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UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
SOUTHERN DIVISION

REALTIME DATA LLC d/b/a IXO,
Plaintiff,

v.

TERADATA OPERATIONS, INC.
Defendant.

Case No. 2:16-cv-02743-AG-FFM

**AMENDED COMPLAINT FOR PATENT INFRINGEMENT AGAINST
TERADATA OPERATIONS, INC.**

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 Teradata Operations, Inc. (“Teradata”):

PARTIES

1. Realtime is a limited liability company organized under the laws of the State of New York. Realtime has places of business at 5851 Legacy Circle,

Plano, Texas 75024, 1828 E.S.E. Loop 323, Tyler, Texas 75701, and 116 Croton Lake Road, Katonah, New York, 10536. Realtime has been registered to do business in Texas since May 2011. 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 47 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, Defendant Teradata Operations, Inc. ("Teradata") is a Delaware corporation with its principal office at 10000 Innovation Drive, Dayton, Ohio 45342. On information and belief, Teradata maintains offices within this District at 601 N Nash St, El Segundo, CA 90245.¹ On information and belief, Teradata also maintains additional offices in Southern California at 17095 Via Del Campo, San Diego, CA 92127.² On information and belief, Teradata Operations, Inc. can be served through its registered agent, C T Corporation System, 818 West Seventh St Suite 930, Los Angeles, CA 90017.

JURISDICTION AND VENUE

3. 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).

4. This Court has personal jurisdiction over Defendant Teradata in this

¹ <http://articles.latimes.com/2012/dec/10/business/la-fi-1210-property-report-20121210>

² <http://www.teradata.com/contact-us/americas/>

action because Teradata has committed acts within the Central District of California giving rise to this action and has established minimum contacts with this forum such that the exercise of jurisdiction over Teradata would not offend traditional notions of fair play and substantial justice. Defendant Teradata, 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. Teradata is registered to do business in the State of California, maintains offices in this District and within Southern California, and has appointed C T Corporation System, 818 West Seventh St Suite 930, Los Angeles, CA 90017 as its agent for service of process.

5. Venue is proper in this district under 28 U.S.C. §§ 1391(b), 1391(c) and 1400(b). Teradata is registered to do business in California, and upon information and belief, has transacted business in the Central District of California and has committed acts of direct and indirect infringement in the Central District of California. Teradata also maintains offices in the Central District of California and elsewhere in Southern California. Teradata has previously moved to transfer to this District a patent infringement case involving the same parties, arguing that all or nearly all of its relevant domestic documents and witnesses are in this District. That case is currently pending in the Northern District of California. Though Realtime only has employees in New York and Texas, it has filed this Complaint in this District (despite the distance to its employees) in light of Teradata's transfer motion and prior court orders on Teradata's transfer motion. At least since April 6, 2016, the parties have been discussing a possible consolidation of the two cases.

COUNT I

INFRINGEMENT OF U.S. PATENT NO. 7,161,506

6. Plaintiff realleges and incorporates by reference paragraphs 1-5

above, as if fully set forth herein.

7. Plaintiff Realtime is the owner by assignment of United States Patent No. 7,161,506 (“the ‘506 patent”) entitled “Systems and methods for data compression such as content dependent data compression.” The ‘506 patent was duly and legally issued by the United States Patent and Trademark Office on January 9, 2007. A true and correct copy of the ‘506 patent, including its reexamination certificates, is included as Exhibit A.

Teradata Database

8. On information and belief, Teradata has made, used, offered for sale, sold and/or imported into the United States Teradata products that infringe the ‘506 patent, and continues to do so. By way of illustrative example, these infringing products include, without limitation, Teradata’s compression products and services, such as, *e.g.*, the Teradata Database product and all versions and variations thereof since the issuance of the ‘506 patent (“Accused Instrumentality”).

9. On information and belief, Teradata has directly infringed and continues to infringe the ‘506 patent, for example, through its own use and testing of the Accused Instrumentality to practice compression methods claimed by Claim 104 of the ‘506 patent, namely, a computer implemented method for compressing data, comprising: analyzing data within a data block of an input data stream to identify one or more data types of the data block, the input data stream comprising a plurality of disparate data types; performing content dependent data compression with a content dependent data compression encoder if a data type of the data block is identified; and performing data compression with a single data compression encoder, if a data type of the data block is not identified, 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. Upon information and belief, Teradata uses the Accused Instrumentality to practice infringing methods for its own internal non-testing business purposes, while testing the Accused Instrumentality, and while providing technical support for the Accused Instrumentality to Teradata's customers.

10. The Accused Instrumentality is a computer-implemented method for data compression. This system minimizes the amount of data transmitted over a network and stored on a backup device. The Accused Instrumentality employs several data compression techniques to achieve this goal.

11. The Accused Instrumentality analyzes data within a data block of an input data stream to identify one or more data types of the data block, the input data stream comprising a plurality of disparate data types. *See, e.g.,* http://www.info.teradata.com/HTMLPubs/DB_TTU_15_00/index.html#page/Data_base_Management/B035_1094_015K/ch09.061.034.html:

12. The Accused Instrumentality performs content dependent data compression with a content dependent data compression encoder if a data type of the data block is identified. *See, e.g.,* http://www.info.teradata.com/HTMLPubs/DB_TTU_15_00/index.html#page/Data_base_Management/B035_1094_015K/ch09.061.034.html:
<http://www.teradatamagazine.com/v12n02/Tech2Tech/Compressed-for-Efficiency/>:

13. The Accused Instrumentality performs data compression with a single data compression encoder, if a data type of the data block is not identified. *See, e.g.,* <http://www.teradatamagazine.com/New-Options-for-Compression/> (“BLOCK-LEVEL COMPRESSION: This compression mechanism operates on all types of data. It compresses all of the data in a data block before it's stored on a disk. It can be applied to all tables in the system or on a table-by-table basis, but it

cannot be applied to only select columns in a table (such as ALC and MVC).”).

14. In the Accused Instrumentality 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. *See, e.g.,* http://www.info.teradata.com/HTMLPubs/DB_TTU_15_00/index.html#page/Database_Management/B035_1094_015K/ch09.061.034.html (“In most cases, the data type of a column is not a factor, and Teradata Database compresses values based only on their byte representation.”).

15. On information and belief, Teradata also directly infringes and continues to infringe other claims of the ‘506 patent, for similar reasons as explained above with respect to Claim 104 of the ‘506 patent.

16. On information and belief, all of the Accused Instrumentalities perform the claimed methods in substantially the same way.

17. On information and belief, use of the Accused Instrumentality in its ordinary and customary fashion results in infringement of the methods claimed by the ‘506 patent.

18. On information and belief, Teradata has had knowledge of the ‘506 patent at least since the filing of this Complaint or shortly thereafter, and on information and belief, Teradata knew of the ‘506 patent and knew of its infringement, including by way of this lawsuit.

19. Upon information and belief, Teradata’s affirmative acts of making, using, and selling the Accused Instrumentalities, and providing implementation services and technical support to users of the Accused Instrumentalities, have induced and continue to induce users of the Accused Instrumentalities to use them in their normal and customary way to infringe Claim 104 of the ‘506 patent by practicing a computer implemented method comprising: receiving a data block in an uncompressed form, said data block being included in a data stream; analyzing

data within the data block to determine a type of said data block; and compressing said data block to provide a compressed data block, wherein if one or more encoders are associated to said type, compressing said data block with at least one of said one or more encoders, otherwise compressing said data block with a default data compression encoder, and 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, Teradata instructs users of Teradata Database that, “Autocompression is the default option for column partitions ... Each container is assessed separately to see whether and how it can be reduced. Several techniques are considered ... These techniques are determined by the Teradata Database, based on the data characteristics within a container.”³ Teradata clarifies to users of Teradata Database that, “In most cases, the data type of a column is not a factor, and Teradata Database compresses values based only on their byte representation.”⁴ Teradata also instructs users of Teradata Database that block-level compression (BLC) “operates on all types of data. It compresses all of the data in a data block before it’s stored on a disk. ... Block-level compression (BLC) can generally achieve the highest compression rates—up to five times, which is a reduction of the data to as little as 20% of its original size. It can also have a significant overall savings in kilobytes transferred per I/O.”⁵ For similar reasons, Teradata also induces its customers to use the Accused Instrumentalities to infringe other claims of the ‘506 patent. Teradata specifically intended and was aware that these normal and customary activities would infringe the ‘506 patent. Teradata performed the

³ <http://www.teradatamagazine.com/v12n02/Tech2Tech/Compressed-for-Efficiency/>

⁴ http://www.info.teradata.com/HTMLPubs/DB_TTU_15_00/index.html#page/Database_Management/B035_1094_015K/ch09.061.034.html

⁵ <http://www.teradatamagazine.com/New-Options-for-Compression/>

acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the ‘506 patent and with the knowledge, or willful blindness to the probability, that the induced acts would constitute infringement. On information and belief, Teradata engaged in such inducement to promote the sales of the Accused Instrumentalities. Accordingly, Teradata has induced and continue to induce users of the Accused Instrumentalities to use the Accused Instrumentalities in their ordinary and customary way to infringe the ‘506 patent, knowing that such use constitutes infringement of the ‘506 patent.

