IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

IN RE INTEL CORPORATION MICROPROCESSOR ANTITRUST LITIGATION	MDL No. 1717-JJF
ADVANCED MICRO DEVICES, INC., a Delaware corporation, and AMD INTERNATIONAL SALES & SERVICES, LTD., a Delaware corporation, Plaintiffs, v. INTEL CORPORATION, a Delaware corporation, and INTEL KABUSHIKI KAISHA, a Japanese corporation, Defendants.	C.A. No. 05-441-JJF
PHIL PAUL, on behalf of himself and all others similarly situated, Plaintiffs, v. INTEL CORPORATION, Defendants.	C.A. No. 05-485-JJF CONSOLIDATED ACTION

PLAINTIFFS' JOINT PRELIMINARY CASE STATEMENT

REDACTED -- PUBLIC VERSION

RICHARDS, LAYTON & FINGER, P.A.

Frederick L. Cottrell, III (#2555)
Chad M. Shandler (#3796)
Steven J. Fineman (#4025)
One Rodney Square
920 North King Street
Wilmington, DE 19899
(302) 651-7836
cottrell@rlf.com
shandler@rlf.com
fineman@rlf.com

OF COUNSEL:

Charles P. Diamond
Linda Smith
Mark Samuels
O'Melveny & Myers LLP
400 South Hope Street
Los Angeles, CA 90071-2899

Counsel for Advanced Micro Devices, Inc. and *AMD International Sales & Services, Ltd.*

Dated: May 1, 2008

PRICKETT JONES & ELLIOTT, P.A.

James L. Holzman (#663)
J. Clayton Athey (#4378)
1310 King Street
P. O. Box 1328
Wilmington, DE 19899
(302) 888-6509
jlholzman@prickett.com
jcathey@prickett.com

Interim Liaison Counsel and Attorneys for Phil Paul, on behalf of himself and all others similarly situated

Dated: May 1, 2008

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I. STATEMENT OF THE CLAIM

A. Introduction and Summary of Intel's Exclusionary Conduct

By the close of the 1990s, Intel faced the unimaginable – the potential loss of the near total dominance of the x86 microprocessor market that it had enjoyed since the introduction of the PC in 1983. Its "upstart" rival, AMD, consigned for much of the prior fifteen years to copying Intel architecture, brought to market a suite of performance-setting chips offered at a fraction of Intel's price. AMD began taking marketshare from Intel, initially for computers sold to consumers at retail. [redacted][1] AMD's expanding presence in consumer retail [redacted]

But the AMD threat was not limited to sales of microprocessors for consumer machines. When Compaq threatened in 1999 to begin using AMD processors in computers targeted for small and medium businesses ("SMB"), [redacted]

As the next decade opened, things only got worse for Intel, particularly as its efforts to consign AMD entirely to the high-cost, low profit consumer part of the market faltered. AMD continued to gain traction with brand-name computer-makers (referred to as "OEMs"), increasing its processor sales for computers targeted for small and medium businesses as well as consumers. And with the introduction of AMD's K-8 series of chips in 2003, AMD dramatically bested Intel almost across the board. More significantly, for the first time it gained entrée into the highly profitable business of supplying processors for computers purchased by large public and private enterprises. Introduced initially at the very high end of the commercial market for data centers, AMD's new Opteron processors were [redacted] AMD had flat-out seized technological leadership.

As Intel began the long climb toward regaining technical parity, a goal it would not achieve until 2006, it realized the critical importance of containing AMD before it reached efficient scale and, in turn, the ability to compete effectively in future rounds of product and process innovation. Antitrust compliance went out the window, as Intel scurried to lock AMD out of as many customers and market segments as possible. Among other things, Intel seized

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[1] Text set off in quotation marks has been extracted from documents produced in this litigation.

upon the following exclusionary tactics:[2]

- **Payments for Exclusivity.** Despite public denials, Intel paid off customers to boycott AMD.[3] [redacted] payments Intel made to Dell – until recently, the world's largest computer-maker. [redacted] At various times, Intel also paid Gateway, Acer, the major Japanese OEMs, and various system builders and distributors to close their doors to AMD.

To highlight particular passages, we have set them out in ***bold italics***.

[2] These tactics, which excluded AMD from huge swaths of the x86 microprocessor market, are at the heart of both AMD's and Class Plaintiffs' Section 2 Sherman Act case and Class Plaintiffs' parallel Cartwright Act, California UCL and other state law claims. Further, much of the discovery necessary to stitch together admissible evidence of the tactics is common to both AMD and the Class, as are the fundamental legal principles underlying their respective claims. Accordingly, this Preliminary Pretrial Statement is presented on behalf of both AMD and the Class.

[3] "'We don't buy exclusivity,' responds Intel general counsel Bruce Sewell, 48, flatly." *Fortune Magazine* (August 21, 2006).

- **Payments for Sector and Channel Exclusion.** Where it couldn't buy company-wide exclusivity, Intel focused its payments on foreclosing AMD from specific sectors of the market critical to AMD's success. Intel has deployed this weapon most successfully to keep AMD-based computers away from large business customers, [redacted]

- **Payments To Cancel or Delay AMD-Powered Platforms.** Another favored Intel tactic was to pay off customers to abandon development of a particular AMD computer model they had decided to launch. Intel typically made these payments to cripple new product announcements essential to the successful launch of a new line of AMD processors, or to nip in the bud AMD inroads into sectors Intel viewed as critical. [redacted]

- **Quantity-Forcing, All-or-Nothing Discounts.** Intel regularly employs a discount scheme that is designed to make it uneconomic for AMD to compete for a customer's available business. Key to this practice is Intel's ability to leverage the large share of its customers' requirements that they must obtain from Intel in any event. Intel is an unavoidable trading partner for all OEMs and most other microprocessor customers.

Because of brand awareness created by Intel's extensive advertising, conservatism which makes corporate purchasing agents favor established brands, platform stability considerations that require OEMs to continue the production of previously introduced computers for eight to twelve quarters, and just plain Intel market dominance, quarter-to-quarter AMD is only able to compete for a very small share of any customer's business.[4] Knowing this, Intel leverages its uncontestable control over the dominant share of the customer's business to capture its contestable business. Intel accomplishes this by offering to discount the price of its non-contestable microprocessors on the condition that the customer also buy its contestable needs from Intel. This imposes a disproportionate, and often unaffordable, cost on AMD. To capture the contestable units, it must not only meet Intel's discounted price on those units, but also charge a price sufficiently lower so that it makes the customer whole for its discount loss on the non-contestable units that Intel's all-or-nothing scheme imposes.[5]

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[4] Although Intel and AMD microprocessors are programmed with the same x86 instruction set, and can therefore run the same x86 software, they are not interchangeable since each must be mated with compatible graphics and other chipsets on the motherboard. Hence, once an OEM launches a platform, it can only source microprocessors from the original microprocessor supplier, be it AMD or Intel, thus locking the other out for the life of that platform. Competition is limited to new platforms, not existing ones.

[5] Intel's practice is most easily explained using a very simplified example. Consider an OEM with requirements of 100 microprocessors (or 100%) for the upcoming quarter, 80 (or 80%) of which must be purchased from Intel. Intel may nominally price those at $100 per processor but offer the customer a $20 discount if it agrees also to buy the contestable units from Intel and not AMD. If the customer buys all 100 from Intel, it pays $80 apiece. If it only buys 80 from Intel, Intel ups the price to $100 each, in effect imposing a penalty of $1,600 for dealing with AMD. Consequently, AMD must charge a price that makes the customer whole for the $1,600 penalty, if it is to capture the available business. In this example, the effective Intel price for the 20 contestable units that AMD must beat is zero since the customer's Intel outlays will be the same if it buys all 100 hundred from Intel ($80

Of course, the notion of discounting the price of units that Intel will sell anyway is simply an illusion (what rational supplier sells for less than full price parts the customer must buy from him anyway?). Its only purpose is to hide the fact that Intel is deeply discounting contestable units [redacted] to keep that business from falling into the hands of a competitor. And as Intel has proven, first-dollar, conditional rebates are an extremely effective way for a dominant firm to leverage its "must have" position to box out a competitor from sales that might otherwise be available to it. Indeed, [redacted], Intel used just this tactic to [redacted]

- **Predatory Bid Pricing**. Despite Intel's exclusionary efforts, AMD's Opteron so outperformed Intel's competitive product that several OEMs began offering an AMD server solution. Servers are frequently sold in large numbers on a bid basis to highly sophisticated end users, typically large corporate, governmental or educational data centers. Purchases of AMD-powered servers by these highly regarded technology leaders had the potential to validate AMD's technological superiority and expedite the introduction of its 64-bit architecture into the broader commercial space.

Seeking both to deny AMD such validation and to deter further OEM defection, Intel [redacted]

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x 100 =$8,000) or just 80 ($100 x 80 = $8,000). AMD cannot stay in business giving its

[redacted]

- **Threats of Retaliation Against OEMs.** The various carrots Intel offers to coax loyal behavior have to be considered in the context of the many sticks it deploys to punish what it considers disloyal conduct. Intel's reputation for retaliation is widespread. The forms of its punishment are myriad. It has a history of delaying or withdrawing marketing funds or other discretionary payments, engaging in hyper-technical quibbling over a customer's entitlement to ostensibly non-discretionary ones (such as Intel Inside money); withholding critical technical and roadmap information; allocating scarce products away from those seen as disloyal; and generally scaling back the level of customer support. These tactics serve to reinforce the inducements Intel regularly dispenses by reminding the industry that disloyal customers can expect their rivals to receive preferential treatment from Intel that will tip the competitive balance. [redacted]

- **Technical Exclusion and Cost Raising.** Hand in glove with Intel's system of financial rewards and penalties, Intel has deployed a host of anticompetitive initiatives to

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chips away for free.

limit AMD's marketshare growth, to raise its costs of competing with Intel, and to degrade performance of AMD products and impugn them in the marketplace. Intel's bag of "dirty tricks" includes: (1) the distribution to independent software writers of Intel compiler software that is secretly designed to degrade artificially the performance of the writers' software when run on AMD-based computers, (2) the manipulation of benchmarking standards to create a false public impression that AMD processors are sub-standard, (3) the manipulation of industry technical standards in a manner designed to prevent or substantially delay AMD's entry into certain markets entirely, (4) the execution of deals with third parties that result in the loss of product features when used with AMD-based computers, and (5) a host of similar brand-damaging stunts that are now just coming to light.

B. AMD Innovation Breakthroughs that Led Intel To Unlawfully Exclude.

The forces that led Intel to resort to anticompetitive exclusionary conduct trace back to the origins of its monopoly in the early 1980s. Intel did not earn its monopoly; it was handed it by IBM. As part of IBM's development of its line of personal computers (which became the standard for PCs), it considered all available microprocessor architectures (including AMD's), settling in 1981 on the line of processors derived from Intel's 8086 chip. However, IBM refused to be dependent on Intel as a monopoly supplier. As part of the contract with IBM, Intel agreed to publish its technical standards openly, to facilitate second-source manufacturing of Intel-designed chips, and it licensed AMD (and others) to begin selling other versions of Intel's microprocessors to IBM.

Intel's x86 microprocessor architecture soon became the accepted industry standard, and additional OEMs began designing x86 computers. The x86 instruction set, along with the

Microsoft Windows operating system, became essential ingredients of personal computing. With the exception of AMD, rival suppliers found it impossible to compete with Intel, and one by one were driven from the market. Propelled by its success, Intel became much more restrictive with its second-sourcing licenses and refused to acknowledge the applicability of AMD's license to Intel's newly released 386 chip or any future generations of x86 microprocessors. Litigation ensued, and several years later the parties forged a settlement that required AMD to reinvent itself. Henceforth, it agreed, it would cease offering pin-for-pin replicates of Intel microprocessors. In return for ridding itself of a second-source for its designs, Intel granted AMD a permanent, nonexclusive and royalty-free license to the x86 instruction set, but not to Intel's x86 architecture. In short, to remain a long-term supplier of x86 microprocessors, AMD would have to develop its own proprietary x86 microprocessor architecture and become a full-fledged innovation rival to Intel.

The move from second-source to innovation rival posed supreme challenges. Most significantly, it required AMD to commit to the heightened product and process innovation pace that its entry as a full innovation rival would both require and further stimulate. Technology in both product design and fabrication process moves fast in the world of computing, and AMD's emergence as an x86 innovation rival would serve to push innovation even faster. Moreover, AMD understood that to compete successfully with Intel, it would be required to develop a product in all three major segments of the x86 computing market – desktop, mobile, and server. Otherwise, Intel would exploit its total monopoly in the unserved segments to leverage AMD's exclusion from the served segments. Because AMD had not previously manufactured a microprocessor directed to the high performance server segment, it would be required to develop such a product essentially from scratch.

These challenges carried enormous, multi-billion dollar price tags. Simply to fund on an ongoing basis both research and development ("R&D") and the construction and equipping of new facilities at which to fabricate each new generation of microprocessors ("fabs"), AMD needed to win a sizable share of the market. By its analysis, it needed to earn between 20% and 30% of industry revenue and achieve a product mix that included significant higher-profit commercial sales. But an even larger share would be necessary (which it estimated as between 30 and 35%) to overcome Intel's leveraging of its dominant position with major OEMs, and to achieve full credibility as a reliable supplier of Tier 1 OEMs.

