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**JCS**

IN THE UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN FRANCISCO DIVISION

**JCS**

PETER JON NAIGOW, individually and on  
behalf of all others similarly situated,

Plaintiff,

v.

INTEL CORPORATION, a Delaware  
corporation,

Defendant.

**CLASS ACTION COMPLAINT**  
**JURY TRIAL DEMANDED**

## COMPLAINT

Plaintiff Peter Jon Naigow, by his undersigned attorneys, brings this civil action for damages and injunctive relief on behalf of himself and all others similarly situated against the above-named Defendant, and demanding a trial by jury, complains and alleges as follows:

### I. NATURE OF THE ACTION

1. Intel holds a monopoly in a market critical to our economy: microprocessors that run the Microsoft Windows and Linux families of operating systems (hereinafter the "x86 Microprocessor Market"). Intel possesses unmistakable and undeniable market power, its microprocessor revenues accounting for approximately 90% of the worldwide total (and 80% of the units).

2. For over a decade Intel has unlawfully maintained its monopoly by engaging in a relentless, worldwide campaign to coerce customers to refrain from dealing with AMD. Among other things,

- Intel has forced major customers into exclusive or near-exclusive deals;
- it has conditioned rebates, allowances and market development funding on customers' agreement to severely limit or forego entirely purchases from its major competitor Advanced Micro Devices, Inc. ("AMD");
- it has established a system of discriminatory, retroactive, first-dollar rebates triggered by purchases at such high levels as to have the practical and intended effect of denying customers the freedom to purchase any significant volume of processors from AMD;
- it has threatened retaliation against customers introducing AMD computer platforms, particularly in strategic market segments;
- it has established and enforced quotas among key retailers effectively requiring them to stock overwhelmingly, if not exclusively, Intel-powered computers, thereby artificially limiting consumer choice;
- it has forced PC makers and technology partners to boycott AMD product launches and promotions;

1           • and it has abused its market power by forcing on the industry technical standards and  
2 products which have as their central purpose the handicapping of AMD in the marketplace.

3           3. Intel's economic coercion of customers extends to all levels – from large computer-  
4 makers like Hewlett-Packard and IBM to small system-builders to wholesale distributors to  
5 retailers such as Circuit City. All face the same choice: accept conditions that exclude AMD or  
6 suffer discriminatory pricing and competitively crippling treatment. In this way, Intel has avoided  
7 competition on the merits and deprived AMD of the opportunity to stake its prices and quality  
8 against Intel's for every potential microprocessor sale.

9           4. Intel's conduct has become increasingly egregious over the past several years as  
10 AMD has achieved technological leadership in critical aspects of microprocessor architecture. In  
11 April 2003, AMD introduced its Opteron microprocessor, the first microprocessor to take x86  
12 computing from 32 bits to 64 bits – an advance that allows computer applications to address  
13 exponentially more memory, thereby increasing performance and enabling features not possible  
14 with just 32 bits. Unlike Intel's 64-bit architecture of the time (Itanium), the AMD Opteron – as  
15 well as its subsequently-introduced desktop cousin, the AMD Athlon64 – offers backward  
16 compatibility, allowing PC users to continue using 32-bit software as, over time, they upgrade their  
17 hardware. Bested in a technology duel over which it long claimed leadership, Intel increased  
18 exploitation of its market power to pressure customers to refrain from migrating to AMD's  
19 superior, lower-cost microprocessors.

20           5. Intel's conduct has unfairly and artificially capped AMD's market share, and  
21 constrained it from expanding to reach the minimum efficient levels of scale necessary to compete  
22 with Intel as a predominant supplier to major customers. As a result, computer manufacturers  
23 continue to buy most of their requirements from Intel, continue to pay monopoly prices, continue  
24 to be exposed to Intel's economic coercion, and continue to submit to artificial limits Intel places  
25 on their purchases from AMD. With AMD's opportunity to compete thus constrained, the cycle  
26 continues, and Intel's monopoly profits continue to flow.