20. By making, using, offering for sale, selling and/or importing into the United States the Accused Instrumentalities, and touting the benefits of using the Accused Instrumentalities’ compression features, Teradata has injured Realtime and is liable to Realtime for infringement of the ‘506 patent pursuant to 35 U.S.C. § 271.

21. As a result Teradata’s infringement of the ‘506 patent, Plaintiff Realtime is entitled to monetary damages in an amount adequate to compensate for Teradata’s infringement, but in no event less than a reasonable royalty for the use made of the invention by Teradata, together with interest and costs as fixed by the Court.

RainStor Database

22. On information and belief, Teradata has made, used, offered for sale, sold and/or imported into the United States Teradata products that infringe the ‘506 patent, and continues to do so. By way of illustrative example, these infringing products include, without limitation, Teradata’s compression products and services, such as, *e.g.*, the RainStor Database product and all versions and variations thereof since the issuance of the ‘506 patent (“Accused Instrumentality”).

23. On information and belief, Teradata has directly infringed and

continues to infringe the '506 patent, for example, through its own use and testing of the Accused Instrumentality to practice compression methods claimed by Claim 104 of the '506 patent, namely, a computer implemented method for compressing data, comprising: analyzing data within a data block of an input data stream to identify one or more data types of the data block, the input data stream comprising a plurality of disparate data types; performing content dependent data compression with a content dependent data compression encoder if a data type of the data block is identified; and performing data compression with a single data compression encoder, if a data type of the data block is not identified, 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. Upon information and belief, Teradata uses the Accused Instrumentality to practice infringing methods for its own internal non-testing business purposes, while testing the Accused Instrumentality, and while providing technical support for the Accused Instrumentality to Teradata's customers.

24. The Accused Instrumentality is a computer-implemented method for data compression. This system minimizes the amount of data transmitted over a network and stored on a backup device. The Accused Instrumentality employs several data compression techniques to achieve this goal.

25. The Accused Instrumentality analyzes data within a data block of an input data stream to identify one or more data types of the data block, the input data stream comprising a plurality of disparate data types. *See, e.g.,* <http://rainstor.com/products/rainstor-database/compress/> ("Field-level de-duplication: This involves processing the source data on a column-by-column basis, reducing the dataset to only the list of the unique values that each column holds, together with a frequency count of the number of times the value appears. In this instance the storage space required using field-level de-duplication is a fraction

of the original data.”).

26. The Accused Instrumentality performs content dependent data compression with a content dependent data compression encoder if a data type of the data block is identified. *See, e.g.,* <http://rainstor.com/products/rainstor-database/compress/> (“Field-level de-duplication: This involves processing the source data on a column-by-column basis, reducing the dataset to only the list of the unique values that each column holds, together with a frequency count of the number of times the value appears. In this instance the storage space required using field-level de-duplication is a fraction of the original data.”).

27. The Accused Instrumentality performs data compression with a single data compression encoder, if a data type of the data block is not identified. *See, e.g.,* <http://rainstor.com/products/rainstor-database/compress/> (“Byte-level compression: In this scenario, components of the tree are aggressively compressed independently using industry standard byte-compression algorithms tuned to offer optimal savings.”).

28. In the Accused Instrumentality 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. *See, e.g.,* <http://rainstor.com/products/rainstor-database/compress/> (“Field-level de-duplication: This involves processing the source data on a column-by-column basis, reducing the dataset to only the list of the unique values that each column holds, together with a frequency count of the number of times the value appears. In this instance the storage space required using field-level de-duplication is a fraction of the original data.”).

29. On information and belief, Teradata also directly infringes and continues to infringe other claims of the ‘506 patent, for similar reasons as explained above with respect to Claim 104 of the ‘506 patent.

30. On information and belief, all of the Accused Instrumentalities perform the claimed methods in substantially the same way.

31. On information and belief, use of the Accused Instrumentality in its ordinary and customary fashion results in infringement of the methods claimed by the '506 patent.

32. On information and belief, Teradata has had knowledge of the '506 patent at least since the filing of this Complaint or shortly thereafter, and on information and belief, Teradata knew of the '506 patent and knew of its infringement, including by way of this lawsuit.

33. Upon information and belief, Teradata's affirmative acts of making, using, and selling the Accused Instrumentalities, and providing implementation services and technical support to users of the Accused Instrumentalities, have induced and continue to induce users of the Accused Instrumentalities to use them in their normal and customary way to infringe Claim 104 of the '506 patent by practicing a computer implemented method comprising: receiving a data block in an uncompressed form, said data block being included in a data stream; analyzing data within the data block to determine a type of said data block; and compressing said data block to provide a compressed data block, wherein if one or more encoders are associated to said type, compressing said data block with at least one of said one or more encoders, otherwise compressing said data block with a default data compression encoder, and 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, Teradata instructs users of RainStor Database that, "Industry Leading Compression Translates to Huge Cost Savings: No feature in a database offers as many direct benefits as Data Compression. It can offer significant storage savings, increase data center density, allow more data to be kept, and increase query

performance in cases where I/O is the bottleneck. All these advantages show up in the Total Cost of Ownership (TCO) calculation. Central to RainStor's unique product capabilities is the ability to compress and de-duplicate large data sets that typically achieve ratios of 40:1, rising to 100:1 in some cases. This comes through four distinct but complementary techniques. ... Field-level de-duplication: ... Pattern-level de-duplication: ... Algorithmic compression: ... Byte-level compression.”⁶ For similar reasons, Teradata also induces its customers to use the Accused Instrumentalities to infringe other claims of the ‘506 patent. Teradata specifically intended and was aware that these normal and customary activities would infringe the ‘506 patent. Teradata performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the ‘506 patent and with the knowledge, or willful blindness to the probability, that the induced acts would constitute infringement. On information and belief, Teradata engaged in such inducement to promote the sales of the Accused Instrumentalities. Accordingly, Teradata has induced and continue to induce users of the Accused Instrumentalities to use the Accused Instrumentalities in their ordinary and customary way to infringe the ‘506 patent, knowing that such use constitutes infringement of the ‘506 patent.

34. By making, using, offering for sale, selling and/or importing into the United States the Accused Instrumentalities, and touting the benefits of using the Accused Instrumentalities' compression features, Teradata has injured Realtime and is liable to Realtime for infringement of the ‘506 patent pursuant to 35 U.S.C. § 271.

35. As a result Teradata's infringement of the ‘506 patent, Plaintiff Realtime is entitled to monetary damages in an amount adequate to compensate for

⁶ <http://rainstor.com/products/rainstor-database/compress/>

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

COUNT II

INFRINGEMENT OF U.S. PATENT NO. 9,054,728

36. Plaintiff Realtime realleges and incorporates by reference paragraphs 1-35 above, as if fully set forth herein.

37. Plaintiff Realtime is the owner by assignment of United States Patent No. 9,054,728 ("the '728 Patent") entitled "Data compression systems and methods." The '728 Patent was duly and legally issued by the United States Patent and Trademark Office on June 9, 2015. A true and correct copy of the '728 Patent is included as Exhibit B.

Teradata Database

38. On information and belief, Teradata has made, used, offered for sale, sold and/or imported into the United States Teradata products that infringe the '728 patent, and continues to do so. By way of illustrative example, these infringing products include, without limitation, Teradata's compression products and services, such as, *e.g.*, Teradata Database, and all versions and variations thereof since the issuance of the '728 patent ("Accused Instrumentality").

39. On information and belief, Teradata has directly infringed and continues to infringe the '728 patent, for example, through its own use and testing of the Accused Instrumentality, which constitute systems for compressing data claimed by Claim 1 of the '728 patent, comprising a processor; one or more content dependent data compression encoders; and a single data compression encoder; wherein the processor is configured: to analyze data within a data block to identify one or more parameters or attributes of the data wherein the analyzing of the data within the data block to identify the one or more parameters or attributes

of the data excludes analyzing based solely on a descriptor that is indicative of the one or more parameters or attributes of the data within the data block; to perform content dependent data compression with the one or more content dependent data compression encoders if the one or more parameters or attributes of the data are identified; and to perform data compression with the single data compression encoder, if the one or more parameters or attributes of the data are not identified. Upon information and belief, Teradata uses the Accused Instrumentality, an infringing system, for its own internal non-testing business purposes, while testing the Accused Instrumentality, and while providing technical support for the Accused Instrumentality to Teradata's customers.

40. The Accused Instrumentality is a system for compressing data, comprising a processor and one or more content dependent data compression encoders. *See, e.g.,* <http://www.teradatamagazine.com/v12n02/Tech2Tech/Compressed-for-Efficiency/>:

41. The Accused Instrumentality uses a single data compression encoder. *See, e.g.,* <http://www.teradatamagazine.com/New-Options-for-Compression/> (“BLOCK-LEVEL COMPRESSION: This compression mechanism operates on all types of data. It compresses all of the data in a data block before it's stored on a disk. It can be applied to all tables in the system or on a table-by-table basis, but it cannot be applied to only select columns in a table (such as ALC and MVC).”).

