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

REALTIME DATA LLC d/b/a IXO,

Plaintiff,

Case No. 6:15-cv-466

JURY TRIAL DEMANDED

v.

ECHOSTAR CORPORATION and HUGHES NETWORK SYSTEMS, LLC,

Defendants.

COMPLAINT FOR PATENT INFRINGEMENT

This is an action for patent infringement arising under the Patent Laws of the United States of America, 35 U.S.C. § 1 *et seq.* in which Plaintiff Realtime Data LLC d/b/a IXO ("Plaintiff," "Realtime," or "IXO") makes the following allegations against Defendant EchoStar Corporation ("EchoStar") and Defendant Hughes Network Systems, LLC ("Hughes") (collectively, "Defendants"):

PARTIES

1. Realtime is a New York limited liability company. Realtime has places of business at 1828 E.S.E. Loop 323, Tyler, Texas 75701 and 116 Croton Lake Road, Katonah, New York 10536. Since the 1990s, Realtime has researched and developed specific solutions for data compression, including, for example, those that increase the speeds at which data can be stored and accessed. As recognition of its innovations rooted in this technological field, Realtime holds over 40 United States patents and has numerous pending patent applications. Realtime has licensed patents in this portfolio to many of the world's leading technology companies. The patents-in-suit relate to Realtime's development of advanced systems and methods for fast and efficient data compression using numerous innovative compression techniques based on, for example, particular attributes of the data.

- 2. On information and belief, EchoStar Corporation ("EchoStar") is a Nevada corporation with its principal place of business at 100 Inverness Terrace East, Englewood, CO 80112. On information and belief, EchoStar can be served through its registered agent, Corporation Service Company, 1560 Broadway, Suite 2090, Denver, CO 80202. On information and belief, EchoStar directly or indirectly owns co-defendant Hughes Network Systems, LLC ("Hughes").¹
- 3. On information and belief, Hughes Network Systems, LLC ("Hughes") is a Delaware limited liability company having a principal place of business at 11717 Exploration Lane, Germantown, MD 20876. On information and belief, Hughes can be served through its registered agent, Corporation Service Company d/b/a CSC-Lawyers Incorporating Service, 211 E. 7th Street Suite 620, Austin, TX 78701. On information and belief, Hughes has been a direct or indirect subsidiary of EchoStar since at least 2011.
- 4. On information and belief, EchoStar, as the direct or indirect owner of Hughes, promotes and offers for sales Hughes-branded products, including the HughesON product² and the HS1200 Broadband Optimization Appliance ("HS1200").³ As further explained below, HughesON and HS1200 infringe the asserted patents. Accordingly, each of the Defendants is properly joined in this action pursuant to 35 U.S.C. § 299.

JURISDICTION AND VENUE

- 5. This action arises under the patent laws of the United States, Title 35 of the United States Code. This Court has original subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).
 - 6. This Court has personal jurisdiction over Defendant EchoStar in this

¹ See http://www.wsj.com/articles/SB10001424052748703584804576143833056404482

² See, e.g.

 $[\]underline{http://www.echostar.com/NewsEvents/PressReleases/PressRelease.aspx?prid=1053}$

³ See, e.g.

http://www.echostar.com/NewsEvents/PressReleases/PressRelease.aspx?prid=1097

action because EchoStar 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 EchoStar would not offend traditional notions of fair play and substantial justice. Defendant EchoStar, directly and through subsidiaries (including Hughes) 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 asserted patents.

- 7. This Court has personal jurisdiction over Defendant Hughes in this action because Hughes 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 Hughes would not offend traditional notions of fair play and substantial justice. Defendant Hughes, directly and 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 asserted patents. Hughes is registered to do business in the State of Texas and has appointed Corporation Service Company d/b/a CSC-Lawyers Incorporating Service, 211 E. 7th Street Suite 620, Austin, TX 78701 as its agent for service of process.
- 8. Venue is proper in this district under 28 U.S.C. §§ 1391(b), 1391(c) and 1400(b). Upon information and belief, EchoStar and Hughes have each transacted business in the Eastern District of Texas and have committed acts of direct and indirect infringement in the Eastern District of Texas. In addition, Defendant Hughes is registered to do business in Texas.