But a string of technological coups presented AMD with the opportunity of reaching these critical milestones. As noted earlier, by April 1997, AMD had designed and introduced its new architecture in a desktop microprocessor – the K6 – that was smaller, faster, and easier to use than Intel's competitive desktop offering (Pentium II), and it presented Intel with serious competition. In June 1999, AMD introduced a next-generation (K-7) microprocessor (Athlon) suitable for both desktop and mobile. The Athlon was notable not only in that it beat its Intel counterpart (Pentium III) on just about every benchmark, but that it maintained its performance lead through successive generations, a feat that won it the prestigious Maximum PC "CPU of the Year" award three years running. The Athlon opened doors at the handful of computer-makers who constitute the Tier 1 OEMs of the industry (*e.g.*, HP, IBM, Sony, Toshiba) and helped establish AMD's reputation in the technology community as a truly significant innovation player.

Most game changing, however, was AMD's introduction of the Opteron microprocessor for the server market in April 2003 and the Athlon64 family of microprocessors for the desktop and notebook markets beginning in September 2003. With these products, AMD became the first company to introduce 64-bit extensions to the x86 instruction set, and thus to provide a

simple transition for computer users from the standard 32-bit chip architecture to the dramatically faster 64-bit computing.[6] Intel followed a different path to 64-bit computing: it pushed for abandonment of the x86 instruction set, which would have rendered existing software obsolete. Sophisticated IT end-users, such as Pixar, ExxonMobil, JP Morgan Chase, Google, DreamWorks, Morgan Stanley and other larger data center operators rejected the Intel path and instead began to drum their suppliers for AMD 64-bit computers. So successful were these products that they opened up a technological lead for AMD in the high end of the market that was to persist until 2006. Indeed, that lead only widened when, in May 2005, AMD beat Intel to the "dual core" punch by offering power-conserving microprocessors that can share computing tasks across two or more processing cores.

C. Intel's Objective of Preventing AMD from Reaching Minimum Viable Scale

The pace of AMD's technical progress led Intel to conclude that it had to clamp down before it was too late. Intel has long recognized that AMD is its only potential x86 rival. Existing intellectual property rights – both Intel's and AMD's – amassed over the twenty-five years of x86 computing, represent a virtually insurmountable entry barrier. Even if technically possible, entrants would require billions of dollars and years of R&D to effect a competing design. Additional billions of dollars would be required to maintain a minimally competitive pace of innovation with the market leaders, and to build or procure current-generation fab capacity.[7]

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[6] x86 64-bit technology dramatically improves the performance of computer systems. Addressing 64-bits of data at once allows computer systems to access a much larger amount of memory and vastly improves system performance.

[7] High volume production early in a new microprocessor product cycle is also critical. A sustainable participant must quickly ramp up to a high level of production to drive down the per-

But as Intel has recognized, the exorbitant costs of competing in the x86 microprocessor market likewise challenge AMD's ability to remain a viable innovation competitor to Intel. Intel has consistently earned more than an 80% ***revenue*** share over the past ten years. What's left over is not sufficient to sustain the level of investments necessary to remain a viable innovation competitor. Intel is keenly aware of this. At an open forum dinner in January 2001, for example, where Intel's CEO Paul Otellini proclaimed that Intel will "NEVER fall behind the performance curve again," he openly acknowledged Intel's intent to leverage its dominant position, proclaiming that a supplier with an 18% share of the market "can't fight off" a supplier with over 80% of the market.

Maintaining marketshare and preventing AMD from reaching critical mass became a central part of Intel's competitive strategy as AMD emerged as Intel's technological equal in the late 1990's, and eclipsed it early in the succeeding decade. The goal was to contain AMD's marketshare growth as much as possible during the period of time it would take for Intel to get back on its technological feet. More importantly, its central objective was to keep AMD below the level necessary for it to achieve long-term sustainability. To accomplish this, Intel single-mindedly sought to maintain an 80% market share by any and all available means, and to relegate AMD to earning the balance in the least profitable segments of the business – generally retail consumer where average chip prices are the lowest and selling costs are the highest. [redacted]

[redacted]

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unit cost of manufacturing a single microprocessor. This presents an insurmountable "chicken and egg" problem: volume requires customers willing to place large orders, but no reputable OEM is likely to order in quantity until an entrant has launched non-infringing, technologically competitive products, demonstrated the ability to ramp its production, and won over other

[redacted]

To be sure, Intel included among its containment tactics legitimately competitive components, such as redoubling investments in R&D and competing more aggressively on price. But the backbone of its strategy was to cut AMD off from the most important customers, the most profitable market segments and the most valuable opportunities for establishing and evangelizing the AMD brand, all with the goal of preventing AMD from achieving sustainable scale.

D. Intel's Efforts Succeeded in Containing the AMD Threat

By its exclusive and near-exclusive deals, Intel orchestrated near game-ending exclusion of AMD. [redacted][8] And these foreclosure numbers fail to take into account the other opportunities that seemingly were open to AMD, but were in fact denied by the OEM's fear of Intel retaliation.

On a revenue basis, Intel foreclosed even more of the market. That is because in high-value sectors with greater average selling prices, Intel [redacted]

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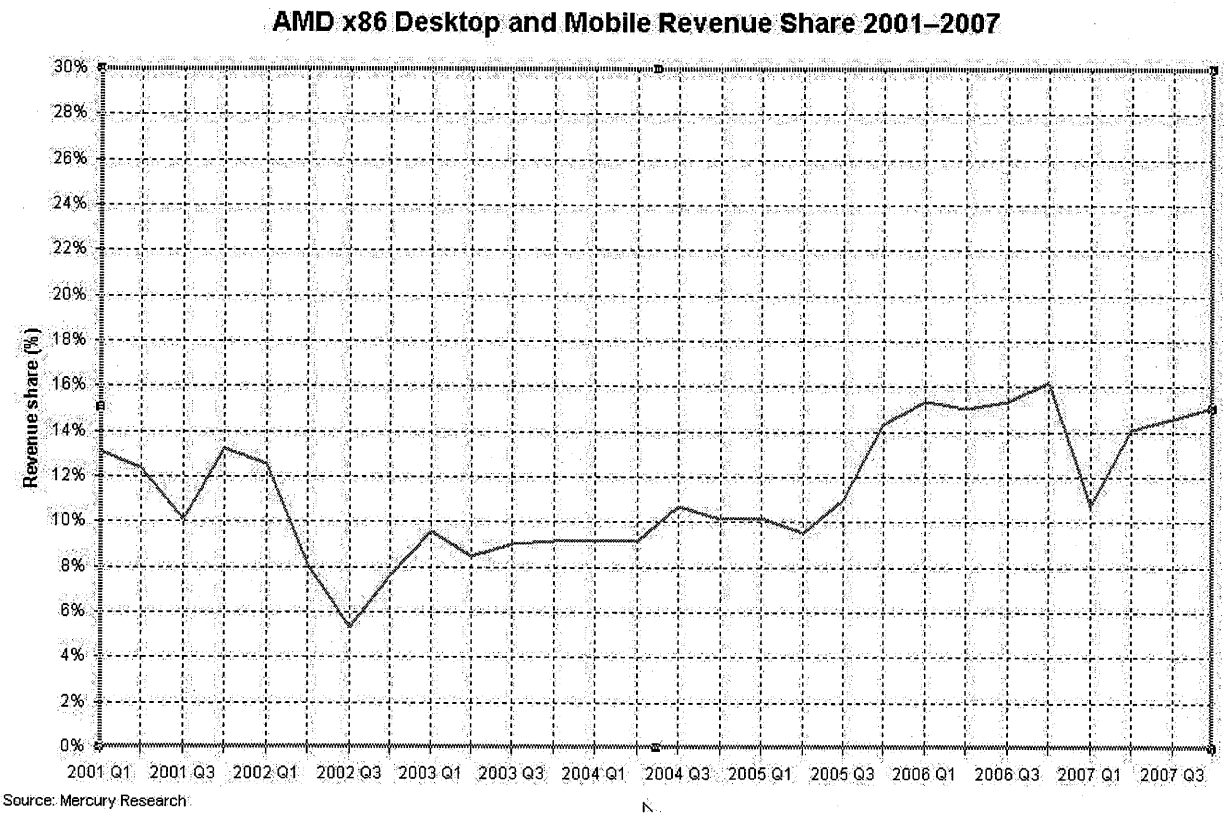
participants in the x86 ecosystem (e.g., chipset and graphics card manufacturers) whose support is essential.

[8] AMD was left generally with the business of smaller customers, thinly spread throughout the worldwide x86 ecosystem, serviced by the distribution channel who buy a lower margin mix of products than do the Tier One OEMs.

[redacted] By foreclosing AMD from even accessing what probably amounts to [redacted] of x86 revenue, Intel assured that AMD could never achieve sustainable scale since doing so would mean capturing ***virtually all*** of the business of the few available customers against a must-carry, entrenched brand.

Intel's exclusionary strategy largely succeeded. Measured on a revenue share basis, AMD made little progress in growing its slice of the pie, not surprising with so many doors closed to it. Indeed, as shown in the following chart, up until the June 2005 filing of this lawsuit and contemporaneous international enforcement actions that caused Intel to moderate its misconduct (and that emboldened its customers), AMD's technologic successes earned it a lower share of desktop and notebook revenues than it had achieved during most of 2001 and early 2002. Through the end of 2008, it garnered roughly 13% of total x86 microprocessor revenues, less than half of what it requires to operate long-term as a sustainable business.



II. EXCLUSIONARY CONDUCT CONTENTIONS

Other than living with its effects, AMD has no first-hand knowledge of the tactics Intel has deployed to keep customers from doing business with AMD. The initial source material for proving up a violation comes from document productions. But Intel has blanketed Plaintiffs under a blizzard of documents. What it contends amounts to the equivalent of 140 million pages has just been produced, much in the past ninety days. Additional caches of documents are being received continuously from Intel's customers, though many, including important OEMs such as HP, have yet to produce their first document. Hence, Plaintiffs' knowledge of the full array of Intel's exclusionary practices must be regarded as preliminary.

Moreover, Intel's document production is an unreliable source of proof since Intel has made sure that the written record tells little of the story. Putting aside its reckless, if not

intentional, destruction of untold numbers of email and other electronic documents in this case, Intel embraces a culture that erases its history as soon as it is created. Stretching back well over a decade before this lawsuit, Intel has implemented, refined and vigorously enforced a corporate policy designed to keep its anti-competitive activities under wraps. [redacted] But there's more. To ensure that its employees do not create any paper trails, Intel stages mock raids of employee offices and uses "bad" documents to conduct mock depositions. [redacted] Intel totally botched its preservation of documents in this case.[9]

The corporate culture at Intel is that of a company under siege, and it translates into lawlessness at the highest levels. [redacted]

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9 [redacted] AMD calculates that the equivalent of [redacted]

[redacted][10][redacted]

But even working from a tainted and damaged written record, and even at this early stage, Intel's exclusionary fingerprints can be found throughout the worldwide market for microprocessors. That market consists principally of two groups: (1) computer manufacturers who either buy microprocessors directly from AMD and Intel, or buy through distribution and (2) independent distributors who buy microprocessors from Intel and AMD for resale to smaller computer manufacturers, specialized system builders, specialty retailers and home hobbyists. Intel has attempted to impose roadblocks to AMD's penetration of both parts of the market.

Computer-makers fall into one of three general categories: large multinational OEMs that buy microprocessors directly from Intel and AMD; smaller regional or local OEMs supplied through distribution; and "white-box" manufacturers or system-builders which generally produce unbranded or private label computers. The latter generally sell in the retail consumer and SMB segments, or offer specialized computing systems (often including software) tailored for distinct end-user groups. We offer below highly abbreviated, customer-by-customer summaries of what at this very early stage we expect the evidence will show, summaries that have been pieced together largely on the basis of what can be inferred from the "paper" record. In footnotes, we

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10 [redacted]

identify the principal players – both from Intel and its customers – whose information will likely be needed to confirm Plaintiffs' understanding of the facts and to transform this fragmentary written record into admissible evidence of unlawful exclusion.

A. Unlawful Exclusion of AMD from Tier 1 OEMs

The largest OEMs, or "Tier Ones" as they are sometimes referred to in the industry, account for roughly 80% of worldwide server and workstation (specialized high-powered desktops) sales, some 40% of desktop sales and nearly 80% of notebook sales. A handful of large OEMs dominate in both desktop and notebook: Hewlett-Packard ("HP"), which acquired Compaq Computer in 2002; Dell; IBM, which sold its PC (but not server) business to Lenovo in May 2005; Fujitsu; and Fujitsu-Siemens. Acer (which completed its purchase of Gateway/eMachines in October 2007), NEC, Toshiba and Sony are also commonly considered Tier One OEMs, the last two principally in the notebook segment of the PC market. Dell and HP are the dominant players, collectively accounting for over 30% of worldwide desktop and mobile sales, and almost 60% of worldwide server sales.