42. The Accused Instrumentality analyzes data within a data block to identify one or more parameter of the data, where the analysis does not rely only on the descriptor. *See, e.g.,* <http://www.teradatamagazine.com/v12n02/Tech2Tech/Compressed-for-Efficiency/>

Efficiency/:

http://www.info.teradata.com/HTMLPubs/DB_TTU_15_00/index.html#page/Data_base_Management/B035_1094_015K/ch09.061.034.html (“In most cases, the data type of a column is not a factor, and Teradata Database compresses values based only on their byte representation.”).

43. The Accused Instrumentality performs content dependent data compression with the one or more content dependent data compression encoders if the one or more parameters or attributes of the data are identified. *See, e.g.,* <http://www.teradatamagazine.com/v12n02/Tech2Tech/Compressed-for-Efficiency/>:

44. The Accused Instrumentality performs data compression with the single data compression encoder, if the one or more parameters or attributes of the data are not identified. *See, e.g.,* <http://www.teradatamagazine.com/New-Options-for-Compression/> (“BLOCK-LEVEL COMPRESSION: This compression mechanism operates on all types of data. It compresses all of the data in a data block before it’s stored on a disk. It can be applied to all tables in the system or on a table-by-table basis, but it cannot be applied to only select columns in a table (such as ALC and MVC).”).

45. On information and belief, Teradata also directly infringes and continues to infringe other claims of the ‘728 patent, for similar reasons as explained above with respect to Claim 1 of the ‘728 patent.

46. On information and belief, all of the Accused Instrumentalities operate in substantially the same way.

47. On information and belief, use of the Accused Instrumentality in its ordinary and customary fashion results in infringement of the systems claimed by the ‘728 patent.

48. On information and belief, Teradata has had knowledge of the ‘728 patent since at least the filing of the original Complaint or shortly thereafter, and on information and belief, Teradata knew of the ‘728 patent and knew of its infringement, including by way of this lawsuit.

49. Upon information and belief, Teradata’s affirmative acts of making, using, and selling the Accused Instrumentalities, and providing implementation services and technical support to users of the Accused Instrumentalities, have induced and continue to induce users of the Accused Instrumentalities to use them in their normal and customary way to infringe the ‘728 patent by making or using a system for compressing data comprising a processor; one or more content dependent data compression encoders; and a single data compression encoder; wherein the processor is configured: to analyze data within a data block to identify one or more parameters or attributes of the data wherein the analyzing of the data within the data block to identify the one or more parameters or attributes of the data excludes analyzing based solely on a descriptor that is indicative of the one or more parameters or attributes of the data within the data block; to perform content dependent data compression with the one or more content dependent data compression encoders if the one or more parameters or attributes of the data are identified; and to perform data compression with the single data compression encoder, if the one or more parameters or attributes of the data are not identified. For example, Teradata instructs users of Teradata Database that, “Autocompression is the default option for column partitions ... Each container is assessed separately to see whether and how it can be reduced. Several techniques are considered ... These techniques are determined by the Teradata Database, based on the data characteristics within a container.”⁷ Teradata clarifies to users of

⁷ <http://www.teradatamagazine.com/v12n02/Tech2Tech/Compressed-for-Efficiency/>

Teradata Database that, “In most cases, the data type of a column is not a factor, and Teradata Database compresses values based only on their byte representation.”⁸ Teradata also instructs users of Teradata Database that block-level compression (BLC) “operates on all types of data. It compresses all of the data in a data block before it’s stored on a disk. ... Block-level compression (BLC) can generally achieve the highest compression rates—up to five times, which is a reduction of the data to as little as 20% of its original size. It can also have a significant overall savings in kilobytes transferred per I/O.”⁹ Teradata specifically intended and was aware that these normal and customary activities would infringe the ‘728 patent. Teradata performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the ‘728 patent and with the knowledge, or willful blindness to the probability, that the induced acts would constitute infringement. On information and belief, Teradata engaged in such inducement to promote the sales of the Accused Instrumentalities. Accordingly, Teradata has induced and continues to induce users of the Accused Instrumentalities to use the Accused Instrumentalities in their ordinary and customary way to infringe the ‘728 patent, knowing that such use constitutes infringement of the ‘728 patent.

50. By making, using, offering for sale, selling and/or importing into the United States the Accused Instrumentalities, and touting the benefits of using the Accused Instrumentalities’ compression features, Teradata has injured Realtime and is liable to Realtime for infringement of the ‘728 patent pursuant to 35 U.S.C. § 271.

51. As a result of Teradata’s infringement of the ‘728 patent, Plaintiff

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http://www.info.teradata.com/HTMLPubs/DB_TTU_15_00/index.html#page/Database_Management/B035_1094_015K/ch09.061.034.html

⁹ <http://www.teradatamagazine.com/New-Options-for-Compression/>

Realtime is entitled to monetary damages in an amount adequate to compensate for Teradata's infringement, but in no event less than a reasonable royalty for the use made of the invention by Teradata, together with interest and costs as fixed by the Court.

RainStor Database

52. On information and belief, Teradata has made, used, offered for sale, sold and/or imported into the United States Teradata products that infringe the '728 patent, and continues to do so. By way of illustrative example, these infringing products include, without limitation, Teradata's compression products and services, such as, *e.g.*, the RainStor Database product and all versions and variations thereof since the issuance of the '728 patent ("Accused Instrumentality").

53. On information and belief, Teradata has directly infringed and continues to infringe the '728 patent, for example, through its own use and testing of the Accused Instrumentality, which constitute systems for compressing data claimed by Claim 1 of the '728 patent, comprising a processor; one or more content dependent data compression encoders; and a single data compression encoder; wherein the processor is configured: to analyze data within a data block to identify one or more parameters or attributes of the data wherein the analyzing of the data within the data block to identify the one or more parameters or attributes of the data excludes analyzing based solely on a descriptor that is indicative of the one or more parameters or attributes of the data within the data block; to perform content dependent data compression with the one or more content dependent data compression encoders if the one or more parameters or attributes of the data are identified; and to perform data compression with the single data compression encoder, if the one or more parameters or attributes of the data are not identified. Upon information and belief, Teradata uses the Accused Instrumentality, an

infringing system, for its own internal non-testing business purposes, while testing the Accused Instrumentality, and while providing technical support for the Accused Instrumentality to Teradata's customers.

54. The Accused Instrumentality is a system for compressing data, comprising a processor and one or more content dependent data compression encoders. *See, e.g.,* <http://rainstor.com/products/rainstor-database/compress/> (“Field-level de-duplication: This involves processing the source data on a column-by-column basis, reducing the dataset to only the list of the unique values that each column holds, together with a frequency count of the number of times the value appears. In this instance the storage space required using field-level de-duplication is a fraction of the original data.”).

55. The Accused Instrumentality uses a single data compression encoder. *See, e.g.,* <http://rainstor.com/products/rainstor-database/compress/> (“Byte-level compression: In this scenario, components of the tree are aggressively compressed independently using industry standard byte-compression algorithms tuned to offer optimal savings.”).

56. The Accused Instrumentality analyzes data within a data block to identify one or more parameter of the data, where the analysis does not rely only on the descriptor. *See, e.g.,* <http://rainstor.com/products/rainstor-database/compress/> (“Field-level de-duplication: This involves processing the source data on a column-by-column basis, reducing the dataset to only the list of the unique values that each column holds, together with a frequency count of the number of times the value appears. In this instance the storage space required using field-level de-duplication is a fraction of the original data.”).

57. The Accused Instrumentality performs content dependent data compression with the one or more content dependent data compression encoders if the one or more parameters or attributes of the data are identified. *See, e.g.,*

<http://rainstor.com/products/rainstor-database/compress/> (“Field-level de-duplication: This involves processing the source data on a column-by-column basis, reducing the dataset to only the list of the unique values that each column holds, together with a frequency count of the number of times the value appears. In this instance the storage space required using field-level de-duplication is a fraction of the original data.”).

58. The Accused Instrumentality performs data compression with the single data compression encoder, if the one or more parameters or attributes of the data are not identified. *See, e.g.,* <http://rainstor.com/products/rainstor-database/compress/> (“Byte-level compression: In this scenario, components of the tree are aggressively compressed independently using industry standard byte-compression algorithms tuned to offer optimal savings.”).

59. On information and belief, Teradata also directly infringes and continues to infringe other claims of the ‘728 patent, for similar reasons as explained above with respect to Claim 1 of the ‘728 patent.

60. On information and belief, all of the Accused Instrumentalities operate in substantially the same way.

61. On information and belief, use of the Accused Instrumentality in its ordinary and customary fashion results in infringement of the systems claimed by the ‘728 patent.

