# IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

MANAGEMENT SCIENCE ASSOCIATES, INC.,	
Plaintiff,	
v.	C.A. No
DATAVANT, INC., and UNIVERSAL PATIENT KEY, INC.,	JURY TRIAL DEMANDED
Defendants.	

## **COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff, Management Science Associates, Inc. ("MSA" or "Plaintiff"), by and through its undersigned counsel, hereby avers and alleges the following for its Complaint against Defendants Datavant, Inc. ("Datavant") and Universal Patient Key, Inc. ("UPK") (collectively, "Defendants").

#### **THE PARTIES**

- 1. Plaintiff MSA is a Pennsylvania corporation having a principal place of business at 6565 Penn Ave., Pittsburgh, PA 15206.
- 2. Upon information and belief, Datavant is a corporation organized and existing under the laws of the State of Delaware, having its principal place of business at 755 Sansome Street, 2<sup>nd</sup> floor, San Francisco, CA 94111.
- 3. Upon information and belief, UPK is a corporation organized and existing under the laws of the State of Delaware, having its principal place of business at 8 Maple Street, Sterling, MA 01564.

#### **JURISDICTION AND VENUE**

- 4. This is a civil action for patent infringement arising under the patent laws of the United States, 35 U.S.C. § 271 *et seq*.
- 5. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338.
- 6. This Court has personal jurisdiction over Defendant Datavant because Datavant is a corporation organized and existing under the laws of the State of Delaware and thus resides in this District.
- 7. This Court has personal jurisdiction over Defendant UPK because UPK is a corporation organized and existing under the laws of the State of Delaware and thus resides in this District.
- 8. Upon information and belief, Datavant has transacted business in this State and District on a substantial and continuous basis.
- 9. Upon information and belief, UPK has transacted business in this State and District on a substantial and continuous basis.
- 10. MSA conducts business in this District and has regular customers that reside and/or have principal places of business in this District.
- 11. Upon information and belief, personal jurisdiction over Datavant is additionally proper because Datavant has committed, and continues to commit, acts of infringement in this District.
- 12. Upon information and belief, personal jurisdiction over UPK is additionally proper because UPK has committed, and continues to commit, acts of infringement in this District.

- 13. In light of Datavant's and UPK's acts of infringement in this District and elsewhere, MSA has suffered harm in this District.
- 14. Venue is proper pursuant to 28 U.S.C. §§ 1391 and 1400 at least because Datavant and UPK both reside in this Dstrict and are subject to personal jurisdiction in this District.

#### **FACTS**

- 15. MSA is a leader and innovator in data management, processing, and analytics for a variety of industries including healthcare, pharmaceutical, information technology, consumer products, manufacturing, and gaming.
- 16. MSA provides a variety of data analytics and information technology products and services to its clients, including developing software solutions for licensing to clients.
- 17. MSA is an industry leader and innovator in de-identification technology, which involves the removal of personally identifiable information ("PII") from a data record.
- 18. MSA's de-identification technology is used in a variety of different industries including the life sciences industry (e.g., such as the healthcare and pharmaceutical industries), in which the removal of PII from records may be required by law or is otherwise desired by MSA's clients.
- 19. MSA has invested and continues to invest significant resources into the development of proprietary de-identification technology, including algorithms, techniques, and systems implemented with software and hardware. MSA's de-identification technology includes unique token generation techniques that involve the generation of a token based at least partially on a plurality of data elements identifying an individual. A generated token is used to create a de-identified record for the individual and to link the de-identified record with at least one other de-identified record for the individual. MSA's de-identification technology represents an innovation

over prior systems and methods for de-identifying data and provides MSA with an important competitive advantage in this field.

- 20. MSA has been awarded several United States patents covering aspects of its de-identification technology, including United States Patent No. 9,614,814 ("the '814 patent"), entitled "System and Method for Cascading Token generation and Data De-identification," attached hereto as Exhibit A.
- 21. Datavant is a healthcare data management company with a stated purpose of connecting data between healthcare providers.
- 22. UPK is a healthcare data management company with a stated purpose of providing software solutions that support real-world analysis of healthcare data in a secure and HIPAA-compliant manner.
- 23. On April 30, 2018, Datavant announced an acquisition of UPK. According to the announcement, UPK "created a suite of software products that de-identify structured and unstructured health data through HIPAA-compliant methodologies."
- 24. UPK's de-identification products and services are described in Exhibit B and Exhibit C, appended hereto.
- Datavant's de-identification products and services are described in ExhibitD, appended hereto.
- 26. UPK filed its own patent application, U.S. Patent Serial No. 15/045,605, directed to de-identification technology in 2016, several years after the priority date of the '814 patent.

- 27. Datavant filed its own patent application, U.S. Patent Serial No. 15/000,905, directed to "data de-identification and anonymous data linkage" in 2016, several years after the priority date of the '814 patent.
- 28. On April 26, 2019, Tony Fontecchio of MSA sent an email to Datavant founder and CEO Travis May that discussed and attached a copy of the '814 patent.
  - 29. Datavant has been aware of the '814 patent at least as of April 26, 2019.
- 30. Upon information and belief, UPK has been aware of the '814 patent at least as of April 26, 2019.