COUNT I

INFRINGEMENT OF U.S. PATENT NO. 7,378,992

9. Plaintiff realleges and incorporates by reference paragraphs 1-8 above, as

if fully set forth herein.

- 10. Plaintiff Realtime is the owner by assignment of United States Patent No. 7,378,992 ("the '992 patent") entitled "Content independent data compression method and system." The '992 patent was duly and legally issued by the United States Patent and Trademark Office on May 27, 2008. A true and correct copy of the '992 patent, including its reexamination certificates, is included as Exhibit A.
- 11. On information and belief, EchoStar and Hughes have each used, offered for sale, sold and/or imported into the United States Hughes products that infringe various claims of the '992 patent and continue to do so. By way of illustrative example, these infringing products include, without limitation, Hughes's compression products and services, such as, *e.g.*, the Hughes ActiveCompression product, which is incorporated into other Hughes products such as the HughesON product⁴ and the HS1200 Broadband Optimization Appliance ("HS1200"),⁵ and all versions and variations thereof since the issuance of the '992 patent ("accused products").
- 12. On information and belief, EchoStar and Hughes have directly infringed and continue to infringe the '992 patent, for example, through their own use and testing of the accused products to practice compression methods claimed by the '992 patent, including a computer implemented method comprising: receiving a data block; associating at least one encoder to each one of several data types; analyzing data within the data block to identify a first data type of the data within the data block; compressing if said first data type is the same as one of said several data types, said data block with said at least one encoder associated with said one of said several data types that is the same as said first data type to provide a compressed data block; and compressing, if said first data type is not the same as one of said several data types, said data block with a

⁴ See http://business.hughes.com/promo/hugheson/about

⁵ See http://www.hughes.com/resources/hs1200-broadband-optimization-appliance/download

default encoder to provide said compressed data block, wherein the analyzing of the data within the data block to identify one or more data types excludes analyzing based only on a descriptor that is indicative of the data type of the data within the data block. On information and belief, use of the accused products in their ordinary and customary fashion results in infringement of the methods claimed by the '992 patent.

- 13. On information and belief, EchoStar and Hughes have each had knowledge of the '992 patent since at least the filing of this Complaint or shortly thereafter, and on information and belief, EchoStar and Hughes each knew of the '992 patent and knew of their infringement, including by way of this lawsuit.
- 14. EchoStar's and Hughes' affirmative acts of making, using, selling, offering for sale, and/or importing the accused products have induced and continue to induce users of the accused products to use the accused products in their normal and customary way to infringe the '992 patent by practicing computer implemented methods comprising: receiving a data block; associating at least one encoder to each one of several data types; analyzing data within the data block to identify a first data type of the data within the data block; compressing if said first data type is the same as one of said several data types, said data block with said at least one encoder associated with said one of said several data types that is the same as said first data type to provide a compressed data block; and compressing, if said first data type is not the same as one of said several data types, said data block with a default encoder to provide said compressed data block, wherein the analyzing of the data within the data block to identify one or more data types excludes analyzing based only on a descriptor that is indicative of the data type of the data within the data block. For example, in its datasheet for TurboPage with ActiveCompression Feature for HN and HX Terminals, 6 EchoStar and Hughes explain that Hughes ActiveCompression employs a two-stage compression scheme using Byte

 $^{^{6}~}See~\underline{http://www.hughes.com/resources/turbopage-with-active compression/download}$