62. On information and belief, Teradata has had knowledge of the ‘728 patent since at least the filing of the original Complaint or shortly thereafter, and on information and belief, Teradata knew of the ‘728 patent and knew of its infringement, including by way of this lawsuit.

63. Upon information and belief, Teradata’s affirmative acts of making, using, and selling the Accused Instrumentalities, and providing implementation services and technical support to users of the Accused Instrumentalities, have

induced and continue to induce users of the Accused Instrumentalities to use them in their normal and customary way to infringe the '728 patent by making or using a system for compressing data comprising a processor; one or more content dependent data compression encoders; and a single data compression encoder; wherein the processor is configured: to analyze data within a data block to identify one or more parameters or attributes of the data wherein the analyzing of the data within the data block to identify the one or more parameters or attributes of the data excludes analyzing based solely on a descriptor that is indicative of the one or more parameters or attributes of the data within the data block; to perform content dependent data compression with the one or more content dependent data compression encoders if the one or more parameters or attributes of the data are identified; and to perform data compression with the single data compression encoder, if the one or more parameters or attributes of the data are not identified. For example, Teradata instructs users of RainStor Database that, "Industry Leading Compression Translates to Huge Cost Savings: No feature in a database offers as many direct benefits as Data Compression. It can offer significant storage savings, increase data center density, allow more data to be kept, and increase query performance in cases where I/O is the bottleneck. All these advantages show up in the Total Cost of Ownership (TCO) calculation. Central to RainStor's unique product capabilities is the ability to compress and de-duplicate large data sets that typically achieve ratios of 40:1, rising to 100:1 in some cases. This comes through four distinct but complementary techniques. ... Field-level de-duplication: ... Pattern-level de-duplication: ... Algorithmic compression: ... Byte-level compression."¹⁰ Teradata specifically intended and was aware that these normal and customary activities would infringe the '728 patent. Teradata performed the

¹⁰ <http://rainstor.com/products/rainstor-database/compress/>

acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the '728 patent and with the knowledge, or willful blindness to the probability, that the induced acts would constitute infringement. On information and belief, Teradata engaged in such inducement to promote the sales of the Accused Instrumentalities. Accordingly, Teradata has induced and continues to induce users of the Accused Instrumentalities to use the Accused Instrumentalities in their ordinary and customary way to infringe the '728 patent, knowing that such use constitutes infringement of the '728 patent.

64. By making, using, offering for sale, selling and/or importing into the United States the Accused Instrumentalities, and touting the benefits of using the Accused Instrumentalities' compression features, Teradata has injured Realtime and is liable to Realtime for infringement of the '728 patent pursuant to 35 U.S.C. § 271.

65. As a result of Teradata's infringement of the '728 patent, Plaintiff Realtime is entitled to monetary damages in an amount adequate to compensate for Teradata's infringement, but in no event less than a reasonable royalty for the use made of the invention by Teradata, together with interest and costs as fixed by the Court.

COUNT III

INFRINGEMENT OF U.S. PATENT NO. 7,358,867

66. Plaintiff Realtime realleges and incorporates by reference paragraphs 1-65 above, as if fully set forth herein.

67. Plaintiff Realtime is the owner by assignment of United States Patent No. 7,358,867 ("the '867 Patent") entitled "Content independent data compression method and system." The '867 Patent was duly and legally issued by the United States Patent and Trademark Office on April 15, 2008. A true and correct copy of the '867 Patent is included as Exhibit C.

Teradata Database

68. On information and belief, Teradata has made, used, offered for sale, sold and/or imported into the United States Teradata products that infringe the '867 patent, and continues to do so. By way of illustrative example, these infringing products include, without limitation, Teradata's compression products and services, such as, *e.g.*, Teradata Database, and all versions and variations thereof since the issuance of the '867 patent ("Accused Instrumentality").

69. On information and belief, Teradata has directly infringed and continues to infringe the '867 patent, for example, through its own use and testing of the Accused Instrumentality to practice compression methods claimed by Claim 16 of the '867 patent, namely, a method comprising: receiving a plurality of data blocks; determining whether or not to compress each one of said plurality of data blocks with a particular one or more of several encoders; if said determination is to compress with said particular one or more of said several encoders for a particular one of said plurality of data blocks; compressing said particular one of said plurality of data blocks with said particular one or more of said several encoders to provide a compressed data block; providing a data compression type descriptor representative of said particular one or more of said several encoders; outputting said data compression type descriptor and said compressed data block; if said determination is to not compress said particular one of said plurality of data blocks; providing a null data compression type descriptor representative of said determination not to compress; and outputting said null data compression type descriptor and said particular one of said plurality of data blocks. Upon information and belief, Teradata uses the Accused Instrumentality, an infringing system, for its own internal non-testing business purposes, while testing the Accused Instrumentality, and while providing technical support for the Accused Instrumentality to Teradata's customers.

70. The Accused Instrumentality practices a method comprising: receiving a plurality of data blocks; determining whether or not to compress each one of said plurality of data blocks with a particular one or more of several encoders; if said determination is to compress with said particular one or more of said several encoders for a particular one of said plurality of data blocks; compressing said particular one of said plurality of data blocks with said particular one or more of said several encoders to provide a compressed data block; providing a data compression type descriptor representative of said particular one or more of said several encoders; outputting said data compression type descriptor and said compressed data block. *See, e.g.,* http://www.info.teradata.com/HTMLPubs/DB_TTU_15_00/index.html#page/Data_base_Management/B035_1094_015K/ch09.061.034.html (“Teradata Database only applies autocompression to column partitions with COLUMN format, and then only if it reduces the size of a container. Teradata Database autocompresses column partitions by default ... For some values there are no applicable compression techniques that can reduce the size of the physical row, so Teradata Database does not compress the values for that physical row, but otherwise the system attempts to compress physical row values using one of the autocompression methods available to it.”); <http://www.teradatamagazine.com/v12n02/Tech2Tech/Compressed-for-Efficiency/> (“Each container is assessed separately to see whether and how it can be reduced. Several techniques are considered, but unless some size reduction is possible, it remains untouched.”).

71. If said determination is to not compress said particular one of said plurality of data blocks, the Accused Instrumentality provides a null data compression type descriptor representative of said determination not to compress; and outputs said null data compression type descriptor and said particular one of

said plurality of data blocks. *See, e.g.,* http://www.info.teradata.com/HTMLPubs/DB_TTU_15_00/index.html#page/Data_base_Management/B035_1094_015K/ch09.061.034.html (“For some values there are no applicable compression techniques that can reduce the size of the physical row, so Teradata Database does not compress the values for that physical row, but otherwise the system attempts to compress physical row values using one of the autocompression methods available to it. When you retrieve rows from a column partitioned table, Teradata Database automatically decompresses any compressed column partition values as is necessary.”).

72. On information and belief, Teradata also directly infringes and continues to infringe other claims of the ‘867 patent, for similar reasons as explained above with respect to Claim 16 of the ‘867 patent.

73. On information and belief, all of the Accused Instrumentalities perform the claimed methods in substantially the same way.

74. On information and belief, use of the Accused Instrumentality in its ordinary and customary fashion results in infringement of the methods claimed by the ‘867 patent.

75. On information and belief, Teradata has had knowledge of the ‘867 patent since at least March 7, 2012, when Applicants in the patent application that issued as U.S. Patent No. 8,386,444, assigned to Teradata, cited U.S. Patent Application Publication No. US 2006/0181441 A1 (“Fallon”) in their Amendment and Response Under 37 C.F.R. 1.116 submitted with a Request for Continued Examination (RCE). U.S. Patent Application Publication No. US 2006/0181441 A1 is the published version of U.S. Patent Application No. 11/400,340 from which the ‘867 patent issued, and contained a Claim 16 identical to Claim 16 of the issued ‘867 patent. Furthermore, the ‘867 patent had already issued on April 15, 2008, about 4 years earlier, when Teradata cited the corresponding published

application on March 7, 2012. Accordingly, Teradata, with knowledge of the claims of the '867 patent, willfully infringed the '867 patent. Furthermore, Teradata has also had knowledge of the '867 patent since at least the filing of this Complaint or shortly thereafter, and on information and belief, Teradata knew of the '867 patent and knew of its infringement, including by way of this lawsuit.