In terms of microprocessor purchases, the Tier Ones are critical. Not only do their purchases comprise an inordinate share of the market, but the leading ones – HP, Dell and IBM/Lenovo – control most of the higher value, enterprise business. Not surprisingly, [redacted]

1. Dell

a) Exclusive Dealing

From the time Dell started making computers in 1984 until May 2006 – a period spanning more than 22 years – Dell did not buy a single AMD microprocessor. [redacted]

[redacted][11]

[redacted]

[11] These amounts only include funds [redacted]

[redacted]

As end-user demand for AMD products increased, Dell [redacted]

[redacted]:

[redacted]

Intel's [redacted]

[redacted]

[redacted]

When Dell announced its addition of AMD-based product in May 2006, [redacted]

[redacted]

While it lasted, Dell's exclusivity [redacted]

[redacted]

[redacted]:

[redacted]

[redacted]

[redacted]

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12 [redacted]

[redacted]

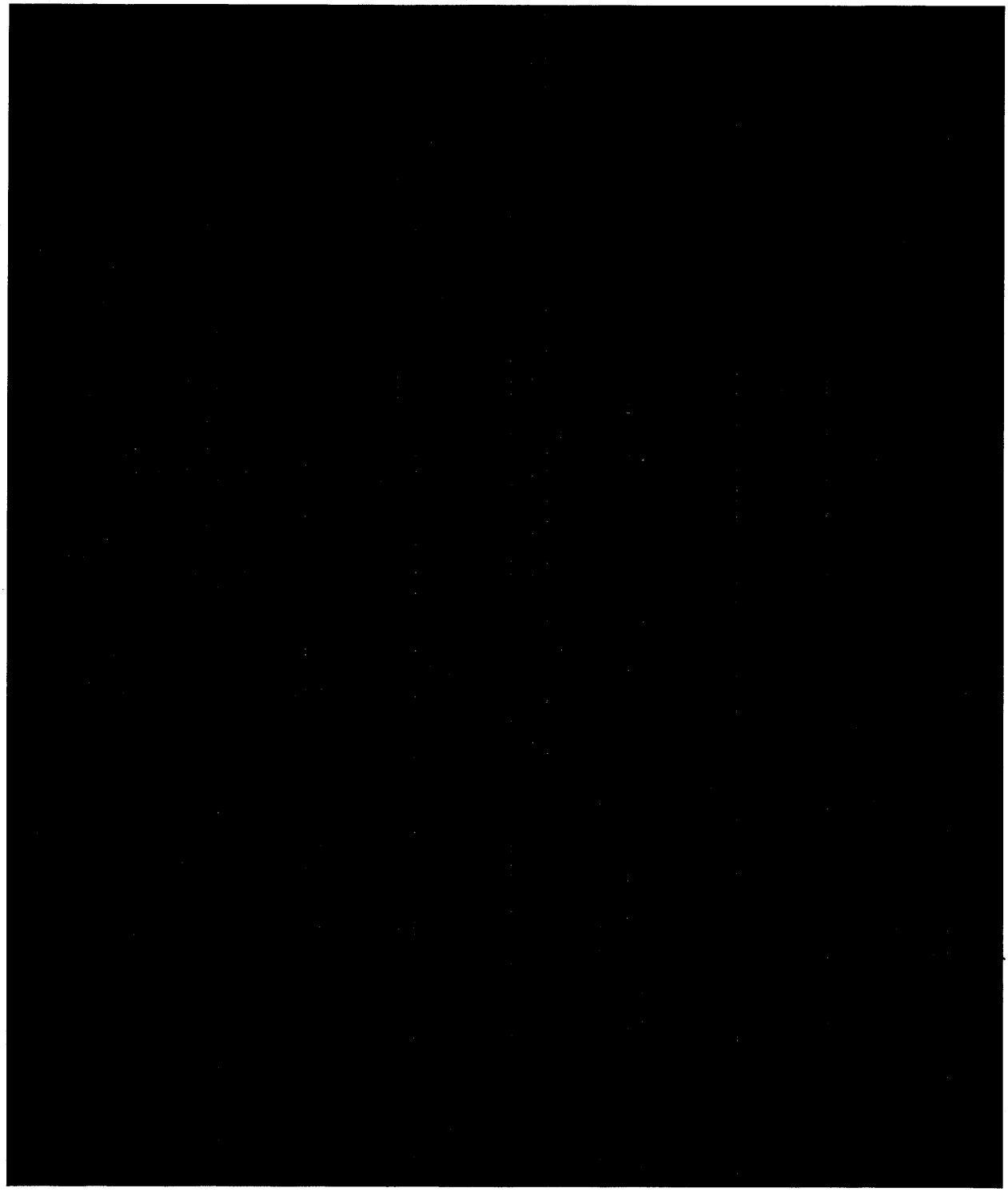
When Dell finally added AMD product in the summer of 2006, [redacted]

As best we can piece together without the benefit of deposition testimony, [redacted][13] Until the bargaining participants are

[redacted]

[13] The following Intel employees (along with their job titles at the time) appear to have been involved in the [redacted]

deposed, the vital details of Dell's exclusive arrangements will remain unknown.



b) Predatory Bid Pricing

Not only did Intel [redacted], it also began [redacted][14]

2. Hewlett-Packard

Following its acquisition of Compaq in 2002, Hewlett-Packard Company ("HP") experienced rapid growth and became, ultimately, the world's largest supplier of personal computers and servers. Unlike Dell, HP has historically resisted sole-sourcing from Intel [redacted]

[redacted]

[14] Plaintiffs will likely need to depose witnesses from various levels of the Intel and Dell organizations to establish that [redacted] The witnesses include the top executives on each side who [redacted] There is likely to be some, but not complete, overlap between these witnesses and those involved in [redacted]

[redacted]

The total value of [redacted]

[redacted]

[15] Intel employees who appear to have had primary responsibility for HP (and their titles at the time) include: [redacted]

[redacted][16]

A few examples from a still fragmentary record will suffice to illustrate [redacted]

Despite [redacted] AMD finally won a commercial desktop platform in 2002 following HP's acquisition of Compaq. This involved complicated negotiations, [redacted]

[redacted]

[redacted] The result: HP took only 160,000 of the one million free processors that AMD

had offered it. No rational computer manufacturer would leave 840,000 free, state-of-the-art microprocessors on the table unless it had been foreclosed from using them by exclusionary conduct. And that is precisely what happened.

3. IBM/Lenovo

Since its incorporation in 1911, IBM has been at the forefront of information technology and is widely considered the gold standard in enterprise and business computing. With its omnipresent mainframes, IBM became the dominant player in the computer industry in the 1950's, and in 1981, IBM literally invented the personal computer. The popularity and success of IBM's desktop and mobile lines passed on to relative newcomer Lenovo when it purchased the IBM PC business in 2005. As a result, Lenovo quickly became an international force rivaling Dell and HP. IBM continues to develop, market, and sell its powerful servers and, [redacted] Unfortunately for AMD, to a large extent, [redacted]

a) Exclusive Dealing – Client Computers Prior to the Lenovo Sale

Throughout the 1990s, IBM purchased microprocessors for its commercial desktops only from Intel, relegating AMD to the low-margin consumer segment. As AMD emerged as a technological rival, Intel [redacted]

[redacted][17]

[17] Key Intel deposition candidates include: [redacted] Potential IBM deposition candidates include: [redacted]

[redacted][19]

In 2004, [redacted]

[redacted]

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[18] Intel deposition candidates: [redacted]. IBM deposition candidates: [redacted]

[19] Intel deposition candidates: [redacted] IBM deposition candidates: [redacted]

[redacted][20]

b) Exclusive Dealing – Client Computers After the Lenovo Purchase

Even before its purchase of IBM's desktop and notebook business in 2005, Lenovo [redacted] In 2004, Lenovo launched an AMD desktop, but [redacted], it postponed the launch event, limited promotion, and relegated the AMD product to its low-end volumes. [redacted]

Lenovo's acquisition of the IBM brand did not provide it with [redacted]

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[20] Intel deposition candidates: [redacted] IBM deposition candidates: [redacted]

[redacted][21]

[redacted][22]

[21] Intel deposition candidates: [redacted]

[redacted]

[redacted][23]

[redacted]

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[22] [redacted]

[23] Intel witnesses: [redacted] Lenovo deposition candidates [redacted]

[redacted][24]

As it turns out, the late 2006 [redacted]

[redacted][26]

c) Exclusive Dealing in IBM Servers – Intel Payments To Prevent IBM's Deployment of AMD-Powered Servers

In 2003, IBM agreed to support the launch of AMD's Opteron through its introduction of a line of servers employing them. As quickly as IBM embraced Opteron, [redacted]

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[24] [redacted]

[25] Intel deposition candidates: [redacted]
Lenovo deposition candidates: [redacted]

[redacted][27]

[redacted][28]

The same story played out again in 2004 [redacted]

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[27] Intel deposition candidates: [redacted] IBM deposition candidates: [redacted]

[28] Intel deposition candidates: [redacted] IBM deposition candidates: [redacted]

Opteron blade server – a rack mountable server computer that can be stacked densely in large, high-performance data centers. [redacted]

[redacted][29] Although AMD-based server products are presently offered by all the other major OEMs catering to enterprise customers, Intel has to this day kept AMD from gaining anything more than a toehold in IBM's valuable commercial server space.

4. Gateway

Although smaller than Dell, IBM/Lenovo, or HP, Gateway was still a significant OEM prior to its acquisition by Acer, and in 2004 accounted for approximately 2.5% of the worldwide desktop market and approximately 1.5% of the worldwide mobile market.[30] Gateway's retail

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[29] Intel deposition candidates: [redacted] IBM deposition candidates [redacted]

[30] AMD is only beginning to understand the nature and extent of Intel's predatory tactics toward Gateway over the past decade. [redacted]

stores and mass-market advertising campaigns made it a popular brand among consumers.[31]

As of the fall of 1998, Gateway had been using Intel microprocessors exclusively in its high-end products and a mix of Intel and AMD chips for the balance of the product line. In November 1998,

In February 1999, Gateway announced a collaboration with AMD on future PC and system products and the inclusion of AMD-K6 (Athlon) processors in Gateway's select product line.

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who appear to be likely deposition candidates.

[31] Gateway has grown significantly since 2000, first through its 2004 merger with eMachines and then, subsequently, through its 2007 acquisition by Acer, which is now the third largest OEM in the world, just ahead of Lenovo.

[redacted] Gateway suddenly "phased out" AMD, and in July 1999, Gateway abruptly cancelled its launch of a machine based on AMD's Athlon processor.

[redacted] Gateway fell woefully short of its fourth quarter 1999 earnings expectations. Gateway publicly blamed Intel for the disaster, and in January 2000, announced that it had chosen the AMD Athlon processor to power its Gateway Select PC Series.

[redacted] Gateway remained Intel exclusive until its merger with eMachines in 2004.

5. Acer

Though not as recognizable as the HP or Dell brands, Taiwan-based Acer has long been an important OEM, supplying both business and consumer systems to computer users around the world. Acer experienced phenomenal growth during the current decade, with revenues increasing almost five-fold, from just over $3 billion in 2000 to $14 billion in 2007. With its

acquisition of Gateway earlier this year, Acer is now the third largest PC manufacturer worldwide.

Although Acer has been a longstanding AMD customer, until recently nearly all of its AMD-based products were in the less profitable consumer sector with the more profitable commercial lines reserved exclusively for Intel. From 2002-2004, for example, while 80% of Acer's Intel-based desktop offerings in Europe were priced over $1,000, one hundred percent of Acer's AMD offerings for the same product line and geography were priced below $1,000. An Acer document production agreement has yet to be finalized.[32] [redacted]

[redacted][33]

[redacted]

[33] Intel employees [redacted] among others, appear to have had responsibility for the day-to-day management of the Acer account around the world. In addition, many key Intel senior executives – including [redacted] Intel employees [redacted]

This much is known: Intel [redacted]

Moreover, [redacted]

[redacted] are likely deposition candidates.