Level Caching (BLC) to deduplicate data streams and V.44 compression on a block-by-block basis. EchoStar and Hughes specifically intended and were aware that the normal and customary use of the accused products would infringe the '992 patent. EchoStar and Hughes performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the '992 patent and with the knowledge, or willful blindness to the probability, that the induced acts would constitute infringement. On information and belief, EchoStar and Hughes engaged in such inducement to promote the sales of the accused products, *e.g.*, through EchoStar's and Hughes's user manuals, product support, marketing materials, and training materials to actively induce the users of the accused products to infringe the '992 patent. Accordingly, EchoStar and Hughes have each induced and continue to induce users of the accused products to use the accused products in their ordinary and customary way to infringe the '992 patent, knowing that such use constitutes infringement of the '992 patent.

- 15. By making, using, offering for sale, selling and/or importing into the United States the accused products, and touting the benefits of using the accused products' compression features, EchoStar and Hughes have injured Realtime and are liable to Realtime for infringement of the '992 patent pursuant to 35 U.S.C. § 271.
- 16. As a result of EchoStar's and Hughes' infringement of the '992 patent, Plaintiff Realtime is entitled to monetary damages in an amount adequate to compensate for EchoStar's and Hughes's infringement, but in no event less than a reasonable royalty for the use made of the invention by EchoStar and Hughes, together with interest and costs as fixed by the Court.

COUNT II INFRINGEMENT OF U.S. PATENT NO. 7,415,530

- 17. Plaintiff Realtime realleges and incorporates by reference paragraphs 1-16 above, as if fully set forth herein.
 - 18. Plaintiff Realtime is the owner by assignment of United States Patent No.

7,415,530 ("the '530 Patent") entitled "System and methods for accelerated data storage and retrieval." The '530 Patent was duly and legally issued by the United States Patent and Trademark Office on August 19, 2008. A true and correct copy of the '530 Patent, including its reexamination certificate, is included as Exhibit B.

- 19. On information and belief, EchoStar and Hughes have each used, offered for sale, sold and/or imported into the United States Hughes products that infringe various claims of the '530 patent and continue to do so. By way of illustrative example, these infringing products include, without limitation, Hughes's compression products and services, such as, *e.g.*, the Hughes ActiveCompression product, which is incorporated into other Hughes products such as the HughesON product⁷ and the HS1200 Broadband Optimization Appliance ("HS1200"),⁸ and all versions and variations thereof since the issuance of the '530 patent ("accused products").
- 20. On information and belief, EchoStar and Hughes have directly infringed and continue to infringe the '530 patent, for example, through their own use, testing, sale, offer for sale, and/or importation of the accused products and systems running the accused products, which when used as designed and intended, constitute a system comprising: a memory device; and a data accelerator, wherein said data accelerator is coupled to said memory device, a data stream is received by said data accelerator in received form, said data stream includes a first data block and a second data block, said data stream is compressed by said data accelerator to provide a compressed data stream by compressing said first data block with a first compression technique and said second data block with a second compression technique, said first and second compression techniques are different, said compressed data stream is stored on said memory device, said compression and storage occurs faster than said data stream is able to be stored on

⁷ See http://business.hughes.com/promo/hugheson/about

⁸ See http://www.hughes.com/resources/hs1200-broadband-optimization-appliance/download

said memory device in said received form, a first data descriptor is stored on said memory device indicative of said first compression technique, and said first descriptor is utilized to decompress the portion of said compressed data stream associated with said first data block. Such infringing systems include the accused products running on HS1200, systems using HughesON, and other compatible systems.

