IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

COHO LICENSING LLC,	
Plaintiff,	
V.	C.A. No.
••	TRIAL BY JURY DEMANDED
LINKEDIN CORP.,	
Defendant.	

COMPLAINT FOR PATENT INFRINGEMENT

Coho Licensing LLC (hereinafter "Coho" or "Plaintiff"), by and through its undersigned counsel, as and for its Complaint against LinkedIn Corporation (hereinafter "LinkedIn" or "Defendant"), alleges as follows:

NATURE OF THE ACTION

1. This is an action for patent infringement arising under the patent laws of the United States, Title 35 of the United States Code ("U.S.C.") to prevent and enjoin Defendant from infringing and profiting, in an illegal and unauthorized manner and without authorization and/or consent from Coho, from U.S. Patent No. 8,024,395 (the "'395 patent") (attached hereto as Exhibit A) and U.S. Patent No. 8,166,096 (the "'096 patent") (attached hereto as Exhibit B) (collectively, the "Asserted Patents") pursuant to 35 U.S.C. §271, and to recover damages, attorneys' fees, and costs.

THE PARTIES

2. Plaintiff Coho is a Delaware limited liability company with its principal place of business at 222 Delaware Avenue, PO Box 25130, Wilmington, DE 19899.

3. Defendant LinkedIn is a Delaware corporation with its principal place of business at 2029 Stierlin Court, Mountain View, California 94043. LinkedIn may be served with process via its registered agent, the Corporation Services Company, 2711 Centerville Road, Suite 400, Wilmington, Delaware 19808.

JURISDICTION AND VENUE

- 4. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§1331 and 1338(a) because the action arises under the patent laws of the United States, 35 U.S.C. §§1 et seq.
- 5. This Court has personal jurisdiction over Defendant by virtue of its systematic and continuous contacts with this jurisdiction, as well as because of the injury to Coho and the cause of action Coho has raised, as alleged herein.
- 6. Defendant is subject to this Court's specific and general personal jurisdiction pursuant to due process and/or Delaware's Long-Arm Statute, *Del. Code. A. Tit. 3, §3104*, due to at least its substantial business in this forum, including: (i) at least a portion of the infringement alleged herein; and (ii) regularly doing or soliciting business, engaging in other persistent courses of conduct, and/or deriving substantial revenue from goods and services provided to individuals in Delaware.
- 7. Defendant has conducted and does conduct business within the state of Delaware, directly or through intermediaries, resellers, agents, or offers for sale, sells, advertises its services in Delaware that infringe the Asserted Patents.
- 8. In addition to Defendant's continuously and systematically conducting business in Delaware, the causes of action against Defendant are connected (but not limited) to Defendant's purposeful acts committed in the state of Delaware, including Defendant's making, using,

importing, offering for sale, selling services which include features that fall within the scope of at least one claim of each of the Asserted Patents.

9. Venue lies in this District under 28 U.S.C. §§1391 and 1400(b) because, among other reasons, Defendant is subject to personal jurisdiction in this District, and has committed and continues to commit acts of patent infringement in this District.

FACTUAL ALLEGATIONS

The '395 patent

- 10. On September 20, 2011 the United States Patent and Trademark Office ("USPTO") duly and legally issued the '395 patent, entitled "Distributed Processing Multiple Tier Task Allocation" after a full and fair examination.
- 11. Coho is presently the owner by assignment of the '395 patent, having received all right, title, and interest in and to the '395 patent from the previous assignee of record. Coho possesses all rights of recovery under the '395 patent, including the exclusive right to recover for past infringement.
- 12. The '395 patent contains three independent claims and seventeen dependent claims. Defendant commercializes, *inter alias*, methods that perform all the steps recited in at least one claim of the '395 patent.
- 13. The invention described in the '395 patent includes a computer-implemented method for distributed processing.
- 14. The computer implemented method of the '395 patent includes the step of dividing a task into a plurality of portions; an allocating computer then allocates at least one task portion to a sub-allocating computer; and said sub-allocating computer receives the task portion. The sub-allocating computer then allocates a subtask portion to an allocated computer, wherein

the subtask portion comprises a portion of a task portion; the allocated computer receives said subtask portion; and a subtask processing computer processes said subtask portion, thereby creating and storing at least one result. Finally, said subtask processing computer transfers said result to a results computer; and said results computer receives and stores results related to said task from a plurality of computers.

The '096 patent

- 15. On April 24, 2012 the USPTO duly and legally issued the '096 patent, entitled "Distributed Processing Multiple-Tier Task Allocation" after a full and fair examination.
- 16. Coho is presently the owner by assignment of the '096 patent, having received all right, title, and interest in and to the '096 patent from the previous assignee of record. Coho possesses all rights of recovery under the '096 patent, including the exclusive right to recover for past infringement.
- 17. The '096 patent contains three independent claims and seventeen dependent claims. Defendant commercializes, *inter alia*, methods that perform all the steps recited in at least one claim of the '096 patent.
- 18. The invention described in the '096 patent includes a computer-implemented method for distributed processing.
- 19. The computer implemented method of the '096 patent comprises a first computer receiving from a plurality of computers a plurality of results related to a task, wherein said task comprises a plurality of task portions, wherein at least one said task portion comprises a plurality of subtask portions, wherein a first result received by said first computer is calculated from a first subtask portion by a fourth computer, said first subtask portion received by said fourth computer from a third computer, said first subtask portion being a divisible portion of a first task portion,

and wherein said third computer received said first task portion from a second computer; said second computer dividing said task into a plurality of task portions, including said first task portion; and wherein said receiving occurs via network communication.