# COUNT I (Patent Infringement in Violation of 35 U.S.C. § 271)

- 31. MSA repeats and re-alleges the averments set forth in paragraphs 1 through 30 of this Complaint by reference as if fully set forth herein.
- 32. The '814 patent was duly and lawfully issued by the U.S. Patent Office on April 4, 2017.
- 33. The '814 patent claims priority to a provisional application filed on June 3, 2013.
- 34. MSA is the sole and exclusive owner of all right, title, and interest in the '814 patent. MSA also has the right to recover all damages for past, present, and future infringement of the '814 patent and to seek injunctive relieve as appropriate under the law.
  - 35. The '814 patent is presumed to be valid under 35 U.S.C. § 282.
- 36. Claim 1 of the '814 patent is directed to a "computer-implemented method for de-identifying records received from a plurality of clients", claim 10 is directed to a "computer

program product for de-identifying records received from a plurality of clients", and claim 19 is directed to a "system for de-identifying records received from a plurality of clients".

- 37. The claimed subject matter of the '814 patent is directed to non-abstract, technical solutions to technical problems in the field of data de-identification.
- 38. The claimed subject matter of the '814 patent represents one or more practical applications of data de-identification technology that achieve significant benefits and improvements in the operation and performance of data de-identification processes, token creation processes, record matching processes, and record linking processes. For example, the claimed subject matter involves the creation of a token using an unconventional technique and based on a client tag that allows for efficient matching and linking of de-identified records while maintaining data privacy.
- 39. The claimed subject matter of the '814 patent is directed to a practical application of token generation technology by applying a new token generation technique to data processing systems that process personally-identifying data records.
- 40. Defendants affirmatively represent that they make and sell "data deidentification technology," including "de-identification software," products, and services as at least described in Exhibit B, Exhibit C, and Exhibit D (the "Accused Instrumentalities").
- 41. The Accused Instrumentalities include one or more software programs, computing devices, and/or a combination of software programs and computing devices that are configured to process and de-identify data including PII.
- 42. The Accused Instrumentalities generate site-specific tokens based on patient data and a site-specific encryption key to "create[] de-identified data sets with site-specific tokens for each patient record" that allows the patient records to be matched and linked for a site.

- 43. The Accused Instrumentalities "convert the site-specific tokens created during the de-identification process into a data recipient's site-specific token scheme" such that "corresponding de-identified patient records in the data source and recipient's data can now be matched."
- 44. The Accused Instrumentalities are understood to include any and all products that Defendants have made, sold, or used, and/or continue to make, use, sell, and/or provide and cause to be used, as described hereinabove, in paragraphs 41 43.
- 45. Upon information and belief, Defendants use the method, computer program product, and system claimed in the '814 patent to provide de-identification services to their customers.
- 46. Upon information and belief, the Accused Instrumentalities that Defendants have made, sold, and used, and continue to make, sell, and use, perform and enable Defendants to provide a computer-implemented method for de-identifying records received from a plurality of clients, each of the plurality of clients associated with a client tag unique to the client and a plurality of records including identifying data for a plurality of individuals, as recited in claim 1, including receiving a record for an individual from at least one data storage device associated with a client, the record comprising a plurality of data elements identifying the individual, generating, with at least one processor, a token based at least partially on the plurality of data elements and a client tag uniquely identifying the client among the plurality of clients, creating, with at least one processor, a de-identified record comprising a portion of the record and the token, matching, with at least one processor, the token or a new token based on the token to at least one other token in a database, the at least one other token generated based on the client tag and associated with at least one other de-identified record for the individual, and linking, with at least one processor, the de-

identified record to the at least one other de-identified record in at least one data storage device, as in claim 1 of the '814 patent.

- 47. Upon information and belief, the Accused Instrumentalities that Defendants have made, sold, and used, and continue to make, sell, and use, include a computer program to deidentify records received from a plurality of clients, each of the plurality of clients associated with a client tag unique to the client and a plurality of records including identifying data for a plurality of individuals, including at least one non-transitory computer-readable medium comprising program instructions that cause at least one processor to receive a record for an individual from at least one data storage device associated with a client, the record comprising a plurality of data elements identifying an individual, generate a token based at least partially on the plurality of data elements and a client tag uniquely identifying the client among the plurality of clients, create a deidentified record comprising a portion of the record and the token, match the token or a new token based on the token to at least one other token in a database, the at least one other token generated based on the client tag and associated with at least one other de-identified record for the individual, and link the de-identified record to the at least one other de-identified record in at least one data storage device, as in claim 10 of the '814 patent.
- 48. Upon information and belief, the Accused Instrumentalities that Defendants have made, sold, and used, and continue to make, sell, and use, include a system for de-identifying records received from a plurality of clients, each of the plurality of clients associated with a client tag unique to the client and a plurality of records including identifying data for a plurality of individuals, including a data supplier computer comprising at least one processor and a de-identification engine, where the de-identification engine is configured to receive a record for an individual from at least one data storage device associated with a client, the record comprising a