- 21. On information and belief, EchoStar and Hughes have had knowledge of the '530 patent since at least the filing of this Complaint or shortly thereafter, and on information and belief, EchoStar and Hughes knew of the '530 patent and knew of their infringement, including by way of this lawsuit.
- 22. EchoStar's and Hughes's affirmative acts of making, using, selling, offering for sale, and/or importing the accused products have induced and continue to induce users of the accused products to use the accused products in their normal and customary way on compatible systems, including on HS1200 and systems using HughesON, to infringe the '530 patent, knowing that when the accused products are used in their ordinary and customary manner with such compatible systems, such systems are converted into infringing systems comprising: a memory device; and a data accelerator, wherein said data accelerator is coupled to said memory device, a data stream is received by said data accelerator in received form, said data stream includes a first data block and a second data block, said data stream is compressed by said data accelerator to provide a compressed data stream by compressing said first data block with a first compression technique and said second data block with a second compression technique, said first and second compression techniques are different, said compressed data stream is stored on said memory device, said compression and storage occurs faster than said data stream is able to be stored on said memory device in said received form, a first data descriptor is stored on said memory device indicative of said first compression technique, and said first descriptor is utilized to decompress the portion of said compressed data stream associated with said first data block, thereby infringing the '530 patent. For example, in

its datasheet for TurboPage with ActiveCompression Feature for HN and HX Terminals,9 EchoStar and Hughes explain that Hughes ActiveCompression employs a two-stage compression scheme using Byte Level Caching (BLC) to deduplicate data streams and V.44 compression on a block-by-block basis. EchoStar and Hughes specifically intended and were aware that the normal and customary use of the accused products on compatible systems, including on HS1200 and systems using HughesON, would infringe the '530 patent. EchoStar and Hughes performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the '530 patent and with the knowledge, or willful blindness to the probability, that the induced acts would constitute infringement. On information and belief, EchoStar and Hughes engaged in such inducement to promote the sales of the accused products, e.g., through EchoStar's and Hughes's user manuals, product support, marketing materials, and training materials to actively induce the users of the accused products to infringe the '530 patent. Accordingly, EchoStar and Hughes have induced and continue to induce users of the accused products to use the accused products in their ordinary and customary way with compatible systems, including HS1200 and systems using HughesON, to make and/or use systems infringing the '530 patent, knowing that such use of the accused products with compatible systems will result in infringement of the '530 patent.

23. EchoStar and Hughes also indirectly infringe the '530 patent by manufacturing, using, selling, offering for sale, and/or importing the accused products, with knowledge that the accused products were and are especially manufactured and/or especially adapted for use in infringing the '530 patent and are not a staple article or commodity of commerce suitable for substantial non-infringing use. On information and belief, the accused products are designed to function with compatible hardware, including HS1200 and systems using HughesON, to create systems comprising: a memory device;

⁹ See http://www.hughes.com/resources/turbopage-with-activecompression/download

and a data accelerator, wherein said data accelerator is coupled to said memory device, a data stream is received by said data accelerator in received form, said data stream includes a first data block and a second data block, said data stream is compressed by said data accelerator to provide a compressed data stream by compressing said first data block with a first compression technique and said second data block with a second compression technique, said first and second compression techniques are different, said compressed data stream is stored on said memory device, said compression and storage occurs faster than said data stream is able to be stored on said memory device in said received form, a first data descriptor is stored on said memory device indicative of said first compression technique, and said first descriptor is utilized to decompress the portion of said compressed data stream associated with said first data block, thereby infringing the '530 patent. Because all software must run on corresponding compatible hardware that necessarily includes a memory device, and the functions of the claimed data accelerator are performed by the accused products when executed on such hardware, the most compelling inference is that the accused products have no substantial non-infringing uses, and that any other uses would be unusual, far-fetched, illusory, impractical, occasional, aberrant, or experimental. EchoStar and Hughes's manufacture, use, sale, offering for sale, and/or importation of the accused products, including as incorporated into HS1200 and HughesON, constitutes contributory infringement of the '530 patent.