[redacted]

[redacted]

[redacted] August 2003 news that Acer intended to support the introduction of AMD's Athlon 64-bit ("K8") chips and had agreed to participate in several launch events with AMD. [redacted]

[redacted]

[redacted]

When Acer launched an Athlon64 notebook the following year, [redacted]

[redacted]

[redacted]

[redacted] And, following the launch of a high-end Acer AMD-based notebook in India in late 2003, [redacted]

6. Japanese OEMs

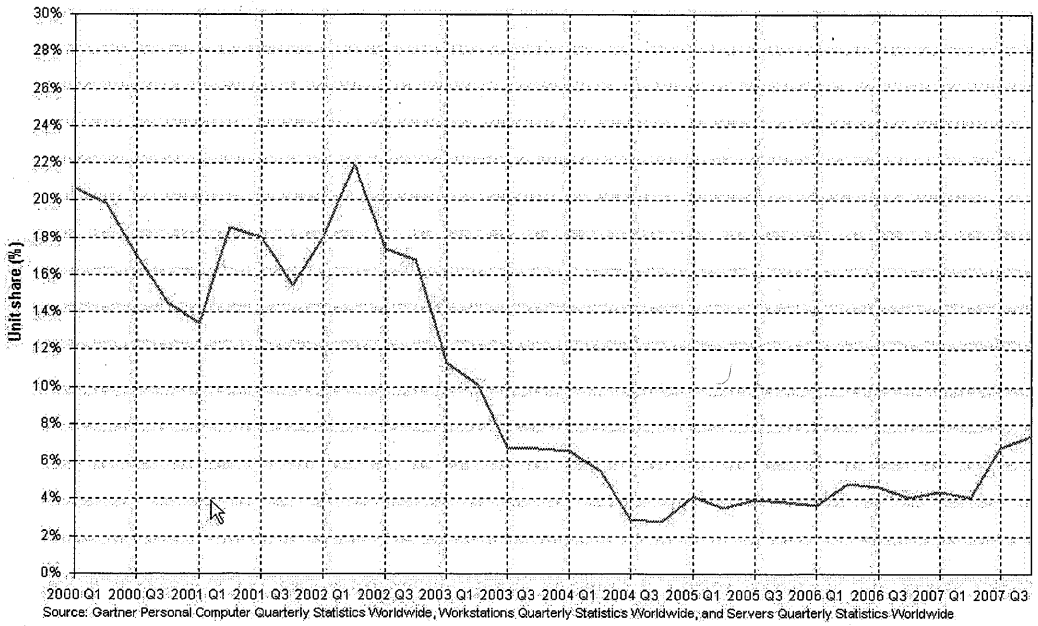
The Japanese OEMs (Sony, NEC, Toshiba, Fujitsu, and Hitachi) represent a significant force in the PC world, not only in Asia but throughout the world. Collectively, they account for roughly one out of every five notebooks sold. Japan is also an "early adopter" of popular technologies, so acceptance of a product in the Japanese market serves as a tremendous marketing boost throughout the world. Knowing that Japan is another potential chokehold on AMD growth, Intel has deployed there its full array of anti-competitive payments, rebates, and other exclusionary misconduct, including the bribing of Japanese OEMs to boycott AMD and punishing those that didn't.

The numbers bear witness to the effectiveness of Intel's campaign. From the late 1990's when AMD began selling to the Japan OEM community, it steadily built its business by offering

superior, price-competitive products. By the second quarter of 2002, it had managed to capture over 22% of microprocessor purchases by the Japanese OEMs.[34] Future growth seemed assured, since AMD was poised to launch its highly competitive 64-bit processors.

That growth never materialized. In fact, AMD's Japanese business was gutted in a matter of nine months, plunging from its 22% high to less than 12% three quarters later, and falling to below 8% by the third quarter of 2003. [redacted] it also crushed AMD's consumer business, relegating it to only 10%. [redacted]

AMD x86 Unit Share in Japan Computer Sales 2000–2007



Source: Gartner Personal Computer Quarterly Statistics Worldwide, Workstations Quarterly Statistics Worldwide, and Servers Quarterly Statistics Worldwide

[34] Measured as an AMD share of microprocessors procured by Japanese OEMs in Japan.

According to the Japan Fair Trade Commission ("JFTC"), which after a three-year investigation found Intel guilty of violating Japanese antitrust law, Intel used all-or-nothing conditional rebates to lock up 100% of the microprocessors purchased by Sony, Toshiba and Hitachi. In exchange for its rebates, NEC agreed to purchase 90% of its Japanese, 70% of its European, and 80% of its worldwide microprocessor requirements from Intel.[35] Intel offered discounts to Fujitsu designed

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[35] To date, the parties have secured many (but not all) of the documents produced to the JFTC by [redacted]. The parties also have entered agreements with [redacted] to produce additional documents and expect [redacted] to enter a production agreement shortly. Based on the information we know today, the following are the Sony employees with significant involvement in negotiations with Intel: [redacted] The following are the NEC employees with significant involvement in negotiations with Intel [redacted] The following Fujitsu employees have had significant involvement in negotiations with Intel: [redacted] For Toshiba, the following employees had significant involvement in Intel negotiations: [redacted]

to foreclose AMD from the lion's share of Fujitsu's business. Intel did not contest the JFTC charges. Here are the facts behind two of those deals.[36]

[redacted] AMD expects to identify additional deposition candidates through review of upcoming Japanese OEM document productions. AMD expects to identify additional deposition candidates through review of upcoming Japanese OEM document productions.

[36] A large number of Intel employees engaged in the anticompetitive conduct underlying the JFTC's findings. Specifically, the following are Intel Executives with significant involvement in Japanese OEM negotiations: [redacted] In addition to these high level executives, the following are Intel employees with significant involvement in Japanese OEM negotiations: [redacted] AMD expects to identify additional deposition candidates through review of upcoming Japanese OEM document productions.

a) Sony

Starting in late 2002, Intel's anticompetitive, all-or-nothing "conditional" rebates dropped Sony's AMD purchases for consumer-based systems from approximately 30% to zero within a matter of months. Intel's efforts were anything but oblique. [redacted]

But Intel was not satisfied with gaining exclusivity just in the United States. [redacted]

[redacted]

By April 2003, Sony's shift to 100% Intel worldwide was all but formalized. [redacted] As a result, Sony has purchased nothing more than nominal AMD volumes since the fourth quarter of 2003, and remains Intel exclusive today. [redacted]

b) Toshiba

Toshiba was one of the first Japanese OEMs to launch AMD products in 1999. The following year, [redacted] By 2002, [redacted]

By February 2004, [redacted]

[redacted][37] AMD did not return to Toshiba until 2007, and then only as a supplier to Toshiba's least profitable consumer segment.

7. European OEMs

Intel has also engaged in a focused strategy to foreclose AMD in Europe. The European Commission launched an investigation of these Intel practices in 2000. Last year it issued a formal Statement of Objections containing its preliminary finding that Intel violated the European counterpart of Section 2. The Commission summarized the three types of illegal Intel conduct it had uncovered:

> First, Intel has provided substantial rebates to various OEMs conditional on them obtaining all or the great majority of their CPU requirements from Intel. Secondly, in a number of instances, Intel made payments in order to induce an OEM to either delay or cancel the launch of a product line incorporating an AMD-based microprocessor. Thirdly, in the context of bids against AMD-based products for strategic customers in the server segment of the market, Intel has offered products on average below cost.

Because the largest worldwide OEMs, like Dell, HP and Lenovo, are also active in Europe, Intel's European exclusionary conduct has to some extent already been detailed. In addition, some regional OEMs operate out of Europe, the largest of which is Fujitsu-Siemens Computers ("FSC"), a joint venture between Fujitsu and Siemens. The operations of FSC are

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37 [redacted]

linked to its parent-company, Fujitsu, and the two companies to some extent share development resources.

Intel has engaged in a host of practices to prevent FSC from broadly adopting AMD's products [redacted] At the core of Intel's exclusion are conditional, quantity-forcing discounts based on FSC meeting volume and product mix targets. These are coupled with threats of punitive price increases and the loss of marketing funds and other incentives if the targets are not met. [redacted]

Moreover, [redacted][38]

[38] The likely FCS deponents include [redacted]

And FSC was not the only European OEM targeted by Intel. The AMD purchases of another of the main European regional OEMs, NEC-CI (and its subsidiary Packard-Bell), were [redacted] limited it to 30% AMD in Europe.

B. Unlawful Exclusion of AMD from System Builders

Although most computer users are only familiar with the brand-name computers made by major OEMs, a significant segment of the overall x86 microprocessor market consists of chips purchased for use in so-called "whiteboxes." "Whitebox" is a shorthand term that generally refers to an unbranded personal computer. Whiteboxes typically are assembled from individual components by system builders.

Whitebox companies and system builders play an important role in the computer eco-system. At the simplest level, system builders serve two primary market niches. First, because it is cheaper to build computers from their component parts than it is to buy them already assembled, system builders are able to create personal computers, often of high quality, that are cheaper than any branded alternative. Second, because system builders build each machine to order, they have the flexibility to create and equip computers that can meet the specialized hardware and software performance needs of specific types of individuals (such as gamers) or industries (such as banks, architects or dentists). Taken as a whole, whitebox manufacturers and system builders account for approximately 20% -30% of the computer and server market and

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[redacted] Intel employees with relevant knowledge, other than senior executives, include [redacted]

accordingly account for that same share of x86 microprocessor purchases.

Based on the materials it has reviewed to date, Plaintiffs expect to prove that Intel used the same type of anti-competitive strategies with whitebox companies and system builders that it did with the major OEMs – a mix of direct payments, structured incentives and preferences for exclusivity, and threats of disproportionate retaliation for doing business with AMD. We focus here on the two whitebox companies that have produced comparatively large document collections, though we suspect that a dozen others also curtailed their business with AMD for fear of Intel retaliation.[39]

1. Supermicro

Founded in 1993, Supermicro sells servers and high-end motherboards globally and has a significant share of the non-OEM server market. [redacted] Historically, Supermicro viewed Intel as a strategic partner as well. In 2001, for example, Supermicro's Vice-President of Sales was quoted

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[39] The whitebox companies that AMD believes have been adversely affected by Intel's anti-competitive conduct include Alienware, Appro Intl., Atipa, Averatec, Egenera, Micron PC/MPC Computers, Network Appliance, Rackable, Supermicro, and Voodoo. Individuals at some of these companies believed to have relevant information regarding Intel's exclusionary conduct includes: [redacted]

in the press as saying that Supermicro would "never ever" sell anything but Intel.

By early 2005, however, Supermicro abandoned its Intel-only status in part because of the compelling price-performance advantage AMD provided to Supermicro's customers.

Although the details of those meetings and subsequent discussions must await the depositions of

[40] Intel participants included

[redacted] Supermicro's behavior reached such a seemingly absurd level that even the press commented that Supermicro "no doubt" was "keeping an eye out for the enforcer men in blue" and wondered aloud "Is Supermicro fearful of being sanctioned?"

2. Rackable

Intel also got tough with Rackable, another system builder which became an early convert to AMD's Opteron server processors and began retreating from its historic "Intel first" philosophy. [redacted] And when Rackable delivered AMD solutions to its customers, [redacted]

[redacted] Supermicro's representatives

At the same time, [redacted] Ultimately, Intel's predatory pricing, when coupled with other coercion, gutted Rackable's AMD-based business.

C. Unlawful Exclusion of AMD from the Distribution Channel

Both AMD and Intel sell microprocessors through "distribution." In simplest terms, a distributor acts as a middle-man between a manufacturer and a customer.[41] Because AMD and Intel typically sell directly to only a handful of the largest, most credit-worthy OEMs, distributors are left to sell microprocessors to a variety of purchasers, including whitebox companies, small and medium-sized OEMs, and, at times, even first-tier OEMs. Distributors can also provide specialized technical services, can offer the microprocessors together with additional component parts, and can otherwise add value that AMD and Intel do not. As large international companies, distributors constitute an important sales channel, accounting for roughly 30 – 35% of the microprocessor market by units, 25 – 30% by revenue. Given Intel's success at foreclosing AMD from selling much to major OEMs, AMD necessarily has relied

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were [redacted]

disproportionately on the distribution channel to bring its products to market.

Knowing the importance of distribution to AMD, Intel has endeavored to limit AMD's access to this channel as well. Thus, [redacted] While discovery in the distribution segment has been limited to date (*i.e.* the parties are still awaiting substantial productions from six of the nine distributors that have been subpoenaed), the following examples of Intel's dealings with two major distributors, Tech Data and Synnex, are illustrative of the exclusionary strategy Intel has deployed.[42]

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[41] AMD and Intel have subpoenaed Abboud Trading, ASI, Avnet, Ingram Micro, Synnex, Tech Data, Bell Microproducts, D&H and Intcomex. AMD anticipates additional productions from the first six, and it has reserved the right to request additional documents from the others.

[42] Based on the limited discovery that AMD has received, the following are the important Intel custodians: [redacted] The following are the key third party distribution custodians who were involved in key events: [redacted]

1. Threats to Remove Preferential Treatment.

Intel rewards its most loyal distributors with preferential pricing and supply, and it disciplines customers by threatening to withdraw them for disloyalty. [redacted]

[redacted]

But a few years later when Synnex was again considering the addition of AMD to its lineup, [redacted]

[redacted]

Although much of the story must await depositions, Intel's [redacted]

Beyond removing benefits, Intel threatens to absolutely boycott distributors who engage too closely with AMD. Tech Data provides a good example. A Fortune 500 company with approximately 90,000 customers, Tech Data is one of the world's largest distributors. It does

business in over 100 countries in North America, South America, Europe, and the Middle East.

[redacted][43]

Intel has also employed one-time cash payments to keep distributors in line. [redacted]

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[43] A number of Tech Data employees appear to have been intimately involved in the discussions with Intel's [redacted]

[redacted]

2. Discretionary End-of-Quarter Rebates

But rewarding loyal customers with incremental funding is only a part of Intel's strategy. More significant are distributor rebates, [redacted] In the low-margin distribution business, these rebates typically spell the difference between a profit and loss for the quarter. Thus, distributors are loath to do anything that would jeopardize them. [redacted]

Astoundingly, in the case of distributors that also carry AMD products, [redacted]

D. Intel's Exclusionary Technical Conduct

Intel has regularly abused its technical muscle to hobble AMD's products and raise AMD's costs. While some of Intel's technological misconduct is well known to AMD, other

aspects are only now surfacing in documents. What follows is a taste of what we expect the evidence, when it is finally assembled, will show.

