IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

IN RE INTEL CORPORATION MICROPROCESSOR ANTITRUST LITIGATION	MDL No. 05-1717-JJF
ADVANCED MICRO DEVICES, INC. and AMD INTERNATIONAL SALES & SERVICE, LTD., Plaintiffs, vs. INTEL CORPORATION and INTEL KABUSHIKI KAISHA, Defendants.	C. A. No. 05-441-JJF DM No. ___ REDACTED PUBLIC VERSION
PHIL PAUL, on behalf of himself and all others similarly situated, Plaintiffs, vs. INTEL CORPORATION, Defendant.	C. A. No. 05-485-JJF

DECLARATION OF TONY CARDINE IN SUPPORT OF AMD'S MOTION FOR SANCTIONS FOR INTEL'S FAILURE TO PRESERVE EVIDENCE

I, Tony Cardine, declare and state as follows:

1.   If called as a witness in this matter, I could and would testify competently to the following facts, all of which are within my own personal knowledge.

2.   I am Director of Project Management for Forensics Consulting Solutions ("FCS"), an electronic discovery service provider retained by Advanced Micro Devices, Inc. ("AMD") in this matter. I make this declaration in support of AMD's Motion for Sanctions for Intel's Failure to Preserve Evidence.

3.   Attached to this declaration as Exhibit A is a true and correct copy of a file count report generated by FCS for 113 AMD custodians. The report contains produced email count information for each of the 113 AMD custodians. The produced email count information is broken down on a monthly basis for each custodian from April 2005 through the custodian's respective production cut-off.

4.   The report contains two columns of email count information. The column titled "Unique Produced" reports the number of unique emails that AMD produced for each custodian from data sources that AMD harvested for that custodian, including hard drives, network space, removable storage devices, email archival systems, and backup tapes. The email count figures in the "Unique Produced" column were generated by FCS for all 113 custodians except   REDACTED

REDACTED   The figures for these four custodians were generated by Stratify, as explained in the Declaration of Sanjeev Srivastav, which is the electronic discovery service provider that hosts the data harvested for these custodians, and incorporated into Exhibit A by FCS.

5.   Email from backup tapes was produced only for the following custodians that are listed in Exhibit A: REDACTED
                    REDACTED

REDACTED

6.   For each of the custodians listed in this paragraph, the column of

Exhibit A titled "Unique OCF" reports the number of unique emails that, on April 29,

2009, Intel asserted were sent or received by the subject custodian prior to being placed

on Exchange Journaling[1] but produced only from the files of other AMD custodians[2]:

except that this number of emails was reduced to reflect any matches for these emails

harvested in connection with AMD's backup tape restorations for the following

custodians: REDACTED

                                       REDACTED

REDACTED   The "Unique OCF" count excludes what Intel in its April 29, 2009 histograms

labeled as "Mail After Accounting for Thread Suppression."

7.   To identify matches to the emails Intel identified as "Missing from

Custodian Production" by Intel on April 29, 2009, FCS followed the steps explained

below. First, FCS identified any emails in a given custodian's backup tape collection that

matched the same sender (or any aliases for that sender), sent date, and sent time down to

the millisecond (allowing for offsets of exactly +1, -1, +2, or -2 hours) of any email

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[1] Exchange Journaling is a feature of Microsoft Exchange software that allows for an automatic copy to be made of any email sent or received by an electronic mailbox subject to Exchange Journaling.
[2] Intel specifically labeled these files as "Missing from Custodian Production".

identified for that custodian by Intel as "Missing from Custodian Production" on April 29, 2009. Second, FCS identified any messages within a given custodian's backup tape collection that had an identical "thread hash" value[3] to an email identified for that custodian by Intel as "Missing from Custodian Production," were of greater or equal message length than that email, and were dated later in time. A full-text matching algorithm was then applied to these messages to verify that the content of the shorter message was wholly contained in the longer message. If a match for a "Missing from Custodian Production" email was identified under either of these approaches, it was not included in the "Unique OCF" total for the custodian in question. This approach possibly understates the count of "Unique OCF" emails for any custodian listed in paragraph 6.