27           6. Consumers ultimately foot this bill, in the form of inflated PC prices and the loss of  
28 freedom to purchase computer products that best fit their needs. Society is worse off for lack of

1 innovation that only a truly competitive market can drive. The Japanese Government recognized  
2 these competitive harms when on March 8, 2005, its Fair Trade Commission (the "JFTC")  
3 recommended that Intel be sanctioned for its exclusionary misconduct directed at AMD. Intel  
4 chose not to contest the charges.

5 7. In this proposed class action, Plaintiff, on behalf of a class of purchasers of Intel  
6 microprocessors, seeks injunctive relief and compensatory damages arising from Intel's restraint of  
7 trade and unfair business practices.

## 8 9 II. JURISDICTION AND VENUE

10 8. The Court has subject matter jurisdiction under 28 U.S.C. § 1337 (commerce and  
11 antitrust regulation) and 28 U.S.C. § 1331 (federal question), as this action arises under Section 2  
12 of the Sherman Act, 15 U.S.C. § 2, and Sections 4 and 16 of the Clayton Act, 15 U.S.C. §§ 15(a)  
13 and 26. The Court has supplemental subject matter jurisdiction of the pendent state law claims  
14 under 28 U.S.C. § 1367.

15 9. Venue is proper because Intel Corporation resides and is found in this district within  
16 the contemplation of 28 U.S.C. § 1391 (b) and (c) and as provided in Sections 4 and 12 of the  
17 Clayton Act, 15 U.S.C. §§ 15 and 22.

## 18 III. THE PARTIES

19 10. Plaintiff Peter Jon Naigow is a resident of Brown Deer, Milwaukee County,  
20 Wisconsin, who purchased a computer with an Intel microprocessor and was injured as a result of  
21 Defendant's illegal conduct.

22 11. Defendant INTEL CORPORATION is a Delaware corporation with its principal  
23 executive offices at Santa Clara, California, and it conducts business both directly and through  
24 wholly-owned and dominated subsidiaries worldwide. Intel and its subsidiaries design, produce,  
25 and sell a wide variety of microprocessors, flash memory devices, and silicon-based products for  
26 use in the computer and communications industries worldwide.

#### IV. CLASS ACTION ALLEGATIONS

12. Plaintiff brings this suit as a class action pursuant to Rules 23(b)(2) and 23(b)(3) of the Federal Rules of Civil Procedure, on behalf of herself and a Plaintiff Class ("the Class") composed of and defined as follows:

All persons and entities residing in the United States who from June 29, 2001 through the present, purchased a microprocessor in the United States indirectly from the Defendant. Specifically excluded from this Class are the Defendant; the officers, directors or employees of the Defendant; any entity in which any has a controlling interest; and any affiliate, legal representative, heir or assign of the Defendant. Also excluded are any federal, state or local governmental entities, any judicial officer presiding over this action and the members of his/her immediate family and judicial staff, and any juror assigned to this action.

13. This action has been brought and may be properly maintained as a class action pursuant to Rule 23 of the Federal Rules of Civil Procedure for the following reasons:

a. The Class is ascertainable and there is a well-defined community of interest among the members of the Class;

b. Based upon the nature of the trade and commerce involved and the number of indirect purchasers of Intel-powered computers, Plaintiff believes that the members of the class number in the thousands, and therefore is sufficiently numerous that joinder of all Class members is not practicable;

c. Plaintiff's claims are typical of the claims of the members of the Class because Plaintiff indirectly purchased an Intel microprocessor from the Defendant or its co-conspirators, and therefore Plaintiff's claims arise from the same common course of conduct giving rise to the claims of the members of the Class and the relief sought is common to the Class;

d. The following common questions of law or fact, among others, exist as to the members of the Class:

i. whether Defendant formed and operated a combination or conspiracy to fix, raise, maintain or stabilize the prices of, or allocate the market for, microprocessors;

ii. whether the combination or conspiracy caused microprocessor prices to be higher than they would have been in the absence of Defendant's conduct;