1. Intel's Compilers

As AMD has continued to prove a worthy competitor, Intel has sought to nullify its technological gains through the redesign of Intel's compilers so as to artificially degrade the performance of AMD microprocessors. Compilers are software programs that translate "source code," i.e., software code written and understood by human programmers, into object code, code written and understood by computers.

AMD and Intel processors are capable of performing the same computing functions because both companies have adopted the other's instruction sets.[44] With the release of AMD's Opteron microprocessor in April 2003, and the launch of the Athlon 64 five months later, AMD's processors were technologically superior because they performed these functions faster and more efficiently than Intel's processors. In 2004, Intel set out to nullify AMD's performance advantage through use of its CPUID function.[45] New versions of the Intel compilers began embedding a hidden CPUID check in the executable programs they produced.[46] These caused the finished software program to determine whether or not the executing computer ran on an

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[44] An instruction set is a set of rudimentary commands a microprocessor is capable of executing. AMD's Opteron and Athlon 64 were capable of executing Intel's SSE (Streaming SIMD Extension) and SSE2 instruction sets, and Intel modified its Pentium 4 to execute AMD's AMD64 instruction set.

[45] A CPUID (CPU Identification) is a piece of code embedded in Intel processors that identifies the processors as either Intel or non-Intel products.

[46] Intel named seventeen employees as persons most knowledgeable about compiler design, development, support, validation, and testing, including [redacted]

Intel-manufactured microprocessor. If an AMD microprocessor is detected, the software programs would run using inefficient executing commands, or simply crash.

Recognizing that virtually every Intel compiler customer would switch to a different vendor if Intel's compilers produced software that would not work with AMD processors, Intel devised a plan to hide its scheme from customers. Intel proclaimed in its marketing material that its compiler offered performance competitive with industry leading compilers for AMD-based systems. However, these claims were untrue. [redacted][47] The effect was dramatic: [redacted][48]

2. Intel's Tampering with BAPCO Benchmarking Standards

[redacted] Intel exploits its stature with the publishers of benchmarking software, which measures the performance of various products. Intel co-founded the Business Applications Performance Corporation ("BAPCo"), an industry

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[redacted] It may be necessary to depose many of these Intel employees to understand the design and assess the effects of the CPUID check in Intel's compiler products.

[47] At least [redacted] complained of severe performance degradations suffered by AMD-based computers caused by the Intel compilers. To determine the impact of the Intel compilers on third-party software products, depositions of third-party witnesses from these companies may be necessary. Further, depositions of Intel technical support personnel, such as compiler PMKs [redacted] may be necessary to determine the effect of the CPUID feature on third-party software.

[48] [redacted] To assess the full extent by which Intel compilers have artificially distorted the competitive positions of Intel and AMD products during the relevant time period for this litigation, depositions of Intel employees and witnesses from third-party software producers are necessary.

consortium that develops supposedly neutral microprocessor benchmarks. Since early-2000, Intel employee Shervin Kheradpir has served as the president of BAPCo.

Intel took [redacted] First, Kheradpir's position as the president of BAPCo [redacted][49] Second, [redacted] Finally, as the president of BAPCo, Kheradpir [redacted][50] [redacted]

3. Intel's Manipulation of Industry Standards Setting Activities

Standard-setting organizations are critical in the computer industry because products manufactured by different companies are useless if they do not employ uniform means to function together. Microprocessors must work in multiple products manufactured by various OEMs. They also must function with other internal PC components manufactured by other companies, including memory components and chipsets. Without this interoperability,

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[49] Several Intel custodians, including [redacted] Since it is unlikely that every such instance is documented, it is necessary to conduct deposition discovery of these Intel employees to determine the full extent of Intel's misconduct.

[50] In one case, [redacted]

consumers would have to purchase all of their products from a single source.

Properly functioning standard-setting organizations allow companies to work together in choosing a standard to which everyone has access. Intel, however, has subverted the standard setting process by repeatedly manipulating the organizations to put AMD at a competitive disadvantage.

a) Intel Has Proposed Design Changes for the Sole Purpose of Harming AMD

One way in which Intel has undermined the neutral purpose of standard-setting organizations is by pushing for design choices that cause the greatest disadvantage to AMD while having little, if any, technological justification. An example is found in Intel's role in the design of new memory controller standards.[51] The Joint Electron Device Engineering Council ("JEDEC") is the industry organization responsible for setting the standards governing everything from the way memory chips are physically designed to the way these chips communicate with other hardware components. Both AMD and Intel need access to the latest memory standards as early as possible to ensure that their processors and chipsets remain compatible with other manufacturers' memory devices.

In 2004, JEDEC began developing a standard governing the design of memory modules

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[51] AMD will need extensive discovery to uncover the full extent of Intel's misconduct in the development of memory controller standards as well as well similar attempts in other design areas. To date, Intel has identified [redacted] Intel has also identified [redacted] It will be necessary to depose many, if not all, of these employees to flush out these issues, especially in light of the limited number of documents Intel has produced on these topics.

for DDR3 memory devices. These modules, or DIMMs, connect the memory chips to the computer's motherboard through a series of metal connectors known as "pins." Intel proposed that the committee rearrange the placement of the pins even though there was no technological justification for doing so. Its only purpose was to disadvantage AMD. Given the way AMD's memory controller works, any change in the design of the memory pins would require that AMD also change the design of its processor. Intel, however, would not be affected. Thus, the change would require only AMD to make expensive and time-consuming modifications to its products.

b) Intel Has Refused To Give AMD Access to Standard-Setting Work

Intel has in some instances attempted to exclude AMD from the standard-setting process entirely. For example, in January 2000, Intel did an end run around JEDEC and formed the Advanced DRAM Technology Consortium ("ADT") to develop a memory standard.[52] The higher-tier members had access to every stage of development, which allowed them to begin designing their products before the standard was publicly announced. The lower-tier members would be allowed to use any standard approved by ADT, but they would not be involved in development of the standard and would only receive access to the standard after it was finalized. Intel structured ADT such that the higher level would include itself and the largest memory manufacturers, but not AMD. When AMD first attempted to join the higher level of ADT in July 2000, it was denied admission. AMD continued to lobby, without success, for admission to

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[52] In addition to the [redacted] employees Intel has identified as most knowledgeable of Intel's relationship with memory suppliers, Intel has also identified [redacted]

the design level.

c) Intel Has Prevented Other Companies from Working with AMD

After Intel failed in its attempt to develop a new memory interface standard through its private ADT organization, Intel began to work with memory producers one on one as another way to keep AMD out of the process. All of this work is done under non-disclosure agreements [redacted][53] These NDAs do not allow the companies to share any of the design information with AMD until the products are released. Because of this delay in receiving the design information, AMD cannot finalize its own design plans, delaying AMD's product releases and increasing its development costs.

4. Intel's Exclusive Dealings with Third-Party Technology Companies.

Intel has engaged in exclusive deals with third-party technology companies to cause them to offer products that offer degraded performance or limited feature sets when run on computers with AMD processors. For example, Skype is a company that publishes software that allows users to use their computers to place telephone or video conference calls over the internet for no or a nominal charge. [redacted][54]

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[53] [redacted] To assess the scope and impact of Intel's exclusionary conduct, it may be necessary to conduct deposition discovery of employees from these companies.

[redacted] To assess the exclusionary effect of the Intel-Skype agreement fully, depositions of Skype and Intel employees involved in the negotiation, such as [redacted], are necessary.

Specifically, Skype 2.0 allows a voice conference call for up to ten-way conference calls on selected Intel dual-core processors, while users of AMD-based computers with similar processing capability were limited to only five-way conference calls. Both Intel and Skype suggested that the limitation on AMD-based computers had something to do with the capability of the processors – an excuse for public consumption that was simply false. [redacted][55]

5. Intel's Bag of Other Dirty Tricks

Intel has engaged in a variety of other tactics to entrench further its microprocessor market dominance. For instance, in late 2005, Microsoft launched the newest version of its Windows operating system known as Microsoft Vista. To ensure that a computer could operate Vista, Microsoft set forth a set of minimum computer hardware requirements that would determine whether a computer was "Vista Capable." Only those computers meeting those requirements qualified to could carry a "Vista Capable" sticker.

[redacted]

[55] The following Skype employees appear to have relevant information and are deposition candidates:: [redacted] In addition, AMD will need to depose Intel employees involved in [redacted]

[redacted][56] [redacted] AMD provided OEMs with a wide range of chip choices, including many that were capable of meeting the "Vista Capable" requirements.

[redacted]

III. STATEMENT OF PRINCIPAL LEGAL AUTHORITIES

AMD and, for injunctive relief purposes, Class Plaintiffs both assert a Sherman Act § 2 claim. Both also assert respective state law claims. Because the guiding legal principles in this case largely are captured by the elements of Section 2, the discussion that follows focuses on how those elements are satisfied in this case.

A. Intel Possesses Monopoly Power in the x86 Microprocessor Market.

Section 2 of the Sherman Act makes it unlawful to monopolize, attempt to monopolize, or conspire to monopolize interstate or foreign trade or commerce.[58] A Section 2 offense has two elements: "(1) the possession of monopoly power in the relevant market and (2) the willful

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[56] [redacted] In order to assess the benefit Intel enjoyed from [redacted] and the injury AMD suffered, it is necessary to conduct deposition discovery of witnesses from each of these third-party companies.

[57] Many high level employees from both companies, including [redacted], were involved in [redacted] Plaintiffs anticipate depositions from among the following additional Microsoft employees: [redacted]

acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident."[59]

The first step in establishing a Section 2 claim is defining the relevant geographic and product markets.[60] The geographic market is "the area in which the defendant effectively competes with other . . . businesses for the distribution of the relevant product."[61] Here, it is undisputed that the relevant geographic market is worldwide. 2007 WL 137152, at *8 (D. Del. Jan. 12, 2007). A product market consists of "products that have reasonable interchangeability for the purposes for which they are produced—price, use and qualities considered."[62] Interchangeable products are roughly equivalent to each other, so either would work effectively, even if one is preferred over the other.[63] In this case, a relevant product market is microprocessors for personal computers and servers that utilize the x86 instruction set (the "x86 microprocessor market"). 2007 WL 137152, at *8 (D.Del. Jan. 12, 2007). The vast body of x86-based computer users around the world has enormous investments in systems and applications that makes substitution to non-x86 computing impractical and prohibitively expensive.[64]

"Monopoly power is the power to control prices or exclude competition."[65] This case will include evidence of both. Monopoly power also may be inferred circumstantially from a

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[58] 15 U.S.C. § 2.
[59] *United States v. Grinnell Corp.*, 384 U.S. 563, 570-71 (1966).
[60] *Conwood Co., L.P. v. U.S. Tobacco Co.*, 290 F.3d 768, 782 (6th Cir. 2002).
[61] *Lansdale v. Philadelphia Elec. Co.*, 692 F.2d 307, 311 (3d Cir. 1982) (citation omitted).
[62] *United States v. E. I. Du Pont de Nemours & Co.*, 351 U.S. 377, 404 (1956).
[63] *Queen City Pizza v. Domino's Pizza*, 124 F.3d 430, 437 (3d Cir. 1997).
[64] *Cf. United States v. Microsoft Corp.*, 253 F.3d 34, 52 (D.C. Cir. 2001) (defining the relevant market as "Intel-compatible PC operating systems" because consumers would not switch to the Mac operating system due to the costs associated with acquiring new hardware and compatible software applications and the efforts involved in learning the new system and reformatting files).
[65] E.I. Du Pont de Nemours & Co., 351 U.S. at 392.

market structure in which the defendant is shown to possess a predominant share of the relevant market.[66] Intel's revenue share of the worldwide x86 microprocessor market is more than 85% and its unit share more than 75%. These market shares far exceed what is needed to infer that Intel has monopoly power.[67]

While the size of a firm's market share is central to a determination of whether monopoly power exists, other relevant factors include barriers to market entry, relative size and strength of competing firms, industry pricing practices and trends, consumer ability to substitute comparable goods, and consumer demand. *Dentsply*, 399 F.3d at 187; *see also Los Angeles Land Co. v. Brunswick Corp.*, 6 F.3d 1422, 1427-28 (9th Cir. 1993) (barriers to entry are "factors in the market that deter entry while permitting incumbent firms to earn monopoly returns") (citing Areeda & Hovenkamp, *Antitrust Law*, ¶ 409 at 509-10 (1992 Supp.)). Here, unusually high barriers to entry secure Intel's monopoly power. These include (1) the need to penetrate a virtually impregnable barrier of intellectual property rights; (2) the ongoing need to meet the enormous capital demands necessary to sustain the research and development required to produce each new generation of microprocessors and to build and equip the new fabs needed to manufacture them; and (3) economies of scale that can only be realized by achieving critical levels of penetration into, and product mix with, a broad customer base.

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[66] *Grinnell Corp.*, 384 U.S. at 571; *Microsoft Corp.*, 253 F.3d at 51; *United States v. Dentsply Int'l, Inc.*, 399 F.3d 181, 187 (3d Cir. 2005).