- 24. By making, using, offering for sale, selling and/or importing into the United States the accused products and systems running the accused products, including the accused products running on HS1200 and systems running HughesON, and touting the benefits of using the accused products' compression features, EchoStar and Hughes have injured Realtime and are liable to Realtime for infringement of the '530 patent pursuant to 35 U.S.C. § 271.
- 25. As a result of EchoStar's and Hughes's infringement of the '530 patent, Plaintiff Realtime is entitled to monetary damages in an amount adequate to compensate

for EchoStar's and Hughes's infringement, but in no event less than a reasonable royalty for the use made of the invention by EchoStar and Hughes, together with interest and costs as fixed by the Court.

COUNT III

INFRINGEMENT OF U.S. PATENT NO. 8,643,513

- 26. Plaintiff realleges and incorporates by reference paragraphs 1-25 above, as if fully set forth herein.
- 27. Plaintiff Realtime is the owner by assignment of United States Patent No. 8,643,513 ("the '513 patent") entitled "Data compression systems and methods." The '513 patent was duly and legally issued by the United States Patent and Trademark Office on February 4, 2014. A true and correct copy of the '513 patent is included as Exhibit C.
- 28. On information and belief, EchoStar and Hughes have each used, offered for sale, sold and/or imported into the United States Hughes products that infringe various claims of the '513 patent and continue to do so. By way of illustrative example, these infringing products include, without limitation, Hughes's compression products and services, such as, *e.g.*, the Hughes ActiveCompression product, which is incorporated into other Hughes products such as the HughesON product¹⁰ and the HS1200 Broadband Optimization Appliance ("HS1200"),¹¹ and all versions and variations thereof since the issuance of the '513 patent ("accused products").
- 29. On information and belief, EchoStar and Hughes have directly infringed and continue to infringe the '513 patent, for example, through their own use and testing of the accused products, including on HS1200 and systems using HughesON, to practice compression methods claimed by the '513 patent, including a method of compressing a plurality of data blocks, comprising: analyzing the plurality of data blocks to recognize when an appropriate content independent compression algorithm is to be applied to the

¹⁰ See http://business.hughes.com/promo/hugheson/about

¹¹ See http://www.hughes.com/resources/hs1200-broadband-optimization-appliance/download

plurality of data blocks; applying the appropriate content independent data compression algorithm to a portion of the plurality of data blocks to provide a compressed data portion; analyzing a data block from another portion of the plurality of data blocks for recognition of any characteristic, attribute, or parameter that is indicative of an appropriate content dependent algorithm to apply to the data block; and applying the appropriate content dependent data compression algorithm to the data block to provide a compressed data block when the characteristic, attribute, or parameter is identified, wherein the analyzing the plurality of data blocks to recognize when the appropriate content independent compression algorithm is to be applied excludes analyzing based only on a descriptor indicative of the any characteristic, attribute, or parameter, and wherein the analyzing the data block to recognize the any characteristic, attribute, or parameter excludes analyzing based only on the descriptor. On information and belief, use of the accused products in their ordinary and customary fashion results in infringement of the methods claimed by the '513 patent.

- 30. On information and belief, EchoStar and Hughes have had knowledge of the '513 patent since at least the filing of this Complaint or shortly thereafter, and on information and belief, EchoStar and Hughes knew of the '513 patent and knew of their infringement, including by way of this lawsuit.
- 31. EchoStar's and Hughes's affirmative acts of making, using, selling, offering for sale, and/or importing the accused products, including the accused products running on HS1200 and systems running HughesON, have induced and continue to induce users of the accused products to use the accused products in their normal and customary way to infringe the '513 patent by practicing compression methods claimed by the '513 patent, including a method of compressing a plurality of data blocks, comprising: analyzing the plurality of data blocks to recognize when an appropriate content independent compression algorithm is to be applied to the plurality of data blocks; applying the appropriate content independent data compression algorithm to a