76. Upon information and belief, Teradata's affirmative acts of making, using, and selling the Accused Instrumentalities, and providing implementation services and technical support to users of the Accused Instrumentalities, have induced and continue to induce users of the Accused Instrumentalities to use them in their normal and customary way to infringe the '867 patent by practicing a method comprising: receiving a plurality of data blocks; determining whether or not to compress each one of said plurality of data blocks with a particular one or more of several encoders; if said determination is to compress with said particular one or more of said several encoders for a particular one of said plurality of data blocks; compressing said particular one of said plurality of data blocks with said particular one or more of said several encoders to provide a compressed data block; providing a data compression type descriptor representative of said particular one or more of said several encoders; outputting said data compression type descriptor and said compressed data block; if said determination is to not compress said particular one of said plurality of data blocks; providing a null data compression type descriptor representative of said determination not to compress; and outputting said null data compression type descriptor and said particular one of said plurality of data blocks. For example, Teradata instructs users of Teradata Database that, "Autocompression is the default option for column partitions ... Each container is assessed separately to see whether and how it can be reduced. Several techniques are considered, but unless some size reduction is possible, it remains untouched. If it is compressed, the needed data automatically returns to its

former state when it is read. ... These techniques are determined by the Teradata Database, based on the data characteristics within a container.”¹¹ Teradata clarifies to users of Teradata Database that, “Teradata Database only applies autocompression to column partitions with COLUMN format, and then only if it reduces the size of a container. ... In most cases, the data type of a column is not a factor, and Teradata Database compresses values based only on their byte representation ... For some values there are no applicable compression techniques that can reduce the size of the physical row, so Teradata Database does not compress the values for that physical row.”¹² Teradata also instructs users of Teradata Database that block-level compression (BLC) “operates on all types of data. It compresses all of the data in a data block before it’s stored on a disk. ... Block-level compression (BLC) can generally achieve the highest compression rates—up to five times, which is a reduction of the data to as little as 20% of its original size. It can also have a significant overall savings in kilobytes transferred per I/O.”¹³ Teradata specifically intended and was aware that the normal and customary use of compression in the Accused Instrumentalities would infringe the ‘867 patent. Teradata performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the ‘867 patent and with the knowledge, or willful blindness to the probability, that the induced acts would constitute infringement. On information and belief, Teradata engaged in such inducement to promote the sales of the Accused Instrumentalities. Accordingly, Teradata has induced and continues to induce users of the Accused Instrumentalities to use the Accused Instrumentalities in their ordinary and

¹¹ <http://www.teradatamagazine.com/v12n02/Tech2Tech/Compressed-for-Efficiency/>

¹² http://www.info.teradata.com/HTMLPubs/DB_TTU_15_00/index.html#page/Database_Management/B035_1094_015K/ch09.061.034.html

¹³ <http://www.teradatamagazine.com/New-Options-for-Compression/>

customary way to infringe the '867 patent, knowing that such use constitutes infringement of the '867 patent.

77. By making, using, offering for sale, selling and/or importing into the United States the Accused Instrumentalities, and touting the benefits of using the Accused Instrumentalities' compression features, Teradata has injured Realtime and is liable to Realtime for infringement of the '867 patent pursuant to 35 U.S.C. § 271.

78. As a result of Teradata's infringement of the '867 patent, Plaintiff Realtime is entitled to monetary damages in an amount adequate to compensate for Teradata's infringement, but in no event less than a reasonable royalty for the use made of the invention by Teradata, together with interest and costs as fixed by the Court.

COUNT IV

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

79. Plaintiff realleges and incorporates by reference paragraphs 1-78 above, as if fully set forth herein.

80. 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 D.

81. On information and belief, Teradata has used, offered for sale, sold and/or imported into the United States Teradata products that infringe various claims of the '992 patent and continues to do so. By way of illustrative example, these infringing products include, without limitation, Teradata's compression products and services, such as, *e.g.*, the Teradata Database product and all versions and variations thereof since the issuance of the '992 patent ("Accused Instrumentalities").

82. On information and belief, Teradata has directly infringed and continues to infringe at least claim 48 of the '992 patent, for example, through its own use and testing of the Accused Instrumentalities 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 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 Instrumentalities in their ordinary and customary fashion results in infringement of the methods claimed by the '992 patent.

83. The Accused Instrumentalities practice a computer-implemented method comprising: receiving a data block:

See, e.g., <http://www.teradatamagazine.com/v11n04/Tech2Tech/Pillar-of-Performance/>

84. The Accused Instrumentalities associate at least one encoder to each one of several data types:

See e.g., <http://www.teradatamagazine.com/v12n02/Tech2Tech/Compressed-for-Efficiency/>

85. The Accused Instrumentalities analyze data within the data block to identify a first data type of the data within the data block:

See, e.g., <http://webcache.googleusercontent.com/search?q=cache:-kEWzwVXw0sJ:www.teradata.com/News-Releases/2011/Teradata-Establishes-New-Standard-for-Columnar-Databases+&cd=1&hl=en&ct=clnk&gl=us>

86. The Accused Instrumentalities compress, 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:

See, e.g. <http://www.teradatamagazine.com/v12n02/Tech2Tech/Compressed-for-Efficiency/>

See, e.g., <http://www.teradatamagazine.com/v11n04/Tech2Tech/Pillar-of-Performance/>

87. The Accused Instrumentalities compress, 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:

See, e.g., <http://www.teradatamagazine.com/New-Options-for-Compression/>

See, e.g., http://www.teradatamagazine.com/uploadedImages/AS2_table.jpg

See, e.g. <http://www.teradatamagazine.com/v12n02/Tech2Tech/Compressed-for-Efficiency/>

88. On information and belief, Teradata has had knowledge of the '992 patent since at least the filing of this Complaint or shortly thereafter, and on information and belief, Teradata knew of the '992 patent and knew of its infringement, including by way of this lawsuit.

89. Teradata's affirmative acts of making, using, selling, offering for sale,

and/or importing the Accused Instrumentalities have induced and continue to induce users of the Accused Instrumentalities to use the Accused Instrumentalities in their normal and customary way to infringe the '992 patent by practicing 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 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 a Teradata News Release, "Teradata Establishes New Standard for Columnar Databases - 9/29/2011,"¹⁴ Teradata explained that Teradata Database automatically chooses from among six types of compression so data can be compressed more efficiently. Teradata specifically intended and was aware that the normal and customary use of the Accused Instrumentalities would infringe the '992 patent. Teradata 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, Teradata engaged in such inducement to promote the sales of the Accused Instrumentalities, *e.g.*, through Teradata's user manuals, product

¹⁴ <http://www.teradata.com/News-Releases/2011/Teradata-Establishes-New-Standard-for-Columnar-Databases/?LangType=1033&LangSelect=true#sthash.vhJ2lvyM.dpuf>

support, marketing materials, and training materials to actively induce the users of the Accused Instrumentalities to infringe the ‘992 patent. Accordingly, Teradata has induced and continues to induce users of the Accused Instrumentalities to use the Accused Instrumentalities in their ordinary and customary way to infringe the ‘992 patent, knowing that such use constitutes infringement of the ‘992 patent.

90. By making, using, offering for sale, selling and/or importing into the United States the Accused Instrumentalities and touting the benefits of using the Accused Instrumentalities’ compression features, Teradata has injured Realtime and is liable to Realtime for infringement of the ‘992 patent pursuant to 35 U.S.C. § 271.

91. As a result of Teradata’s infringement of the ‘992 patent, Plaintiff Realtime is entitled to monetary damages in an amount adequate to compensate for Teradata’s infringement, but in no event less than a reasonable royalty for the use made of the invention by Teradata, together with interest and costs as fixed by the Court.

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

92. Plaintiff Realtime realleges and incorporates by reference paragraphs 1-91 above, as if fully set forth herein.

93. 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 E.

94. On information and belief, Teradata has used, offered for sale, sold and/or imported into the United States Teradata products that infringe various claims of the ‘530 patent and continues to do so. By way of illustrative example,

these infringing products include, without limitation, Teradata's compression products and services, such as, *e.g.*, the Teradata Database product and all versions and variations thereof since the issuance of the '530 patent ("Accused Instrumentalities").

95. On information and belief, Teradata has directly infringed and continues to infringe at least Claim 1 of the '530 patent, for example, through its own use, testing, sale, offer for sale, and/or importation of the Accused Instrumentalities and computer systems running the Accused Instrumentalities, 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 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 Instrumentalities running on compatible systems.

96. The Accused Instrumentalities constitute a system comprising a memory device:

See, *e.g.*, <http://www.teradatamagazine.com/New-Options-for-Compression/>

97. The Accused Instrumentalities comprise a data accelerator, wherein

said data accelerator is coupled to said memory device:

See, e.g., <http://www.info.teradata.com/edownload.cfm?itemid=113480006> at 46.

