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

MEMORY INTEGRITY, LLC	
Plaintiff,	Civil Action No.
V.	JURY TRIAL DEMANDED
MICROSOFT CORPORATION,	JUNI IRIAL DEMIANDED
Defendant.	

## **COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff Memory Integrity, LLC ("MI"), by way of this Complaint for Patent Infringement ("Complaint") against the above-named Defendant Microsoft Corporation ("Microsoft" 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.

#### THE PARTIES

- 2. Plaintiff MI is a limited liability company organized under the laws of the State of Delaware with a place of business at 1220 N. Market Street, Suite 806, Wilmington, Delaware 19801.
- 3. On information and belief, Defendant Microsoft is a corporation organized under the laws of the State of Washington with its principal place of business at 1 Microsoft Way, Redmond, Washington 98052.

#### **JURISDICTION AND VENUE**

4. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338.

- 5. On information and belief, Defendant is subject to the jurisdiction of this Court by reason of its acts of patent infringement which have been committed in this Judicial District, and by virtue of its regularly conducted and systematic business contacts in this State. As such, Defendant has purposefully availed itself of the privilege of conducting business within this Judicial District; has established sufficient minimum contacts with this Judicial District such that it should reasonably and fairly anticipate being haled into court in this Judicial District; and at least a portion of the patent infringement claims alleged herein arise out of or are related to one or more of the foregoing activities.
  - 6. Venue is proper in this judicial district under 28 U.S.C. §§ 1391(c) and 1400(b).

### THE PATENT-IN-SUIT

- 7. On November 13, 2007, United States Patent No. 7,296,121 (the "'121 Patent"), entitled "Reducing Probe Traffic in Multiprocessor Systems," was duly and legally issued by the United States Patent and Trademark Office. A true and correct copy of the '121 Patent is attached as Exhibit A to this Complaint.
- 8. MI is the assignee and owner of the right, title and interest in and to the '121 Patent, including the right to assert all causes of action arising under said patent and the right to any remedies for infringement of it.

# COUNT I – INFRINGEMENT OF U.S. PATENT NO. 7,296,121

- 9. The allegations set forth in the foregoing paragraphs 1 through 8 are hereby realleged and incorporated herein by reference.
- 10. In violation of 35 U.S.C. § 271(a), Microsoft has directly infringed and continues to directly infringe, both literally and under the doctrine of equivalents, the '121 Patent by making, using, offering for sale, selling, and importing products (the "Accused Instrumentalities") and by performing methods that practice the subject matter claimed in one or

more claims of the '121 Patent, including but not limited to claim 1, in the United States, including within this Judicial District, without the authority of MI. For example, Microsoft has directly infringed the '121 Patent by selling products that contain a multicore processor that utilizes a probe filtering unit to reduce probe traffic in a computer system. The Accused Instrumentalities include, but are not limited to the Microsoft Surface.

- 11. Microsoft has had actual knowledge of the '121 Patent and its infringement of that patent since at least the date of service of this Complaint.
- 12. Microsoft is also inducing infringement of the '121 Patent under 35 U.S.C. §
  271(b), since at least the date of service of this Complaint, by actively aiding and abetting others
  (including its direct and indirect customers) whose sale, offer for sale, importation, and use of the
  Accused Instrumentalities constitutes direct infringement. Microsoft has engaged in these
  actions with either the specific intent to cause infringement or with willful blindness to the
  infringement that it is causing. For example, Microsoft's actions that actively induce its
  customers to directly infringe at least claim 25 of the '121 Patent include selling the Accused
  Instrumentalities, providing user manuals regarding use of the Accused Instrumentalities, and
  providing technical support regarding the use of the Accused Instrumentalities, where the use of
  the Accused Instrumentalities during normal operation by Microsoft's customers infringes at
  least claim 25 of the '121 Patent. The use of the Accused Instrumentalities identified above
  during normal operation directly infringes claim 25 of the '121 Patent in at least the following
  manner:
  - (a) The Accused Instrumentalities comprise a plurality of processing nodes because they contain multicore processors. The cores are connected in a point-to-point architecture and each core has an associated L1 cache memory;

- (b) One of the processor cores requests access to a memory line by transmitting a probe to the Snoop Control Unit (the probe filtering unit);
- (c) The Snoop Control Unit evaluates the probe using a copy of the L1 data cache tag RAMs which is representative of the states associated with selected L1 caches to determine whether a valid copy of the memory line is in any of the L1 caches;
- (d) The Snoop Control Unit transmits the probe only to selected ones of the cores identified in the evaluating step;
- (e) The Snoop Control Unit accumulates responses from the selected cores; and
- (f) The Snoop Control Unit responds to the original request from the first core.
- 13. Microsoft is also committing contributory infringement of the '121 Patent under 35 U.S.C. § 271(c) since at least the date of service of this Complaint by importing and selling the Accused Instrumentalities to others, including but not limited to its customers, knowing and/or being willfully blind to the fact that these products constitute a material part of the invention, were especially made or especially adapted for use in an infringement of the '121 Patent, and have no substantial non-infringing uses. For example, the Accused Instrumentalities constitute a material part of the claimed invention at least because they contain all of the components that perform the method of reducing probe traffic in a computer system as claimed in claim 25 of the '121 Patent. The Accused Instrumentalities were made or especially adapted for use in an infringement of the '121 Patent and have no substantial non-infringing uses at least because they contain components whose only purpose is to reduce probe traffic in a computer system as claimed in claim 25 of the '121 Patent. The use of the Accused Instrumentalities

identified above by Microsoft's customers during normal operation directly infringes claim 25 of the '121 Patent in at least the following manner:

- (a) The Accused Instrumentalities comprise a plurality of processing nodes because they contain multicore processors. The cores are connected in a point-to-point architecture and each core has an associated L1 cache memory;
- (b) One of the processor cores requests access to a memory line by transmitting a probe to the Snoop a. Control Unit (the probe filtering unit);
- (c) The Snoop Control Unit evaluates the probe using a copy of the L1 data cache tag RAMs which is representative of the states associated with selected L1 caches to determine whether a valid copy of the memory line is in any of the L1 caches;
- (d) The Snoop Control Unit transmits the probe only to selected ones of the cores identified in the evaluating step;
- (e) The Snoop Control Unit accumulates responses from the selected cores; and
- (f) The Snoop Control Unit responds to the original request from the first core.
- 14. MI has been harmed by Microsoft's infringing activities.

## **JURY DEMAND**

MI demands a jury trial on all issues and claims so triable.

#### PRAYER FOR RELIEF

**WHEREFORE**, MI prays for judgment as follows:

- a. An adjudication that Microsoft has infringed the '121 Patent;
- b. An award of damages to be paid by Microsoft adequate to compensate MI for past infringement of the '121 Patent, and any continuing or future infringement through the

date such judgment is entered, including prejudgment and post-judgment interest, costs, expenses and an accounting of all infringing acts including but not limited to those acts not presented at trial;

- c. An order that Microsoft pay an ongoing royalty in an amount to be determined for any continued infringement after the date judgment is entered; and
- d. Such further relief at law and in equity as the Court may deem just and proper.

Dated: November 26, 2013 STAMOULIS & WEINBLATT LLC

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