and individuals located in the Eastern District of Texas.

65. On information and belief, the DirecTV '305 Products enable methods for controlling and monitoring access to network servers using a session identifier.

66. On information and belief, the DirecTV '305 Products utilize a session identifier that allows web servers to recognize and service multiple requests from the same client and control access to the server without repeated authentication.

67. On information and belief, the DirecTV '305 Products enable the use of a uniform resource locator that includes a transfer protocol identifier, a host name, one or more directory names, and a file name.

68. On information and belief, the DirecTV '305 Products enable the use of a session identifier where the session identifier is appended to the path name in the uniform resource locator between the transfer protocol identifier and the file name.

69. On information and belief, the DirecTV '305 Products use a text string that identifies a series of requests and responses to perform a complete task or set of tasks between a client and a server system. The DirecTV '305 Products tag, add, affix, or supplement the text string that identifies a session to the sequence of zero or more elements that follows the host address in a URL between the transfer protocol identifier and file name.

70. On information and belief, the DirecTV '305 Products comprise a server system that tracks access history information within a client-server session.

71. On information and belief, the DirecTV '305 Products use a session identifier that enables the client to access files within a protected domain. Specifically, the DirecTV '305 Products use a text string that identifies a session to enable a client computer to access files within a protected domain.

72. On information and belief, the DirecTV '305 Products enable the use of a session identifier to access files with a plurality of servers.

73. On information and belief, DirecTV has directly infringed the '305 patent by, among other things, having made, used, offered for sale, and/or sold technology for processing service requests from a client to a server system over a computer network, including but not limited to the DirecTV '305 Products, which include infringing technologies for processing service requests from a client to a server system over a computer network. Such products and/or services include, by way of example and without limitation, the DirecTV Genie Versions: HR44-500, HR54-500, and HR54R1-500.

74. By having made, used, tested, offered for sale, and/or sold products and services for processing service requests from a client to a server system over a computer network, including but not limited to the DirecTV '305 Products, DirecTV has injured Soverain and is liable to Soverain for directly infringing one or more claims of the '305 patent, including at least claim 1, pursuant to 35 U.S.C. § 271(a).

75. On information and belief, DirecTV also indirectly infringed the '305 patent by actively inducing infringement under 35 USC § 271(b).

76. On information and belief, DirecTV had knowledge of the '305 patent and knew of its infringement since at least the date the '305 patent issued. Entities co-owned by DirecTV's parent company cited the '305 patent family in the following U.S. Patents and published patent applications:

- U.S. Patent No. 7,609,686 entitled, *Mass Multimedia Messaging* (filed November 1, 2004, issued October 27, 2009).
- U.S. Patent No. 7,890,586 entitled, *Mass Multimedia Messaging* (filed November 23, 2004, issued February 15, 2011).

77. Alternatively, on information and belief, DirecTV has had knowledge of the '305 patent since at least service of this Complaint or shortly thereafter, and on information and belief, DirecTV knew of the '305 patent and knew of its infringement, including by way of this lawsuit.

78. On information and belief, DirecTV intended to induce patent infringement by third-party customers and users of the DirecTV '305 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. DirecTV specifically intended and was aware that the normal and customary use of the accused products would infringe the '305 patent. DirecTV performed the acts that constitute induced infringement, and would induce actual infringement, with knowledge of the '305 patent and with the knowledge that the induced acts would constitute infringement. For example, DirecTV provided the DirecTV '305 Products that have the capability of operating in a manner that infringed one or more of the claims of the '305 patent, including at least claim 1 and DirecTV further provided documentation and training materials that cause customers and end users of the DirecTV '305 Products to utilize the products in a manner that directly infringe one or more claims of the '305 patent. By providing instruction and training to customers and end-users on how to use the DirecTV '305 Products in a manner that directly infringed one or more claims of the '305 patent, including at least claim 1, DirecTV specifically intended to induce infringement of the '305 patent. On information and belief, DirecTV engaged in such inducement to promote the sales of the DirecTV '305 Products, *e.g.*, through DirecTV user manuals, product support, marketing materials, and training materials to actively induce the users of the accused products to infringe the '305 patent. Accordingly, DirecTV has induced users of the accused products to use the accused products in their ordinary and customary way to infringe the '305 patent, knowing that such use constituted infringement of the '305 patent.

79. The ‘305 patent is well-known within the industry as demonstrated by the over 1,900 citations to the ‘305 patent family in published patents and patent applications assigned to technology companies and academic institutions. Several of DirecTV’s competitors have paid considerable licensing fees for their use of the technology claimed by the ‘305 patent. To gain an advantage over DirecTV’s competitors by utilizing the same licensed technology without paying reasonable royalties, DirecTV infringed the ‘305 patent in a manner best described as willful, wanton, malicious, in bad faith, deliberate, consciously wrongful, flagrant, or characteristic of a pirate.

80. To the extent applicable, the requirements of 35 U.S.C. § 287(a) have been met with respect to the ‘305 patent.

81. Because of DirecTV’s infringement of the '305 patent, Soverain has suffered monetary damages, and seeks recovery in an amount adequate to compensate for DirecTV’s infringement, but in no event less than a reasonable royalty for the use made of the invention by DirecTV together with interest and costs as fixed by the Court.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff Soverain respectfully requests that this Court enter:

A. A judgment in favor of Plaintiff Soverain that DirecTV has infringed, either literally and/or under the doctrine of equivalents, the ‘305 patent;

B. An award of damages resulting from DirecTV’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 Soverain may show itself to be entitled.

JURY TRIAL DEMANDED

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

Dated: April 2, 2018

Respectfully submitted,

/s/ Dorian S. Berger

Elizabeth L. DeRieux (TX Bar No. 05770585)
CAPSHAW DERIEUX, LLP
114 E. Commerce Ave.
Gladewater, Texas 75647
Telephone: 903-845-5770
E-mail: ederieux@capshawlaw.com

Dorian S. Berger (CA SB No. 264424)
Daniel P. Hipskind (CA SB No. 266763)
Eric B. Hanson (CA SB No. 254570)
BERGER & HIPSKIND LLP
9538 Brighton Way, Ste. 320
Beverly Hills, California 90210
Telephone: 323-886-3430
Facsimile: 323-978-5508
E-mail: dsb@bergerhipskind.com
E-mail: dph@bergerhipskind.com
E-mail: ebh@bergerhipskind.com

Attorneys for Soverain IP, LLC