portion of the plurality of data blocks to provide a compressed data portion; analyzing a data block from another portion of the plurality of data blocks for recognition of any characteristic, attribute, or parameter that is indicative of an appropriate content dependent algorithm to apply to the data block; and applying the appropriate content dependent data compression algorithm to the data block to provide a compressed data block when the characteristic, attribute, or parameter is identified, wherein the analyzing the plurality of data blocks to recognize when the appropriate content independent compression algorithm is to be applied excludes analyzing based only on a descriptor indicative of the any characteristic, attribute, or parameter, and wherein the analyzing the data block to recognize the any characteristic, attribute, or parameter excludes analyzing based only on the descriptor. For example, in its datasheet for TurboPage with ActiveCompression Feature for HN and HX Terminals, 12 EchoStar and Hughes explain that Hughes ActiveCompression employs a two-stage compression scheme using Byte Level Caching (BLC) to deduplicate data streams and V.44 compression on a block-byblock basis. EchoStar and Hughes specifically intended and were aware that the normal and customary use of the accused products would infringe the '513 patent. EchoStar and Hughes performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the '513 patent and with the knowledge, or willful blindness to the probability, that the induced acts would constitute infringement. On information and belief, EchoStar and Hughes engaged in such inducement to promote the sales of the accused products, e.g., through EchoStar's and Hughes's user manuals, product support, marketing materials, and training materials to actively induce the users of the accused products to infringe the '513 patent. Accordingly, EchoStar and Hughes have induced and continue to induce end users of the accused products to use the accused products in their ordinary and customary way to infringe the '513 patent, knowing that

 $^{^{12}~}See~\underline{http://www.hughes.com/resources/turbopage-with-active compression/download}$

such use constitutes infringement of the '513 patent.

- 32. By making, using, offering for sale, selling and/or importing into the United States the accused products, including as part of HS1200 and HughesON products, and touting the benefits of using the accused products' compression features, EchoStar and Hughes have injured Realtime and are liable to Realtime for infringement of the '513 patent pursuant to 35 U.S.C. § 271.
- 33. As a result of EchoStar and Hughes's infringement of the '513 patent, Plaintiff Realtime is entitled to monetary damages in an amount adequate to compensate for EchoStar and Hughes's infringement, but in no event less than a reasonable royalty for the use made of the invention by EchoStar and Hughes, together with interest and costs as fixed by the Court.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff Realtime respectfully requests that this Court enter:

- a. A judgment in favor of Plaintiff that EchoStar and Hughes have infringed, either literally and/or under the doctrine of equivalents, the '992 patent, the '530 patent, and the '513 patent;
- b. A permanent injunction prohibiting EchoStar and Hughes from further acts of infringement of the '992 patent, the '530 patent, and the '513 patent;
- c. A judgment and order requiring EchoStar and Hughes to pay Plaintiff its damages, costs, expenses, and prejudgment and post-judgment interest for Defendant's infringement of the '992 patent, the '530 patent, and the '513 patent as provided under 35 U.S.C. § 284; and
- d. A judgment and order requiring EchoStar and Hughes to provide an accounting and to pay supplemental damages to Realtime, including without limitation, prejudgment and post-judgment interest;
- e. 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 Defendants; and

f. Any and all other relief as the Court may deem appropriate and just under the circumstances.

DEMAND FOR JURY TRIAL

Plaintiff, under Rule 38 of the Federal Rules of Civil Procedure, requests a trial by jury of any issues so triable by right.

Dated: May 8, 2015 Respectfully submitted,

/s/ Marc A. Fenster by permission Claire Abernathy Henry Marc A. Fenster (CA SBN 181067) LEAD ATTORNEY Reza Mirzaie (CA SBN 246953) Brian D. Ledahl (CA SBN 186579) Jeffrey Z.Y. Liao (CA SBN 288994) C. Jay Chung (CA SBN 252794) **RUSS AUGUST & KABAT** 12424 Wilshire Boulevard, 12th Floor Los Angeles, CA 90025 (310) 826-7474 mfenster@raklaw.com rmirzaie@raklaw.com bledahl@raklaw.com iliao@raklaw.com jchung@raklaw.com

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