Defendant's Infringement of the Asserted Patents

- 20. Defendant LinkedIn uses software that allows for the distributed processing of large data sets across clusters of computers that form a distributed application software framework. LinkedIn also uses a dataset analysis platform for analyzing large data sets that consists of a high-level language for expressing data analysis programs, coupled with a distributed application software framework infrastructure for evaluating these programs. Further, for example, LinkedIn created and uses a batch workflow scheduler Azkaban to run its distributed application software framework jobs. In the process of using Azkaban to run jobs using a distributed application software framework and the dataset analysis platform, LinkedIn performs a computer-implemented method for distributed processing in accordance with at least one claim of the '395 and '096 patents, respectively.
- 21. LinkedIn divides a task into a plurality of task portions. Azkaban, for example, defines a workflow archive file that consists of multiple jobs that make up the individual tasks of a flow. When the workflow is executed, Azkaban will run the set of jobs and processes in a particular order through job dependencies.
- 22. A LinkedIn allocating computer sends task portions to a sub-allocating computer. Furthermore, the sub-allocating computer receives the task portion. Azkaban jobs, for example, are started using plugin-based job executors located on a server for Azkaban. As an example, one of the job executors uses the dataset analysis platform executor, which compiles platform programs into distributed application software framework jobs and executes them in a distributed

cluster. However, distributed application software framework jobs can also be started using other job executors. There are 3 machine roles in a distributed application software framework used by LinkedIn: Client Machines, Job Trackers, and Task Trackers. The Job Tracker coordinates parallel processing of data using MapReduce. The Client Machine submits MapReduce jobs to the Job Tracker. The server for Azkaban fills the role of a Client machine in the MapReduce framework.

- 23. A LinkedIn sub-allocating computer allocates subtask portions to allocated computers, which receives the subtask portions. The Job Tracker receives a Map Reduce job consisting of map and reduce tasks to be run on input. The Job Tracker will split the input and assign the split input blocks to the individual map and reduce tasks, which are then scheduled to be run on Task Trackers.
- 24. In a LinkedIn distributed application software framework, a subtask portion comprises a portion of the task portion. For example, A MapReduce job consists of individual map and reduce tasks. A distributed application software framework task executes the individual map and reduce tasks. A distributed application software framework job consists of all the files and classes needed to run a Map Reduce job, including the individual map and reduce tasks.
- 25. A LinkedIn subtask processing computer processes the subtask portion, creating a result. For example, in LinkedIn's computer implemented method the Task Tracker receives and executes individual map or reduce tasks. Furthermore, when a map task is finished, the results of the computation are stored in local storage as intermediate data.
- 26. The LinkedIn subtask processing computer transfers the results to a results computer, which receives and stores results from a plurality of computers. In LinkedIn's computer implemented method, the Task Trackers transfer their intermediate data to a node

running a reduce task for final computation. The output is a file that is written to a distributed file system.

COUNT I (DIRECT INFRINGEMENT OF THE '395 PATENT)

- 27. Plaintiff realleges and incorporates by reference the allegations set forth in paragraphs 1-26.
- 28. Taken together, either partially or entirely, use of the features included in a batch workflow scheduler, dataset analysis platform and/or distributed application software framework perform the process recited in one or more of the claims of the '395 patent.
- 29. Defendant directly infringes one or more of the claims of the '395 patent by making, using, selling, offering to sell and/or importing the computer-implemented method for distributed processing described in the '395 patent in violation of 35 USC § 271(a).

COUNT II (DIRECT INFRINGEMENT OF THE '096 PATENT)

- 30. Plaintiff realleges and incorporates by reference the allegations set forth in paragraphs 1-29.
- 31. Taken together, either partially or entirely, use of the features included in a batch workflow scheduler, dataset analysis platform and/or distributed application software framework perform the process recited in one or more of the claims of the '096 patent.
- 32. Defendant directly infringes one or more of the claims of the '096 patent by making, using, selling, offering to sell and/or importing the computer-implemented method for distributed processing described in the '096 Patent in violation of 35 USC § 271(a).

DEMAND FOR JURY TRIAL

33. Coho demands a trial by jury of any and all causes of action.

PRAYER FOR RELIEF

Coho respectfully prays for the following relief:

- 1. That Defendant be adjudged to have infringed the Asserted Patents, literally and/or under the doctrine of equivalents;
- 2. That Defendant, its officers, directors, agents, servants, employees, attorneys, affiliates, divisions, branches, parents, and those persons in active concert or participation with any of them, be preliminary and permanently restrained and enjoined from directly and/or indirectly infringing the Asserted Patents;
- 3. An assessment of pre-judgment and post-judgment interest and costs against Defendant, together with an award of such interests and costs, in accordance with 35 U.S.C. §284;
- 4. That Defendant be directed to pay enhanced damages, including Coho's attorneys' fees incurred in connection with this lawsuit pursuant to 35 U.S.C. §285; and
- 5. That Coho have such other and further relief as this Court may deem just and proper.

Dated: September 17, 2013

BAYARD, P.A.

OF COUNSEL:

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