[67] *See, e.g., Dentsply Int'l, Inc.*, 399 F.3d at 188 (market share between 75 and 80% is "more than adequate to establish a prima facie case of power"); *Image Tech. Servs. v. Eastman Kodak Co.*, 125 F.3d 1195, 1206 (9th Cir. 1997) (65% market share is sufficient); *Heattransfer Corp. v. Volkswagenwerk, A.G.*, 553 F.2d 964, 981 (5th Cir. 1977) (71-76% market share is sufficient); ABA Section of Antitrust Law, *Model Jury Instructions in Civil Antitrust Cases* C-17 (2005) (50% market share is sufficient to support inference of market power); 2 *Von Kalinowski on*

B. Intel Has Maintained Its Monopoly Power Through Unlawful Exclusionary Conduct That Has Had an Anticompetitive Effect.

The second element of a Section 2 violation, willful acquisition or maintenance of monopoly power, "must be accompanied by some anticompetitive conduct on the part of the possessor."[68] The Supreme Court has long ordained and consistently maintained as flexible an application of Section 2 as is necessary to counter monopolists' genius in devising new and novel methods of exclusion.[69] "'[T]he means of illicit exclusion, like the means of legitimate competition, are myriad.'"[70] But none escapes the Court's overarching principle that "a monopolist will be found to violate § 2 of the Sherman Act if it engages in exclusionary or predatory conduct without a valid business justification."[71] And recent enforcement in the Third

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Antitrust § 25.03[3] (2nd ed. 2004) ("[l]ower courts have held that a high market share (generally above 70 percent) by itself demonstrates monopoly power").

[68] *Broadcom Corp. v. Qualcomm Inc.*, 501 F.3d 297, 308 (3d Cir. 2007) (citing *Verizon Commc'ns Inc. v. Trinko*, 540 U.S. 398, 407 (2004)).

[69] *See, e.g.*, *American Tobacco Co. v. United States*, 328 U.S. 781 (1946) (condemning defendant who engaged in exclusionary conduct that foreclosed smaller rivals from access to necessary supplies); *Grinnell*, 384 U.S. at 570, 576 (finding defendants who willfully achieved a monopoly through a variety of exclusionary practices, including entering into agreements to maintain minimum resale prices of central service station, forming revenue sharing agreements with their competitors, and implementing increased rates in cities where the defendants had a monopoly, in violation of Section 2); *Otter Tail Power Co. v. United States*, 410 U.S. 366 (1973) (concluding that an electric utility illegally engaged in exclusionary conduct with the intent to prevent towns from establishing municipal systems in its service area); *Eastman Kodak Co. v. Image Technical Servs., Inc.*, 504 U.S. 451, 477 (1992) (condemning defendant's use of its market power in the aftermarket for servicing photocopiers to exclude competitors from the market).

[70] *Verizon Commc'ns Inc.*, 540 U.S. at 414 (quoting *Microsoft*, 253 F.3d at 58). *See also LePage's Inc. v. 3M*, 324 F.3d 141, 152 (3d Cir. 2003) ("'Anticompetitive conduct' can come in too many different forms, and is too dependent upon context, for any court or commentator ever to have enumerated all the varieties.") (quoting *Caribbean Broad. Sys. Ltd. v. Cable & Wireless PLC*, 148 F.3d 1080, 1087 (D.C. Cir. 1998)).

[71] *LePage's Inc.*, 324 F.3d at 152; *see also Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 605 (1985) (conduct that excludes a rival "on some basis other than efficiency" is predatory"); *Lorain Journal Co. v. United States*, 342 U.S. 143 (1951) (conduct had no valid business justification, other than to exclude the rival radio station, and was anticompetitive).

and other Circuit Courts is consistent with the Supreme Court's history of unwavering condemnation of a dominant firm's exclusionary abuse.[72] Thus, the anticompetitive conduct element of a Section 2 claim is met whenever a monopolist engages in "[c]onduct that impairs the opportunities of rivals and either does not further competition on the merits or does so in an unnecessarily restrictive way . . . ."[73] Here Intel's relentless exclusion takes numerous forms, but its collective objective is singular: to do whatever is necessary to foreclose AMD's window of special opportunity and to thwart its emergence as a sustainable innovation rival to Intel.

1. Payments for Exclusivity or Near-Exclusivity

Payments for exclusion violate Section 2 if they are structured to preclude new entrants from competing on the merits.[74] For example, in *Dentsply*, the Third Circuit concluded that a monopolist's exclusivity agreements with key dealers harmed competition by keeping its competitors' sales from reaching a level that might pose a genuine threat to the monopolist's overwhelming share of the market.[75] Indeed, even non-monopolists violate the antitrust laws when they enter exclusive or near-exclusive deals that foreclose rivals from a substantial segment of the market. *See Tampa Elec. Co. v. Nashville Coal Co.*, 365 U.S. 320, 327 (1961)

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[72] *See, e.g., Dentsply*, 399 F.3d at 196-97 (rejecting defendant's "pretextual" justification for exclusionary practices "designed expressly to exclude its rivals from access to dealers"); *Microsoft*, 253 F.3d at 64 (condemning defendant's use of exclusive contracts with key distributors to foreclose its rival from distribution opportunities); *Conwood Co., L.P.*, 290 F.3d 768 (finding a monopolist's pervasive practice of destroying rival's racks and point of sale (POS) materials and reducing the number of rival's facings through exclusive agreements with and misrepresentations to retailers violated Section 2); *Gen. Indus. Corp. v. Hartz Mountain Corp.*, 810 F.2d 79 (8th Cir. 1987) (inferring defendant's intent to destroy competition through a variety of anticompetitive means without legitimate business reasons).

[73] *Broadcom Corp.*, 501 F.3d at 308 (citing *Aspen Skiing Co.*, 472 U.S. at 604-05 & n. 32).

[74] See generally Tom, Balto & Averitt, Anticompetitive Aspects of Market-Share Discounts and Other Incentives to Exclusive Dealing, 67 Antitrust L.J. 615 (2000).

[75] 399 F.3d at 191.

(exclusive dealing arrangements violate antitrust law when they "foreclose competition in a substantial share of the line of commerce affected"). Where engaged in by a monopolist, all competitively significant exclusion is condemned. *See Microsoft*, 253 F.3d at 70 (exclusive and partial exclusive deals entered into by a monopolist can give rise to a Section 2 violation even where the threshold for a Section 1 violation is not met). Moreover, an exclusive deal need not consist of a written contract or be otherwise express to be unlawful. So long as the agreement is implied or the "practical effect" of the pricing arrangement is exclusivity, the agreement is subject to condemnation under Section 2.[76]

In their totality, [redacted] foreclosed AMD from a substantial portion of the market. Further, [redacted] foreclosed AMD from the highly profitable commercial client segment that is essential to generating the cash flow required to sustain AMD's innovation over the long term. They represent the "key" players that a monopolist simply may not exclude. *See Microsoft*, 253 F.3d at 64. And it makes no difference whether such foreclosure is bought through payments and discounts or achieved through threats and coercion. *Compare Le Page's* (foreclosure achieved through bundled discounts) with *Dentsply*, 399 F.3d at 190 (foreclosure achieved through coercion of dealers). Here the evidence will show both.

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[76] *See Tampa Electric Co. v. Nashville Coal Co.*, 365 U.S. 320, 327 (1961). *See generally* 1 Julian O. von Kalinowski, et al., Antitrust Laws and Trade Regulation § 2.04[5][a] (2004) ("Sometimes a formal agreement between the seller and the purchaser lacks an express exclusionary condition prohibited by the statutes, but the buyer has been made to believe that if he deals with competitors of the seller, he will suffer some kind of reprisal. The fear of reprisal, in such cases, may stem less from what has been said to the purchaser, than from its observation of the seller's general course of conduct. In determining whether an exclusive dealing arrangement exists, courts look at the substance of the conduct; not its form.").

2. First Dollar Rebates Offered To Leverage Non-Contestable Demand To Foreclose AMD from the Opportunity To Compete Profitably for Contestable Demand

In addition to exclusivity secured through payments expressly or implicitly conditioned thereon, Intel achieves similar foreclosure by means of a pricing strategy that leverages an OEM's dependency on Intel for the bulk of its current microprocessor needs. By leveraging its monopoly power over that uncontestable demand, Intel forecloses AMD from any meaningful opportunity to compete for the OEM's far lesser contestable demand. As previously explained, in any given calendar quarter most of an OEM's microprocessor requirements must be obtained from Intel, either because they are for continuing models of Intel-powered computers or essential to meeting end-user demand that is microprocessor specific. Accordingly, only a small share of an OEM's requirements is contestable by AMD at any given time. Intel exploits this demand segregation by offering an OEM a first-dollar rebate on all of its purchases, but only if the OEM satisfies its contestable demand with Intel microprocessors, too. Thus, rather than conditioning a discount or payment on exclusivity, as such, Intel conditions its all-or-nothing rebate on the customer meeting an Intel-established purchase target that reflects all, or virtually all, of the OEM's requirements.

The economic principle at work in this scheme is the same as the one that drives bundled discounts schemes. An "[a]ntitrust policy requires the courts to seek the economic substance of an arrangement, not merely its form." *Weiss v. York Hospital*, 745 F.2d 786, 815 (3d Cir. 1984).[77] In both the present and bundled form of pricing schemes, the monopolist excludes a rival by offering the customer a "discount" on the part of its requirements that the rival cannot

supply, but only if the customer also buys its contestable needs from the monopolist. As recognized by the Third Circuit, such pricing schemes can be "viewed as effectuating exclusive dealing arrangements because of the way in which they were structured."[78] This is because such all-or-nothing pricing can "foreclose the opportunities of rivals when a dealer can obtain its best discount only by dealing exclusively with the dominant firm."[79] Stated another way, an earlier Third Circuit opinion observed that to meet a monopolist's three-product "bonus" rebate, a one-product rival had "to compete three-on-one."[80] The result was that the monopolist was able to "sell all three products on a non-competitive basis in what would have otherwise been a competitive market for [one of the products]."[81]

Here, for AMD to compete for the limited OEM demand contestable at any given time, it not only has to meet Intel's discount on the microprocessors in contest, but additionally has to make the OEM whole for its lost "discount" on the larger volumes it would have to buy from Intel regardless.[82] Such leveraging of rebates on sales on which Intel faces no competition to

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[77] AMD will present expert testimony at trial explaining both the commonality of the economic principle involved and the identity of exclusionary effect achieved.

[78] *Lepage's*, 324 F.2d at 154.

[79] 324 F.3d at 158 (quoting 3A Phillip E. Aveeda and Herbert Hovenkamp, *Antitrust Law* ¶ 768 b2, at 148 (2d Ed. 2002).

[80] *SmithKline Corp. v. Eli Lilly & Co.*, 575 F.2d 1056, 1061 (3d Cir. 1978).

[81] *SmithKline Corp.*, 575 F.2d at 1065.

[82] In the Third Circuit, such leveraged discounting constitutes exclusionary conduct in violation of Section 2 without regard to whether or not the discount takes the price of the contestable product below cost. *LePage's*, 324 F.3d at 151-52. In contrast, the Ninth Circuit has adopted a special test in which the entirety of the discount is attributed to the price of the contestable product and a *Brooke Group*-derived cost test is then applied to that price as reconstructed. *Cascade Health Solutions v. PeaceHealth*, 515 F.3d 883 (9th Cir. 2007); *see also Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209 (1993) (cost test applicable to price predation). The present case is, of course, governed by Third Circuit law. However, the leveraged discounting here in issue would fail the Ninth Circuit's so-called *Ortho* cost test as

secure sales where it confronts competition constitutes "an act of willful acquisition and maintenance of monopoly power" and is prohibited by Section 2.[83]

3. Payments to OEMs To Exclude AMD Solutions from Key Market Segments, Distribution Channels, and New Product Launches

Unfair business practices engaged in by a firm with monopoly power satisfy the conduct element of a Section 2 claim when they have significant harmful effects on competition. For example, in *Conwood*, the Sixth Circuit found that a monopolist's use of illegitimate business tactics to limit a rival's access to the retail channel stifled the rival's growth, restricting output and reducing consumer choice in the market for moist snuff. 290 F.3d 768, 785, 788 (defendant's collection of dirty tricks included destroying competitors' advertising materials in retail stores, using its position as category manager to limit the rival's products introduced by stores, and entering into exclusive arrangements with retailers to reduce the number of plaintiff's facings). A monopolist's practices fall outside of the scope of legitimate merit competition when its success is influenced by unlawful conduct rather than the superiority of its products and services. *See Associated Radio Serv. Co. v. Page Airways, Inc.*, 624 F.2d 1342 (5th Cir. 1980) (finding the defendant's success materially attributable to its predatory conduct, including suspicious payments to customers and government officials, targeted at preventing the success of its rival's competitive products).

Excluding competition from key distribution channels or market segments violates Section 2 when it precludes a rival from accessing the necessary customer base to achieve volumes of distribution necessary to efficiency. For example, in *Dentsply*, the Third Circuit

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well. *See Ortho Diagnostic Sys., Inc. v. Abbott Laboratories, Inc.*, 920 F. Supp 455 (S.D.N.Y. 1996).

condemned the defendant's use of exclusive contracts to prevent rivals' access to dealers who were the "critical link to end-users."[84] Such exclusion can violate Section 2 even where other means of distribution exist. In *Grinell*, the Supreme Court proclaimed that "it is unlawful and exclusionary" for a monopolist to enter into "restrictive agreements" that render certain market segments "free of competition." 384 U.S. at 570, 576. *See also, e.g.*, *Dentsply*, 399 F.3d at 196 ("mere existence of other avenues of distribution is insufficient without an assessment of their overall significance to the market"); *Microsoft*, 253 F.3d at 64 (anticompetitive tactics violated Section 2 by excluding rivals from the most cost-efficient means of distribution).