plurality of data elements identifying an individual, and generate a token based at least partially on the plurality of data elements and a client tag uniquely identifying the client. Upon information and belief, the Accused Instrumentalities also include a data processing entity computer remote from the data supplier computer, the data processing computer comprising at least one processor configured to match the token or a new token based on the token to at least one other token in a database, the at least one other token generated based on the client tag and associated with at least one other de-identified record for the individual, and link a de-identified record comprising a portion of the record and the token to the at least one other de-identified record in at least one data storage device, as in claim 19 of the '814 patent.

- 49. Upon information and belief, Defendants' past and current manufacture, use, sale, and offer for sale of the Accused Instrumentalities infringe at least claims 1, 10, and 19 of the '814 patent.
- 50. Datavant has had actual knowledge of the '814 patent since at least April 26, 2019.
- 51. Upon information and belief, UPK has had actual knowledge of the '814 patent since at least April 26, 2019.
- 52. Upon information and belief, Defendants had actual knowledge of the '814 patent prior to April 26, 2019.
- 53. Upon information and belief, Defendants have actual knowledge that the Accused Instrumentalities infringe at least one of the claims of the '814 patent.
- 54. Defendants, without authority, have directly infringed and continue to directly infringe the '814 patent under 35 U.S.C. § 271(a) by making, using, selling, and/or offering

for sale the Accused Instrumentalities. Such infringement will continue unless enjoined by the Court.

- 55. Upon information and belief, Defendants have advertised and sold the Accused Instrumentalities to other parties, including Defendants' customers, clients, and endusers, across the country and in this District, with actual knowledge that such parties' use would directly infringe one or more claims of the '814 patent.
- 56. The Accused Instrumentalities are not a staple article of commerce and do not have a substantial non-infringing use.
- 57. Upon information and belief, Defendants provide their de-identification customers with instructions, directions, or terms of use for using the Accused Instrumentalities, including specifying the manner in which the Accused Instrumentalities are used for installation, deployment, configuration, and operation.
- 58. Upon information and belief, Defendants direct and control their deidentification customers to match and link de-identified records within the customers' own databases based on the token generated by the Accused Instrumentalities such that the performance of matching and linking records is attributable to Defendants.
- 59. Defendants have indirectly infringed and continue to indirectly infringe the '814 patent under 35 U.S.C. § 271(b) by actively inducing one or more other parties, including Defendants' de-identification customers, to infringe one or more claims of the '814 patent by providing those de-identification customers with instructions, directions, or terms of use for using the Accused Instrumentalities, including specifying the manner in which the Accused Instrumentalities are used for installation, deployment, configuration, and operation.

- 60. Defendants have indirectly infringed and continue to indirectly infringe the '814 patent under 35 U.S.C. § 271(c) by contributing to the infringement of at least one claim of the '814 patent by one or more other parties, including Defendants' de-identification customers, knowing that the Accused Instrumentalities are especially made or adapted for infringing one or more claims of the '814 patent.
- 61. The foregoing is exemplary of Defendants' infringement and does not constitute a full recitation of MSA's contentions regarding Defendants' infringement of the '814 patent.
- 62. MSA has been irreparably damaged and will continue to be irreparably damaged by reason of Defendants' infringement of the '814 patent unless this Court restrains the infringing acts of Defendants.
- 63. Defendants' activities and infringement of the '814 patent have been and are willful and deliberate, constituting willful infringement.
- 64. As a direct result of Defendants' infringing activities, MSA has suffered damages in an amount to be determined at trial.

WHEREFORE, MSA respectfully requests judgment be entered against Defendants as follows:

- A. The '814 patent has been infringed by Defendants;
- B. An award of damages adequate to compensate MSA for the infringement, in the form of at least a reasonable royalty, MSA's lost profits, and/or Defendants' profits resulting from the infringement together with prejudgment interest from the date the infringement began;
  - C. Any damages permitted in the Court's equitable discretion;

- D. A finding that this case is exceptional under 35 U.S.C. § 285 and an award to MSA of its attorneys' fees, costs, and expenses in this action;
- E. An injunction permanently enjoining Defendants, their affiliates, officers, directors, employees, agents, licensees, subsidiaries, successors, and assignees, and any and all persons acting in privity or in concert with any of them who receive notice of the injunction, including distributors, sales representatives, and customers, from further acts of infringement of the '814 patent;
  - F. Costs and expenses in this action; and
  - G. Such other and further relief as the Court may deem just and proper.

### **DEMAND FOR JURY TRIAL**

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Plaintiff hereby demands a trial by jury for all issues triable by a jury.

Dated: April 13, 2020

#### SMITH, KATZENSTEIN & JENKINS LLP

/s/ Eve H. Ormerod

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