See, e.g., <http://www.teradatamagazine.com/v12n02/Tech2Tech/Compressed-for-Efficiency/>

98. A data stream is received by said data accelerator of the Accused Instrumentalities in received form:

See, e.g. <http://www.teradatamagazine.com/v11n04/Tech2Tech/Pillar-of-Performance/>

99. In the Accused Instrumentality, said received data stream includes a first data block and a second data block:

See, e.g., <http://webcache.googleusercontent.com/search?q=cache:-kEWzwVXw0sJ:www.teradata.com/News-Releases/2011/Teradata-Establishes-New-Standard-for-Columnar-Databases+&cd=1&hl=en&ct=clnk&gl=us>

See, e.g., <http://www.dbms2.com/2011/09/22/teradata-columnar-compression/>

100. In the Accused Instrumentality, 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:

See, e.g., <http://webcache.googleusercontent.com/search?q=cache:-kEWzwVXw0sJ:www.teradata.com/News-Releases/2011/Teradata-Establishes-New-Standard-for-Columnar-Databases+&cd=1&hl=en&ct=clnk&gl=us>

See, e.g., <http://www.teradatamagazine.com/v12n02/Tech2Tech/Compressed-for-Efficiency/>

See, e.g., <http://www.teradatamagazine.com/v11n04/Tech2Tech/Pillar-of-Performance/>

101. In the Accused Instrumentality, said first and second compression techniques are different.

See, e.g., <http://webcache.googleusercontent.com/search?q=cache:-kEWzwVXw0sJ:www.teradata.com/News-Releases/2011/Teradata-Establishes-New-Standard-for-Columnar-Databases+&cd=1&hl=en&ct=clnk&gl=us>

See, e.g., <http://www.teradatamagazine.com/v12n02/Tech2Tech/Compressed-for-Efficiency/>

102. In the Accused Instrumentality said compressed data stream is stored on said memory device:

See, e.g., http://www.info.teradata.com/htmlpubs/DB_TTU_15_00/index.html#page/Database_Management/B035_1094_015K/ch14.066.006.html

103. In the Accused Instrumentality said compression and storage occurs faster than said data stream is able to be stored on said memory device in said received form:

<http://webcache.googleusercontent.com/search?q=cache:-kEWzwVXw0sJ:www.teradata.com/News-Releases/2011/Teradata-Establishes-New-Standard-for-Columnar-Databases+&cd=1&hl=en&ct=clnk&gl=us>

http://www.info.teradata.com/htmlpubs/DB_TTU_15_00/index.html#page/Database_Management/B035_1094_015K/ch09.061.031.html

104. In the Accused Instrumentality the 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.

See, e.g., <http://www.teradatamagazine.com/v12n02/Tech2Tech/Compressed-for-Efficiency/>

http://www.info.teradata.com/htmlpubs/DB_TTU_15_00/index.html#page/Database_Management/B035_1094_015K/ch09.061.030.html

http://www.info.teradata.com/HTMLPubs/DB_TTU_15_00/index.html#page/Data_base_Management/B035_1094_015K/ch09.061.034.html

105. On information and belief, Teradata has had knowledge of the ‘530 patent since at least the filing of this Complaint or shortly thereafter, and on information and belief, Teradata knew of the ‘530 patent and knew of its infringement, including by way of this lawsuit.

106. Teradata’s affirmative acts of making, using, selling, offering for sale, and/or importing the Accused Instrumentalities have induced and continue to induce users of the Accused Instrumentalities to use the Accused Instrumentalities in their normal and customary way on compatible systems to infringe the ‘530 patent, knowing that when the Accused Instrumentalities 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 an article in Teradata Magazine entitled "New Options for Compression",¹⁵ Teradata explains that data compression has the benefit of reducing I/O to improve throughput by enabling the placement of more data in cache memory and minimizing data movement between storage and memory. Additionally, in a Teradata News Release, "Teradata Establishes New Standard for Columnar Databases - 9/29/2011,"¹⁶ Teradata explained that Teradata Database automatically chooses from among six types of compression so data can be compressed more efficiently. Additionally, in its Release Summary for Teradata Database Release 14.0, Teradata explained that primary data, fallback data, and CLOB data can be independently compressed with block-level compression (BLC).¹⁷ Teradata specifically intended and was aware that the normal and customary use of Teradata Database on compatible systems would infringe the '530 patent. Teradata performed the acts that constitute induced infringement, and would induce actual

¹⁵ <http://www.teradatamagazine.com/New-Options-for-Compression/>

¹⁶ <http://www.teradata.com/News-Releases/2011/Teradata-Establishes-New-Standard-for-Columnar-Databases/?LangType=1033&LangSelect=true#sthash.vhJ2lvyM.dpuf>

¹⁷ http://www.info.teradata.com/HTMLPubs/DB_TTU_14_10/index.html#page/General_Reference/B035_1098_112A/Chap3.49.004.html

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, Teradata engaged in such inducement to promote the sales of the Accused Instrumentalities, *e.g.*, through Teradata's user manuals, product support, marketing materials, and training materials to actively induce the users of the Accused Instrumentalities to infringe the '530 patent. Accordingly, Teradata has induced and continues to induce users of the Accused Instrumentalities to use the Accused Instrumentalities in their ordinary and customary way with compatible systems to make and/or use systems infringing the '530 patent, knowing that such use of the Accused Instrumentalities with compatible systems will result in infringement of the '530 patent.

107. Teradata also indirectly infringes the '530 patent by manufacturing, using, selling, offering for sale, and/or importing the Accused Instrumentalities, with knowledge that the Accused Instrumentalities 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 Instrumentalities are designed to function with compatible hardware to create 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. 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 Instrumentalities when executed on such hardware, the most compelling inference is that the Accused Instrumentalities have no substantial non-infringing uses, and that any other uses would be unusual, far-fetched, illusory, impractical, occasional, aberrant, or experimental. Teradata’s manufacture, use, sale, offering for sale, and/or importation of the Accused Instrumentalities constitutes contributory infringement of the ‘530 patent.

108. By making, using, offering for sale, selling and/or importing into the United States the Accused Instrumentalities and computer systems running the Accused Instrumentalities, and touting the benefits of using the Accused Instrumentalities’ compression features, Teradata has injured Realtime and is liable to Realtime for infringement of the ‘530 patent pursuant to 35 U.S.C. § 271.

109. As a result of Teradata’s infringement of the ‘530 patent, Plaintiff Realtime is entitled to monetary damages in an amount adequate to compensate for Teradata’s infringement, but in no event less than a reasonable royalty for the use made of the invention by Teradata, together with interest and costs as fixed by the Court.

COUNT VI

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

110. Plaintiff realleges and incorporates by reference paragraphs 1-109 above, as if fully set forth herein.

111. 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 F.

112. On information and belief, Teradata has used, offered for sale, sold and/or imported into the United States Teradata products that infringe various claims of the ‘513 patent and continues to do so. By way of illustrative example, these infringing products include, without limitation, Teradata’s compression products and services, such as, *e.g.*, the Teradata Database product and all versions and variations thereof since the issuance of the ‘513 patent (“Accused Instrumentalities”).

113. On information and belief, Teradata has directly infringed and continues to infringe Claim 1 of the ‘513 patent, for example, through its own use and testing of the Accused Instrumentalities 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 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 Instrumentalities in their ordinary and customary fashion results in infringement of the methods claimed by the '513 patent.

114. The Accused Instrumentality is a method of compressing a plurality of data blocks.

<http://www.info.teradata.com/edownload.cfm?itemid=113480006>

<http://www.dbms2.com/2011/09/22/teradata-columnar-compression/>

<http://www.teradatamagazine.com/v12n02/Tech2Tech/Compressed-for-Efficiency/>

115. The Accused Instrumentality analyzes the plurality of data blocks to recognize when an appropriate content independent compression algorithm is to be applied to the plurality of data blocks:

http://www.info.teradata.com/htmlpubs/DB_TTU_15_00/index.html#page/Database_Management/B035_1094_015K/ch14.066.010.html

<http://www.dbms2.com/2011/09/22/teradata-columnar-compression/>

116. The Accused Instrumentality applies the appropriate content independent data compression algorithm to a portion of the plurality of data blocks

to provide a compressed data portion.

<http://www.teradatamagazine.com/v12n02/Tech2Tech/Compressed-for-Efficiency/>

<http://www.dbms2.com/2011/09/22/teradata-columnar-compression/>

<http://www.teradatamagazine.com/New-Options-for-Compression/>

117. The Accused Instrumentality analyzes 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:

<http://webcache.googleusercontent.com/search?q=cache:->

[kEWzwVXw0sJ:www.teradata.com/News-Releases/2011/Teradata-Establishes-New-Standard-for-Columnar-Databases+&cd=1&hl=en&ct=clnk&gl=us](http://www.teradata.com/News-Releases/2011/Teradata-Establishes-New-Standard-for-Columnar-Databases+&cd=1&hl=en&ct=clnk&gl=us)

118. The Accused Instrumentality applies 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.

<http://www.teradatamagazine.com/v12n02/Tech2Tech/Compressed-for-Efficiency/>

<http://www.teradatamagazine.com/v11n04/Tech2Tech/Pillar-of-Performance/>

119. In the Accused Instrumentality 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.

120. In the Accused Instrumentality the analyzing the data block to recognize the any characteristic, attribute, or parameter excludes analyzing based only on the descriptor.

<http://webcache.googleusercontent.com/search?q=cache:->

[kEWzwVXw0sJ:www.teradata.com/News-Releases/2011/Teradata-Establishes-New-Standard-for-Columnar-Databases+&cd=1&hl=en&ct=clnk&gl=us](http://www.teradata.com/News-Releases/2011/Teradata-Establishes-New-Standard-for-Columnar-Databases+&cd=1&hl=en&ct=clnk&gl=us)

<http://www.teradatamagazine.com/v12n02/Tech2Tech/Compressed-for-Efficiency/>

121. On information and belief, Teradata has had knowledge of the ‘513 patent since at least the filing of this Complaint or shortly thereafter, and on information and belief, Teradata knew of the ‘513 patent and knew of its infringement, including by way of this lawsuit.