In the x86 microprocessor market, the OEM distribution channel is the critical link for reaching end users and expanding market share. Here, Intel uses its monopoly power in the x86 microprocessor market to preserve its dominant market position by engaging in anticompetitive conduct to control, limit, and delay the OEMs' introduction of products that incorporate AMD microprocessors, and to limit the promotion of such products if and when they are launched. This does not constitute Intel persuasion of OEMs to reject AMD microprocessors by reason of Intel's technical superiority or lower pricing. Rather, through the use of threats and payments targeted at disadvantaging AMD, Intel coerces OEMs to delay or terminate long-planned and full engineered launches of AMD-powered products, and to limit the promotion of those they do launch. Intel's use of such exclusionary tactics forecloses AMD from opportunities it has already won, thereby compounding the exclusion that severely restricts its access to opportunities in the first place. Intel's exclusion of AMD from the major OEMs' full product

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[83] *SmithKline*, 575 F.2d at 1065.

mix and promotional mainstream relegates AMD to less efficient and inferior means of distribution and serves to keep AMD's revenue share of the x86 microprocessor market well below 20%.[85] As a result, Intel's anticompetitive conduct restricts output, raises prices, reduces consumer choice, slows innovation, and precludes AMD from achieving sustainable efficient scale. *See General Indus. Corp.*, 810 F.2d at 804 (preventing competing products from reaching store shelves deprives consumers of real choice).

4. Subsidization of Below-Cost Bids by Providing "Loyal" OEMs Free Microprocessors with Which To Target "Disloyal" OEMs Bidding AMD Solutions

Predatory pricing in violation of Section 2 occurs when a defendant sets its prices below an appropriate measure of its cost but still has a reasonable prospect of recouping its investment in the below cost pricing scheme.[86] While non-conditional low prices benefit consumers, pricing set at predatory levels can threaten competition.[87] The definition of the appropriate measure of cost to test for predation has never been addressed by the Supreme Court and is particularly difficult in an industry with high and continuing research and development costs and relatively

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[84] 399 F.3d at 196 (analogizing Dentsply's authorized dealers to the high-volume retailers in *Le Page's* that were critical of providing competing firms with access to "the widespread locations and strong customer goodwill that prominent retailers provided").

[85] *See* R. Bork, *The Antitrust Paradox* 156 (1978) ("By disturbing optimal distribution patterns one rival can impose costs upon another, that is, force the other to accept higher costs."); Herbert Hovenkamp, *Antitrust Law* ¶ 1802c, at 64 (2d ed. 2002) ("A set of strategically planned exclusive dealing contracts may slow the rival's expansion by requiring it to develop alternative outlets for its products or rely at least temporarily on inferior or more expensive outlets. Consumer injury results from the delay that the dominant firm imposes on the smaller rival's growth.").

[86] *Brooke Group Ltd.*, 509 U.S. at 222-224.

[87] *Brooke Group, Ltd.,* 509 U.S. at 223.

low "next unit" manufacturing costs.[88] Certain fixed costs become variable over a relatively short period of predation. While the parties' respective experts will grapple with these issues, there is clear evidence that [redacted] Since it is indisputable that the production of a microprocessor involves some cost, such "sales" are necessarily predatory.

In the x86 microprocessor market, AMD is Intel's only remaining rival of consequence. The "foreclosure of 'one significant competitor' from the market," let alone the only competitor, "may lead to higher prices and reduced output."[89] Given the near insurmountable barriers to industry entry, Intel can readily recoup the costs associated with its targeted predatory pricing scheme through the lessening in innovation rivalry that its suppression of AMD will engender.

5. Range of Non-Price Exclusionary Conduct, Such As Threats, Interferences with AMD Product Launches, and Withholding of Technical Information from Customers That Did "Too Much" Business with AMD

Conduct that has no rational business purpose other than its adverse effect on competition is exclusionary. *General Indus. Corp.*, 810 F.2d 795 (defendant engaged in an array of non-price exclusionary conduct in violation of Section 2, including persuading competing manufacturers to terminate a rival's distributorship, threatening customers and forcing them to cancel orders with its rivals, and preventing competing products from reaching store shelves). Influencing or inducing customers in an improper manner, through bribes, threats, or similar practices, violates

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[88] In such an industry, the relevant measure of cost should include fixed and sunk capital costs. While a monopolist's prices could be above the marginal short-term cost of producing an additional unit, they may be below an equally efficient competitor's long-term costs of staying in business. *See* RICHARD POSNER, ANTITRUST LAW: AN ECONOMIC PERSPECTIVE 188, 193 (1976).

[89] *LePage's*, 324 F.3d at 159 (quoting *Roland Mach. Co. v. Dresser Indus., Inc.*, 749 F.2d 380, 394 (7th Cir. 1984)).

Section 2.[90] In *Instructional Sys. Dev. Corp. v. Aetna Casualty & Surety Co.*, 817 F.2d 639 (10th Cir. 1990), the court was quick to infer anticompetitive intent to protect its monopoly where the defendant bribed purchasing officials, caused customers to delay payments to its rival, and disparaged its rival's products to potential customers. *See also Conwood*, 290 F.3d at 786 (defendant engaged in a variety of non-price exclusionary conduct in violation of Section 2 including the destruction of the plaintiff's in-store displays, disparaging the plaintiff's reputation, intimidating customers into purchasing the relevant product solely from the defendant, and threatening suppliers that assisted the defendant's rivals).

Intel engages in a wide array of anticompetitive non-price conduct bearing no justification other than to restrain competition in the x86 microprocessor market. Intel's retaliatory tactics against OEMs who choose to do business with AMD include the delay of earned payments and the withdrawal of discretionary payments, the withholding of competitively important technical information or other forms of support, and discriminatory rationing of high demand products. Intel engages in these and similar anticompetitive practices to engender fear among OEMs that "too much" or the "wrong kind" of business with AMD will brand them "disloyal" and subject them to costly punishment. Intel's reputation for retaliation serves to deter OEMs from doing business with AMD, and thereby materially contributes to the maintenance of Intel's monopoly.

C. The Anticompetitive Effects of Intel's Myriad Exclusionary Conduct Must Be Considered Together

While the forms of Intel's anticompetitive conduct are as diverse as its opportunities for

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[90] *Associated Radio Servs. Co.*, 624 F.2d at 1354 (condemning a monopolist's use of suspicious payments with customers to steal business from its rival).

exclusion are varied, the relevant inquiry is their overall effect of a monopolist's practices considered together.[91] As summarized by the Third Circuit:

> As the Supreme Court recognized in *Cont'l Ore Co. v.* Union *Carbide & Carbon Corp.*, 370 U.S. 690, 699, 82 S.Ct. 1404, 8 L.Ed.2d 777 (1962), the courts must look to the monopolist's conduct taken as a whole rather than considering each aspect in isolation. The Court stated, "'in a case like the one before us [alleging § 1 and § 2 violations], the duty of the jury was to look at the whole picture and not merely at the individual figures in it.'" *Id.* (citation omitted). *See also City of Anaheim v. S. Cal. Edison Co.*, 955 F.2d 1373, 1376 (9th Cir. 1992) ("[I]t would not be proper to focus on specific individual acts of an accused monopolist while refusing to *consider their overall combined effect* ... We are dealing with what has been called the 'synergistic effect' of the mixture of the elements.") (emphasis added).[92]

So here, early predatory exclusion from would-be "evangelist" buyers of Opteron-powered servers dampened end user demand for other AMD-based solutions. Absent such suppression, heightened demand would have pressed fearful OEMs sooner and harder to risk Intel's retaliation and to break free of its stick-and-carrot exclusivity. Thus, each element of

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[91] 2 Phillip E. Areeda & Herbert Hovenkamp, *Antitrust Law* ¶ 310c7, at 208 (3d ed. 2007).
[92] *Le Page's*, 324 F.3d at 162.

Intel's exclusion reinforces another.[93] It is that cumulative and synergistic effect on AMD and the x86 microprocessor market that constitutes the pertinent inquiry for this case.

D. Anticompetitive Effect

The cumulative effect of Intel's exclusionary conduct has been critically to suppress AMD's market opportunity to achieve a scale that would have sustained its long-term presence as an x86 innovation rival. That AMD gained some share and revenue is immaterial. It gained sufficiently less share and sufficiently less revenue so as to suffer a critical diminishment of its innovation roadmap. As held in *Dentsply*, "the test is not total foreclosure, but whether the challenged practices ... severely restrict the market's ambit."[94] As did Microsoft, Intel "kept usage of its competitor's [product] below 'the critical level necessary for [its rival] to pose a real threat to Microsoft's monopoly.'"[95]

Such strategically planned exclusion may slow the rival's expansion and "[c]onsumer injury results from the delay that the dominant firm imposes on the smaller rival's growth."[96] The pertinent inquiry is whether Intel's conduct excluded a competitor "from the essential facilities that would permit it to achieve the efficiencies of scale necessary to threaten the monopoly."[97] Here, AMD's growth was not only slowed, but its best opportunity to achieve innovation sustainability was thwarted. Where, as here, barriers to entry are high and only one

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[93] *See* Irwin M. Stelzer, Notes for Presentation at Department of Justice - Federal Trade Commission Hearings on Monopoly Power and Single Firm Conduct (March 7, 2007), at 15-16 ("To examine a firm's pricing practices in isolation from its other practices is to look at one thread in a tapestry. .... [A]n examination of all of the dominant firm's tactics, and on the ebb and flow of its market position, throws light on its pricing practices – on their intent and effect.").
[94] *Dentsply*, 399 F.3d at 191.
[95] *LePage's*, 324 F.3d at 159 (quoting *Microsoft*, 253 F.3d at 69).
[96] *Dentsply*, 399 F.3d at 191.
[97] *LePage's*, 324 F.3d at 159.

viable rival remains, competitive injury to that competitor becomes injury to the competitive process itself.[98] Not only was consumer choice limited by the constrained availability of AMD-based product, but consumers will additionally suffer the higher prices and technological loss that AMD's diminishment as an innovation rival will bring. That loss will include not only less AMD innovation, but the loss as well of the incremental Intel innovation that AMD's lost innovation would have spurred.

E. Intel's Exclusionary Conduct Inflicted Antitrust Injury on AMD

AMD will show that Intel's unlawful conduct foreclosed AMD from a multitude of sales opportunities that AMD would have won but for such misconduct. This in itself is more than sufficient to prove antitrust injury: "It is enough that the illegality is shown to be a material cause of the injury; a plaintiff need not exhaust all possible alternative sources of injury in fulfilling his burden of proving injury compensable under § 4 [of the Clayton Act]."[99]

Beyond meeting this minimum burden, AMD will go on to show that the totality of Intel's exclusionary conduct had the synergistic effect of maintaining its monopoly, thereby harming both consumers and the competitive process. Where, as here, only one market rival remains, injury to that rival constitutes injury to the competitive process itself:

> When a monopolist's actions are designed to prevent *one* or more new or potential competitors from gaining a foothold in the market by exclusionary, i.e. predatory, conduct, its success in that goal is

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[98] *LePage's*, 324 F.3d at 162-163.

[99] *Zenith Radio Corp. v. Hazeltime Research Inc.*, 395 U.S. 100, 114 n.9 (1969) (citations omitted) (emphasis in original).

> not only injurious to the potential competitor but also to competition in general.[100]

AMD will establish the revenue shortfalls suffered as a result of Intel's misconduct, as well as the manner in which those shortfalls constrain its ongoing innovation. It will then proceed to quantify the revenue levels required to sustain an innovation rival in the X86 microprocessor market. Finally, it will present expert economic analysis that will demonstrate that but for Intel's exclusionary and predatory conduct AMD would have achieved that revenue position during its multi-year window of technological advantage. Thus, the constraint upon AMD's future capacity to innovate is the vehicle by which the injury to the competitive process has been delivered. That AMD's injury accordingly qualifies as recoverable antitrust injury is beyond any basis for serious dispute. *See, e.g.*, *Angelico v. Lehigh Valley Hospital, Inc.*, 184 F.3d 268, 274 (3d Cir. 1999) (Injury "suffered, when shut out of competition for anticompetitive reasons, is indeed among those [injuries] the antitrust laws were designed to prevent."). Here AMD was "shut out" of sufficient business opportunity to prevent its emergence as a sustainable innovation competitor to Intel. That constitutes both antitrust injury and injury in fact, and entitles AMD to relief under Section 2.

IV. CATEGORIES OF EVIDENCE ON WHICH PLAINTIFFS EXPECT TO RELY

A. Given Factors Unique to This Case, Broad Deposition Discovery Is Appropriate

Before turning to the discovery Plaintiffs will need, four preliminary observations about discovery in this case are in order.

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[100] *LePages*, 324 F.3d at 159 (emphasis added).