8.   For each of the following custodians, the column titled "Unique OCF" reports the number of unique emails that, on March 2, 2009, Intel asserted were sent or received by the subject custodian prior to being placed on Exchange Journaling but were produced only from the files of other AMD custodians (i.e., "Missing from Custodian Production"):   REDACTED   The "Unique OCF" count excludes what Intel in its March 2, 2009 histograms labeled as "Mail After Accounting for Thread Suppression."

9.   For each of the following custodians, the column titled "Unique OCF" reports the number of unique emails that, on November 14, 2008, Intel asserted were sent or received by the subject custodian prior to being placed on Exchange Journaling but

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[3] As previously disclosed to Intel, the "thread hash" value is a hash code computed using the first 200 characters of the normalized subject field and the last 20 characters of the email body.

were produced only from the files of other AMD custodians: REDACTED

REDACTED

10.   For each of the following custodians, the column titled "Unique OCF" reports the number of unique emails that FCS identified as having been sent or received by the subject custodian prior to being placed on Exchange Journaling, but produced only from the productions of other AMD custodians: REDACTED

REDACTED

11.   To identify "Unique OCF" counts for these custodians, FCS searched for all emails sent or received by each custodian in AMD's production (outside of the custodian's own production) in the period prior to the month in which the custodian's email was subject to Exchange journaling (the "Potential OCF Set"). FCS then removed

exact duplicates within the Potential OCF Set.   Next, FCS reduced the size of the Potential OCF Set by identifying emails from the Set that might be contained in the custodian's email data collection (either as exact copies or as part of longer email chains). Emails so identified were also deducted from the monthly "Unique OCF" totals for that custodian.

12.   To identify emails from the Potential OCF Set that might be contained within the custodian's data collection, FCS took the following steps. First, it identified any emails within the custodian's collection that matched the same sender (or any aliases for that sender), sent date, and sent time down to the millisecond (allowing for offsets of exactly +1, -1, +2, or -2 hours) of an email within the Potential OCF Set. Second, FCS identified any email messages within the custodian's collection that had an identical "thread hash" value, were of greater or equal message length, and were dated later in time than an email from the Potential OCF Set. A full-text matching algorithm was then applied to these messages to verify that the content of the shorter message was wholly contained in the longer message. Possible matches identified using either method were not included in the "Unique OCF" total for that custodian. The results produced by these methods possibly understate a custodian's OCF counts.
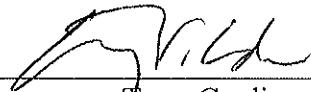
13.   For custodians   REDACTED   the column "Unique OCF" reports the number of unique emails that FCS, working in conjunction with Stratify, identified as having been sent or received by the subject custodian prior to being placed on Exchange Journaling, but produced only from the productions of other AMD custodians. For its part in this process FCS searched for all

emails sent or received by each custodian in the population of produced emails for all custodians hosted at FCS (which did not include the custodian's own production, which was hosted at Stratify). FCS then delivered a report for each custodian identifying the emails returned by the search just described. The report contains various metadata fields for each such email. Stratify analyzed this report, as described in the Declaration of Sanjeev Srivastav, and returned a report of "Unique OCF" counts to FCS for REDACTED

REDACTED These "Unique OCF" counts have been incorporated into Exhibit A for those custodians.

I declare under the penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Dated: October 14, 2009.

_____
Tony Cardine

CERTIFICATE OF SERVICE

I hereby certify that on October 14, 2009, I electronically filed the foregoing docum ent

with the Clerk of Court using CM/ECF and have sent by electronic mail to the following:

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I hereby certify that on October 14, 2009, I ha ve sent by electronic m ail the foregoing

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