122. Teradata’s affirmative acts of making, using, selling, offering for sale, and/or importing the Accused Instrumentalities have induced and continue to induce end-users of the Accused Instrumentalities to use the Accused Instrumentalities 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 a Teradata News Release, “Teradata Establishes New Standard for Columnar Databases - 9/29/2011,”¹⁸ Teradata explained that Teradata Database automatically chooses from among six types of compression, including Algorithmic Compression (ALC), so data can be compressed more efficiently. Additionally, in its Release Summary for Teradata Database Release 14.0, Teradata explained that primary data, fallback data, and CLOB data can be independently compressed with block-level compression (BLC).¹⁹ Teradata specifically intended and was aware that the normal and customary use of the Accused Instrumentalities would infringe the ‘513 patent. Teradata performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the ‘513 patent and

¹⁸ <http://www.teradata.com/News-Releases/2011/Teradata-Establishes-New-Standard-for-Columnar-Databases/?LangType=1033&LangSelect=true#sthash.vhJ2lvyM.dpuf>

¹⁹ http://www.info.teradata.com/HTMLPubs/DB_TTU_14_10/index.html#page/General_Reference/B035_1098_112A/Chap3.49.004.html

with the knowledge, or willful blindness to the probability, that the induced acts would constitute infringement. On information and belief, Teradata engaged in such inducement to promote the sales of the Accused Instrumentalities, *e.g.*, through Teradata's user manuals, product support, marketing materials, and training materials to actively induce the users of the Accused Instrumentalities to infringe the '513 patent. Accordingly, Teradata has induced and continues to induce users of the Accused Instrumentalities to use the Accused Instrumentalities in their ordinary and customary way to infringe the '513 patent, knowing that such use constitutes infringement of the '513 patent.

123. By making, using, offering for sale, selling and/or importing into the United States the Accused Instrumentalities and touting the benefits of using the Accused Instrumentalities' compression features, Teradata has injured Realtime and is liable to Realtime for infringement of the '513 patent pursuant to 35 U.S.C. § 271.

124. As a result of Teradata's infringement of the '513 patent, Plaintiff Realtime is entitled to monetary damages in an amount adequate to compensate for Teradata's infringement, but in no event less than a reasonable royalty for the use made of the invention by Teradata, together with interest and costs as fixed by the Court.

COUNT VII

INFRINGEMENT OF U.S. PATENT NO. 6,597,812

125. Plaintiff realleges and incorporates by reference paragraphs 1-124 above, as if fully set forth herein.

126. Plaintiff Realtime is the owner by assignment of United States Patent No. 6,597,812 ("the '812 patent") entitled "System and method for lossless data compression and decompression." The '812 patent was duly and legally issued by the United States Patent and Trademark Office on July 22, 2003. A true and

correct copy of the '812 patent is included as Exhibit G.

Teradata Database

127. On information and belief, Teradata has used, offered for sale, sold and/or imported into the United States Teradata products that infringe various claims of the '812 patent and continues to do so. By way of illustrative example, these infringing products include, without limitation, Teradata's compression products and services, such as, *e.g.*, the Teradata Database product and all versions and variations thereof since the issuance of the '812 patent ("Accused Instrumentalities").

128. On information and belief, Teradata has directly infringed and continues to infringe the '812 patent, for example, through its own use and testing of the Accused Instrumentalities to practice compression methods claimed by the '812 patent, including a method for compressing input data comprising a plurality of data blocks, the method comprising the steps of: detecting if the input data comprises a run-length sequence of data blocks; outputting an encoded run-length sequence, if a run-length sequence of data blocks is detected; maintaining a dictionary comprising a plurality of code words, wherein each code word in the dictionary is associated with a unique data block string; building a data block string from at least one data block in the input data that is not part of a run-length sequence; searching for a code word in the dictionary having a unique data block string associated therewith that matches the built data block string; and outputting the code word representing the built data block string. On information and belief, use of the Accused Instrumentalities in their ordinary and customary fashion results in infringement of the methods claimed by the '812 patent.

129. The Accused Instrumentality compresses input data comprising a plurality of data blocks:

<http://www.info.teradata.com/edownload.cfm?itemid=113480006>

<http://www.dbms2.com/2011/09/22/teradata-columnar-compression/>
<http://www.teradatamagazine.com/v12n02/Tech2Tech/Compressed-for-Efficiency/>

130. The Accused Instrumentality detects if the input data comprises a run-length sequence of data blocks.

<http://webcache.googleusercontent.com/search?q=cache:-kEWzwVXw0sJ:www.teradata.com/News-Releases/2011/Teradata-Establishes-New-Standard-for-Columnar-Databases+&cd=1&hl=en&ct=clnk&gl=us>

<http://www.teradatamagazine.com/v12n02/Tech2Tech/Compressed-for-Efficiency/>

131. The Accused Instrumentality outputs an encoded run-length sequence, if a run-length sequence of data blocks is detected.

<http://www.teradatamagazine.com/v12n02/Tech2Tech/Compressed-for-Efficiency/>

http://www.info.teradata.com/htmlpubs/DB_TTU_15_00/index.html#page/Database_Management/B035_1094_015K/ch09.061.030.html

132. The Accused Instrumentality maintains a dictionary comprising a plurality of code words, wherein each code word in the dictionary is associated with a unique data block string.

<http://www.teradatamagazine.com/v12n02/Tech2Tech/Compressed-for-Efficiency/>

133. The Accused Instrumentality builds a data block string from at least one data block in the input data that is not part of a run-length sequence.

<http://webcache.googleusercontent.com/search?q=cache:-kEWzwVXw0sJ:www.teradata.com/News-Releases/2011/Teradata-Establishes-New-Standard-for-Columnar-Databases+&cd=1&hl=en&ct=clnk&gl=us>

<http://www.teradatamagazine.com/v12n02/Tech2Tech/Compressed-for-Efficiency/>

134. The Accused Instrumentality searches for a code word in the dictionary having a unique data block string associated therewith that matches the built data block string.

<http://www.teradatamagazine.com/v12n02/Tech2Tech/Compressed-for-Efficiency/>

135. The Accused Instrumentality outputs the code word representing the built data block string.

<http://www.teradatamagazine.com/v12n02/Tech2Tech/Compressed-for-Efficiency/>

http://www.info.teradata.com/HTMLPubs/DB_TTU_15_00/index.html#page/Data_base_Management/B035_1094_015K/ch09.061.034.html

136. On information and belief, Teradata has had knowledge of the ‘812 patent since at least the filing of this Complaint or shortly thereafter, and on information and belief, Teradata knew of the ‘812 patent and knew of its infringement, including by way of this lawsuit.

137. Teradata’s affirmative acts of making, using, selling, offering for sale, and/or importing the Accused Instrumentalities have induced and continue to induce users of the Accused Instrumentalities to use the Accused Instrumentalities in their normal and customary way to infringe the ‘812 patent by practicing compression methods claimed by the ‘812 patent, including a method for compressing input data comprising a plurality of data blocks, the method comprising the steps of: detecting if the input data comprises a run-length sequence of data blocks; outputting an encoded run-length sequence, if a run-length sequence of data blocks is detected; maintaining a dictionary comprising a plurality of code words, wherein each code word in the dictionary is associated with a unique data block string; building a data block string from at least one data block in the input data that is not part of a run-length sequence; searching for a code word in the dictionary having a unique data block string associated therewith that matches the built data block string; and outputting the code word representing the built data block string. For example, Teradata’s article in Teradata Magazine entitled “Pillar of Performance”²⁰ explained that Teradata Database will automatically choose among six types of compression including dictionary compression, dynamically adjusting the compression mechanisms for optimal storage as the data evolves over time, thereby preventing dictionary compression values from becoming stale over time. Teradata specifically intended and was

²⁰ <http://www.teradatamagazine.com/v11n04/Tech2Tech/Pillar-of-Performance/>

aware that the normal and customary use of the Accused Instrumentalities would infringe the '812 patent. Teradata performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the '812 patent and with the knowledge, or willful blindness to the probability, that the induced acts would constitute infringement. On information and belief, Teradata engaged in such inducement to promote the sales of the Accused Instrumentalities, *e.g.*, through Teradata's user manuals, product support, marketing materials, and training materials to actively induce the users of the Accused Instrumentalities to infringe the '812 patent. Accordingly, Teradata has induced and continues to induce users of the Accused Instrumentalities to use the Accused Instrumentalities in their ordinary and customary way to infringe the '812 patent, knowing that such use constitutes infringement of the '812 patent.

138. By making, using, offering for sale, selling and/or importing into the United States the Accused Instrumentalities and touting the benefits of using the Accused Instrumentalities' intelligent compression features, Teradata has injured Realtime and is liable to Realtime for infringement of the '812 patent pursuant to 35 U.S.C. § 271.