First, the scope of discovery must track the evidentiary burden that the discovery is intended to meet. Here, Intel will undoubtedly hold Plaintiffs to a burden of establishing material exclusion, quantitatively, geographically (the relevant market is worldwide) and temporally. To meet it, Plaintiffs will need to develop admissible evidence that, but for Intel's wrongful conduct, quarter-to-quarter over a seven-year period AMD would likely have been able to win a larger share of its customers' business around the world. Necessarily, Plaintiffs must arm themselves with evidence of what Intel constraints were in place over those quarters for each of those customers in each of those locations.

Building this record is not something Plaintiffs can achieve with a few dozen depositions. The customer landscape is panoramic. In this brief alone, we have discussed fifteen OEMs, ten system builders, and nine distributors whose executives and purchasing agents were deeply involved in negotiating exclusionary deals with Intel. In annexes to this brief, we identify 206 Intel executives, managers, salespeople and engineers, as well as 280 of their customer counterparts, [redacted] The numbers are great because over time, different people occupied seats at the negotiating table, and we are dealing with a seven-year time horizon.

Second, much of the testimony Plaintiffs need to elicit, and most of the documents they need to collect, will not be read or shown to the jury. Instead, this discovery will contribute to an overall admissible record of Intel's misconduct that qualified experts can summarize and upon which they can rely. In a case of this magnitude, the jury will see only the tip of a much larger iceberg that must be made up of admissible, record evidence. Accordingly, the scope of discovery cannot be defined, as Intel would prefer, by the number of witnesses likely to be called to testify or the number of exhibits a party may eventually offer into evidence.

Third, by its conduct and culture, Intel has intentionally increased the difficulty of proving its antitrust violations. As noted earlier, among 140 million pages of discovery produced by Intel, [redacted]. Going back to the Andy Grove days, Intel has adopted and assiduously enforced an antitrust compliance program that has as its hallmarks the avoidance of a paper trail of its customer dealings and the prompt purging of any written record that might inadvertently appear. [redacted]

Because of the laconic written deal record Intel has engineered, deposition discovery in this case unavoidably will be somewhat "hit and miss." [redacted] Plaintiffs will require multiple depositions to specifically identify those most materally involved and to stitch together from years-old recollections each episode of AMD exclusion.

Fourth, as noted earlier, the written record has not yet been fully assembled. [redacted] Other OEMs are in the process of supplementing their production. [redacted] Moreover, much of Intel's production, has yet to be received in usable form. This is particularly so as to [redacted] When ultimately available for review, these documents will undoubtedly shed light on some additional deposition needs.

B. Depositions Needed To Establish the Facts

[redacted] For the court's convenience, the names of those individuals (together with identifying information) are collected in annexes to this Statement. Annex A sets forth [redacted] Annex B sets forth [redacted] All are thus likely deposition candidates.

Obviously, as depositions are conducted, names will fall off these lists, but others are likely to be added, both because of deposition testimony implicating them or the production of

new documents identifying their roles. Hence, the lists should be regarded as preliminary.

C. Categories of Documents on Which Plaintiffs Expect To Rely

Documentary evidence on which Plaintiffs expect to reply comes from two broad sources: Intel and its customers. The Intel materials take the form of email and other correspondence, internal reports and presentation material and spreadsheets culled from approximately 328 Intel custodians. These materials provide, *inter alia*, [redacted]

Additionally, Intel is in the process of producing sales transactional data (e.g., price, quantity, etc.), cost data (cost to manufacture microprocessors at each fab) and other manufacturing data (e.g., yield rates, etc.) from Intel's internal database systems and materials stored for and accessible by Intel work groups in SharePoint servers. This data will constitute part of the basic source material for economic analysis of the exclusion effects of Intel's conduct.

The third-party productions include documents and transactional data maintained by the various OEMs, system builders, parts distributors and computer retailers, as well as documents maintained by various Intel partners and vendors (e.g., Skype, Microsoft, and Intel's auditors, Ernst & Young). These materials are being produced from various custodians responsible for their employer's Intel relationship and, as in the case with similar materials from Intel, provide a basic understanding of the respective dealings between Intel and its customers.

Transactional data is also being produced by some of the third parties including all major OEMs (Dell, HP, IBM, Lenovo, Acer, Gateway, Fujitsu, NEC, Sony), major distributors of microprocessors and computer systems (TechData, Avnet, Synnex, Ingram Micro, ASI), system builders (Rackable, Supermicro, Egenera) and major computer retailers (Best Buy, CompUSA,

Staples, Circuit City, Office Depot, Office Max). The data consists either of transactional level detail, or weekly or monthly sales compilations. In the case of distributors, these data show sales of x86 microprocessors, while in the case of OEMs, system builders and retailers they show sales of the computer systems incorporating x86 microprocessors. Producing third parties are also providing data on their cost of goods sold. This third-party data will also constitute part of the source material Plaintiffs' experts will use in analyzing the effect of Intel's exclusionary conduct.

D. Expert Testimony

Plaintiffs currently intend to offer economic and industry expert testimony. The latter will deal with issues such as the structure of the x86 microprocessor and computer markets; demand- and supply-side substitutability of x86 and non-x86 microprocessors; barriers to entry; the existence and extent of, and explanation for, the uncontestable segment of customers' business; the relative importance of different parts of the x86 distribution chain; economies of scale and sustainability in the x86 space; the different development paths taken by AMD and Intel, and the relative superiority of their products.

Economic testimony will establish that the relevant geographic market is global, and a relevant product market is x86 microprocessors ("CPUs") suitable for use in personal computers, workstations and servers. It will also show that Intel had substantial monopoly power in the x86 market, and that AMD's presence in the market acted as a constraint on that power. Existing high entry barriers prevent other actual or potential competitors from constraining Intel's monopoly power. Economists will also analyze the effects of Intel's numerous forms of anticompetitive behavior, show that they foreclosed AMD from a material portion of the market and, if required, show that Intel used conditional financial incentives that effectively priced units that would otherwise have been purchased from AMD below an appropriate measure of cost.

This behavior harmed AMD by foreclosing sales of its products, raising its costs, and constraining its ability to invest in innovation. All of this, in turn, harmed consumers through higher prices, less product variety, and reduced innovation.

Economic analysis will also quantify both lost profits on the sales of CPUs that AMD would have sold but for Intel's misconduct, and additional adverse impacts (such as higher borrowing and production costs) that collectively reduced its enterprise value. AMD's lost profits and impairment to its enterprise value will be estimated separately. Damages arising from direct effects on U.S. commerce (for FTAIA purposes) will also be estimated.

V. FORMS OF RELIEF SOUGHT BY PLAINTIFFS

A. AMD Seeks Damages For The Injury To Its Business And An Injunction Prohibiting Intel's Exclusionary Conduct

AMD seeks treble damages for the injury to its business and property. *See* 15 U.S.C. § 15 (any person injured in his or her "business or property by reason of anything forbidden in the antitrust laws . . . shall recover threefold the damages by him [or her] sustained . . .") Once fact of injury has been shown, "it is not necessary to show with total certainty the amount of damages sustained, just that the antitrust violation caused the antitrust injury suffered by the plaintiff." *Rossi v. Standard Roofing*, 156 F.3d 452, at 483 (3d Cir. 1998).

AMD's damages include the difference in the business value of AMD as it presently exists and as it would have existed but for Intel's exclusionary conduct. Expert analysis establishing those respective values will be presented.[101] AMD's damages presentation will also take account of Judge Farnan's ruling[102] concerning limitations resulting from the Foreign Trade

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[101] *See generally Rossi*, 156 F.3d 452, 485-87.
[102] *Advanced Micro Devices v. Intel Corporation*, 452 F. Supp. 2d 555 (D. Del. 2006).

Antitrust Improvements Act.[103] Evidence will be presented establishing a direct link between AMD's damages and affected U.S. commerce. That evidence will include a showing both of the "but for" domestic structure of AMD and the locus of the sales opportunities which Intel unlawfully foreclosed. AMD's damages claim has not yet been fully quantified, but will certainly be measured in billions of dollars.

AMD will also seek injunctive relief. Indeed, the only realistic prospect for sustainable competition in the X86 market is vitally dependant on such relief. Unless Intel is hereafter limited to the lawful merits competition that Section 2 permits, its monopoly will forever remain unchallengeable. Appropriate injunctive relief will necessarily include specific prohibitions directed at each of the exclusionary practices by which Intel forecloses rivals from market opportunities. Prohibitions against express and implied exclusive dealing arrangements, prohibitions against pricing schemes that achieve exclusion through all-or-nothing leveraging, and prohibitions against payments for dropping, delaying or limiting the manufacture, sale or promotion of rival-based products will all be sought. Equally important is a prohibition tailored to take away the "stick" half of Intel's "stick-and-carrot" usurpation of customer purchasing freedom. The crux of Intel's "stick" strategy is the discriminatory disadvantage it imposes on "disloyal" OEMs. This serves both to punish those targeted OEMs while deterring others from dealing with AMD lest they too incur Intel's wrath. To lift this dark veil of fear, AMD will seek an injunction that will require transparency in Intel's customer dealings and prohibit

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[103] 15 U.S.C. § 6a (1997).

discrimination against those who also deal with AMD.[104]

B. Class Plaintiffs Seek Recovery of "Pass On" Damages and Injunctive Relief

Class Plaintiffs seek to represent a class of individuals and entities residing in the United States that bought personal computers containing an Intel x86 microprocessor. The putative class members are individual consumers, businesses and other organizations that use (as opposed to re-sell) Intel's microprocessors. Occupying the end of the chain of distribution, they are the ones in that chain who have suffered the consequences of Intel's exclusionary behavior because they cannot pass that injury on to others.

The monetary relief being sought by Class Plaintiffs is the recovery of the overcharges resulting from Intel's anticompetitive conduct that were "passed on" to the putative class members during the class period. Intel's monopoly in the X86 microprocessor market has had a class-wide impact in the form of overcharges, i.e., the difference between the price that was actually paid by the putative class members and the price they would have paid had the anticompetitive conduct not occurred. *See, e.g. DRAM*; 2006 WL 1530166, at *7-10.

Calculation of these damages will involve expert opinion as to the percentage overcharge imposed by Intel on its direct purchasers and the extent to which that overcharge was passed on to members of the proposed class. At the direct level, the overcharge estimate will require identification of one or more benchmarks as well as the use of margin data and other information concerning these benchmarks. Potential benchmarks include any microprocessors sold by Intel at prices that during a particular time period were unaffected or affected less by Intel's

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[104] *See United States v. Dentsply Int'l, Inc.*, 2006 WL 2612167, *2-3 (injunction banning price discrimination against non-exclusive dealers while permitting volume discounts only where "publicized" and offered to all dealers on a "uniform basis").

challenged conduct, or other products sold by Intel or third parties that were not the subject of Intel's exclusionary conduct.

At the indirect level, the pass-on estimate will require expert analysis of purchase and sales data from Intel and third parties, much of which already has been collected. Class Plaintiffs will also need to have sufficient understanding of the data that are produced so that they and their experts can rely upon this information.

On May 16, 2008, Class Plaintiffs are scheduled to file a motion in which they will seek certification of a nationwide class for damages under California law. Alternatively, they will seek certification of a 26-state subclass for damages under the laws of those states. At this stage of the litigation, Class Plaintiffs have not yet estimated the damages of the proposed class or sub-class, but they expect such damages to measure in the billions of dollars.

Class Plaintiffs also seek injunctive relief pursuant to Section 16 of the Clayton Act, 15 U.S.C. § 26 on behalf of a nationwide class. The putative class members will continue to buy personal computers equipped with Intel x86 microprocessors, and by forcing Intel to stop its anticompetitive conduct, they would benefit from lower-priced PCs in the future. Class members would also benefit in the future from a broader range of microprocessor choices and greater microprocessor innovation in a more competitive environment.

VI. CONCLUSION

Intel's illegal maintenance of its x86 monopoly was pervasive, long standing, largely undocumented and below the radar. For these reasons, substantial numbers of depositions will be required – both of Intel witnesses and third-party witnesses – to get to the facts. Plaintiffs renew their request that the Court permit their discovery to proceed along multiple deposition tracks, two for Intel witnesses and a third for third-party witnesses, and a window within which to complete all three.

RICHARDS, LAYTON & FINGER, P.A.

/s/ Frederick L. Cottrell, III
Frederick L. Cottrell, III (#2555)
Chad M. Shandler (#3796)
Steven J. Fineman (#4025)
One Rodney Square
920 North King Street
Wilmington, DE 19899
(302) 651-7836
cottrell@rlf.com
shandler@rlf.com
fineman@rlf.com

OF COUNSEL:

Charles P. Diamond
Linda Smith
Mark Samuels
O'Melveny & Myers LLP
400 South Hope Street
Los Angeles, CA 90071-2899

Attorneys for Advance Micro Devices, Inc. and AMD International Sales & Service, Ltd.

PRICKETT JONES & ELLIOTT, P.A.

/s/ James L. Holzman
James L. Holzman (#663)
J. Clayton Athey (#4378)
1310 King Street
P. O. Box 1328
Wilmington, DE 19899
(302) 888-6509
jlholzman@prickett.com
jcathey@prickett.com

Interim Liaison Counsel and Attorneys for Phil Paul, on behalf of himself and all others similarly situated