139. As a result of Teradata's infringement of the '812 patent, Plaintiff Realtime is entitled to monetary damages in an amount adequate to compensate for Teradata's infringement, but in no event less than a reasonable royalty for the use made of the invention by Teradata, together with interest and costs as fixed by the Court.

COUNT VIII

INFRINGEMENT OF U.S. PATENT NO. 9,116,908

140. Plaintiff Realtime realleges and incorporates by reference paragraphs 1-139 above, as if fully set forth herein.

141. Plaintiff Realtime is the owner by assignment of United States Patent

No. 9,116,908 (“the ‘908 Patent”) entitled “System and methods for accelerated data storage and retrieval.” The ‘908 Patent was duly and legally issued by the United States Patent and Trademark Office on August 25, 2015. A true and correct copy of the ‘908 Patent is included as Exhibit H.

142. 42. On information and belief, Teradata has used, offered for sale, sold and/or imported into the United States Teradata products that infringe various claims of the ‘908 patent and continues to do so. By way of illustrative example, these infringing products include, without limitation, Teradata’s compression products and services, such as, e.g., the Teradata Database product and all versions and variations thereof since the issuance of the ‘908 patent (“Accused Instrumentalities”).

143. On information and belief, Teradata has directly infringed and continues to infringe the ‘908 patent, for example, through its own use, testing, sale, offer for sale, and/or importation of the Accused Instrumentalities and computer systems running the Accused Instrumentalities, which when used as designed and intended, constitute a system comprising: a memory device; and a data accelerator configured to compress: (i) a first data block with a first compression technique to provide a first compressed data block; and (ii) a second data block with a second compression technique, different from the first compression technique, to provide a second compressed data block; wherein the compressed first and second data blocks are stored on the memory device, and the compression and storage occurs faster than the first and second data blocks are able to be stored on the memory device in uncompressed form, thereby infringing the ‘908 Patent. Such infringing systems include the Accused Instrumentalities running on compatible systems.

144. The Accused Instrumentality includes the memory device and the data accelerator configured to compress.

<http://www.teradatamagazine.com/New-Options-for-Compression/>

<http://www.info.teradata.com/edownload.cfm?itemid=113480006>

145. The Accused Instrumentality compresses a first data block with a first compression technique to provide a first compressed data block.

<http://www.teradatamagazine.com/v12n02/Tech2Tech/Compressed-for-Efficiency/>

<http://www.teradatamagazine.com/v11n04/Tech2Tech/Pillar-of-Performance/>

146. The Accused Instrumentality compresses a second data block with a second compression technique, different from the first compression technique, to provide a second compressed data block.

<http://webcache.googleusercontent.com/search?q=cache:->

[kEWzwVXw0sJ:www.teradata.com/News-Releases/2011/Teradata-Establishes-New-Standard-for-Columnar-Databases+&cd=1&hl=en&ct=clnk&gl=us](http://webcache.googleusercontent.com/search?q=cache:-kEWzwVXw0sJ:www.teradata.com/News-Releases/2011/Teradata-Establishes-New-Standard-for-Columnar-Databases+&cd=1&hl=en&ct=clnk&gl=us)

<http://www.teradatamagazine.com/v12n02/Tech2Tech/Compressed-for-Efficiency/>

147. In the Accused Instrumentality the compressed first and second data blocks are stored on the memory device, and the compression and storage occurs faster than the first and second data blocks are able to be stored on the memory device in uncompressed form.

http://www.info.teradata.com/htmlpubs/DB_TTU_15_00/index.html#page/Databas_e_Management/B035_1094_015K/ch14.066.006.html

<http://webcache.googleusercontent.com/search?q=cache:->

[kEWzwVXw0sJ:www.teradata.com/News-Releases/2011/Teradata-Establishes-New-Standard-for-Columnar-Databases+&cd=1&hl=en&ct=clnk&gl=us](http://webcache.googleusercontent.com/search?q=cache:-kEWzwVXw0sJ:www.teradata.com/News-Releases/2011/Teradata-Establishes-New-Standard-for-Columnar-Databases+&cd=1&hl=en&ct=clnk&gl=us)

http://www.info.teradata.com/htmlpubs/DB_TTU_15_00/index.html#page/Databas_e_Management/B035_1094_015K/ch09.061.031.html

148. On information and belief, Teradata has had knowledge of the ‘908 patent since at least the filing of this Amended Complaint on September 14, 2015 or shortly thereafter, and on information and belief, Teradata knew of the ‘908 patent and knew of its infringement, including by way of this lawsuit.

149. Teradata’s affirmative acts of making, using, selling, offering for sale, and/or importing the Accused Instrumentalities have induced and continue to induce users of the Accused Instrumentalities to use the Accused Instrumentalities in their normal and customary way on compatible systems to infringe the ‘908 patent, knowing that when the Accused Instrumentalities 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 configured to compress: (i) a first data block with a first compression technique to provide a first compressed data block; and (ii) a second data block with a second compression technique, different from the first compression technique, to provide a second compressed data block; wherein the compressed first and second data blocks are stored on the memory device, and the compression and storage occurs faster than the first and second data blocks are able to be stored on the memory device in uncompressed form, thereby infringing the ‘908 Patent. For example, in an article in Teradata Magazine entitled “New Options for Compression”, Teradata explains that data compression has the benefit of reducing I/O to improve throughput by enabling the placement of more data in cache memory and minimizing data movement between storage and memory. Additionally, in a Teradata News Release, “Teradata Establishes New Standard for Columnar Databases - 9/29/2011,” Teradata explained that Teradata Database automatically chooses from among six types of compression so data can be compressed more efficiently, resulting in significantly improved system performance. Additionally, in its Release Summary for Teradata Database Release 14.0, Teradata explained

that primary data, fallback data, and CLOB data can be independently compressed with block-level compression (BLC). Teradata specifically intended and was aware that the normal and customary use of Teradata Database on compatible systems would infringe the '908 patent. Teradata performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the '908 patent and with the knowledge, or willful blindness to the probability, that the induced acts would constitute infringement. On information and belief, Teradata engaged in such inducement to promote the sales of the Accused Instrumentalities, e.g., through Teradata's user manuals, product support, marketing materials, and training materials to actively induce the users of the Accused Instrumentalities to infringe the '908 patent. Accordingly, Teradata has induced and continues to induce users of the Accused Instrumentalities to use the Accused Instrumentalities in their ordinary and customary way with compatible systems to make and/or use systems infringing the '908 patent, knowing that such use of the Accused Instrumentalities with compatible systems will result in infringement of the '908 patent.

150. Teradata also indirectly infringes the '908 patent by manufacturing, using, selling, offering for sale, and/or importing the Accused Instrumentalities, with knowledge that the Accused Instrumentalities were and are especially manufactured and/or especially adapted for use in infringing the '908 patent and are not a staple article or commodity of commerce suitable for substantial non-infringing use. On information and belief, the Accused Instrumentalities are designed to function with compatible hardware to create systems comprising: a memory device; and a data accelerator configured to compress: (i) a first data block with a first compression technique to provide a first compressed data block; and (ii) a second data block with a second compression technique, different from the first compression technique, to provide a second compressed data block;

wherein the compressed first and second data blocks are stored on the memory device, and the compression and storage occurs faster than the first and second data blocks are able to be stored on the memory device in uncompressed form, thereby infringing the '908 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 Instrumentalities when executed on such hardware, the most compelling inference is that the Accused Instrumentalities have no substantial non-infringing uses, and that any other uses would be unusual, far-fetched, illusory, impractical, occasional, aberrant, or experimental. Teradata's manufacture, use, sale, offering for sale, and/or importation of the Accused Instrumentalities constitutes contributory infringement of the '908 patent.

151. By making, using, offering for sale, selling and/or importing into the United States the Accused Instrumentalities and computer systems running the Accused Instrumentalities, and touting the benefits of using the Accused Instrumentalities' compression features, Teradata has injured Realtime and is liable to Realtime for infringement of the '908 patent pursuant to 35 U.S.C. § 271.

152. As a result of Teradata's infringement of the '908 patent, Plaintiff Realtime is entitled to monetary damages in an amount adequate to compensate for Teradata's infringement, but in no event less than a reasonable royalty for the use made of the invention by Teradata, 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 Teradata has infringed, either literally and/or under the doctrine of equivalents, the '506 patent, the '728 patent, the '867 patent, the '992 patent, the '530 patent, the '513

patent, the '812 patent, and the '908 patent; and that Teradata's infringement of the '867 patent was willful;

- b. A judgment and order requiring Teradata to pay Plaintiff its damages, costs, expenses, and prejudgment and post-judgment interest for its infringement of the '728 patent, the '867 patent, the '992 patent, the '530 patent, the '513 patent, the '812 patent, and the '908 patent; as provided under 35 U.S.C. § 284;
- c. A judgment and order requiring Teradata to provide an accounting and to pay supplemental damages to Realtime, including without limitation, prejudgment and post-judgment interest;
- 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 Teradata; and
- e. 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 17, 2016

Respectfully submitted,

/s/ Marc A. Fenster

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