- 1                   iii.    the operative time period of Defendant's combination or conspiracy;
- 2                   iv.    whether Defendant's conduct caused injury to the business or
- 3   property of Plaintiff and the members of the Class;
- 4                   v.    the appropriate measure of the amount of damages suffered by the
- 5   Class;
- 6                   vi.   whether Defendant's conduct violates Section 1 of the Sherman Act;
- 7                   vii.  whether Defendant's conduct violates Sections 16720 and 17200 of
- 8   the California Business and Professions Code;
- 9                   viii. whether Defendant's conduct violates the antitrust, unfair
- 10   competition, and consumer protection laws of the other states as alleged below; and
- 11                e.    These and other questions of law or fact which are common to the members
- 12   of the Class predominate over any questions affecting only individual members of the Class;
- 13                f.    After determination of the predominate common issues identified above, if
- 14   necessary or appropriate, the Class can be divided into logical and manageable subclasses;
- 15                g.    Plaintiff will fairly and adequately protect the interests of the Class in that
- 16   Plaintiff has no interests that are antagonistic to other members of the Class and has retained
- 17   counsel competent and experienced in the prosecution of class actions and antitrust litigation to
- 18   represent herself and the Class;
- 19                h.    A class action is superior to other available methods for the fair and efficient
- 20   adjudication of this litigation since individual joinder of all damaged Class members is impractical.
- 21   The damages suffered by individual Class members are relatively small, given the expense and
- 22   burden of individual prosecution of the claims asserted in this litigation. Thus, absent the
- 23   availability of class action procedures, it would not be feasible for Class members to redress the
- 24   wrongs done to them. Even if the Class members could afford individual litigation, the court
- 25   system could not. Further, individual litigation presents the potential for inconsistent or
- 26   contradictory judgments and would greatly magnify the delay and expense to all parties and to the
- 27   court system. Therefore, the class action device presents far fewer case management difficulties
- 28



1 and will provide the benefits of unitary adjudication, economy of scale and comprehensive  
2 supervision by a single court;

3 i. Defendant has acted, and refused to act, on grounds generally applicable to  
4 the Class, thereby making appropriate final injunctive relief with respect to the Class as a whole;  
5 and

6 j. In the absence of a class action, Defendant would be unjustly enriched  
7 because it would be able to retain the benefits and fruits of its wrongful conduct.

8 14. The Claims in this case are also properly certifiable under the laws of the State of  
9 California, and of the other individual states identified below in the Claims for Relief.

## 10 11 V. FACTUAL BACKGROUND

### 12 A. Early History

13 15. The brain of every computer is a general-purpose microprocessor, an integrated  
14 circuit capable of executing a menu of instructions and performing requested mathematical  
15 computations at very high speed. Microprocessors are defined by their instruction set – the  
16 repertoire of machine language instructions that a computer can follow. So, too, are computer  
17 operating systems – software programs that perform the instructions in the set allowing the  
18 computer to perform meaningful tasks. The first generation of microprocessors, which were  
19 capable of handling 4 and then later 8 bits of data simultaneously, evolved to provide 16-bit  
20 capability (the original DOS processors), then sometime later a 32-bit capability (allowing the use  
21 of advanced graphical interfaces such as later versions of Windows), and now 64-bit capability.

22 16. When IBM defined the original PC standards in the early 1980s, it had available to  
23 it a variety of microprocessors, each with its own instruction set – among these were  
24 microprocessors developed by Motorola, Zilog, National Semiconductor, Fairchild, Intel and  
25 AMD. IBM opted for the Intel architecture, which utilized what became known as the x86  
26 instruction set (after Intel's naming convention for its processors, *i.e.*, 8086, 80186, 80286, 80386),  
27 and a compatible operating system offered by Microsoft, known as DOS. Unwilling to be  
28 consigned to a single source of supply, however, IBM demanded that Intel contract with another

1 integrated circuit company and license it to manufacture x86 chips as a second source. AMD,  
2 which had worked with Intel before in supplying microprocessors, agreed to abandon its own,  
3 competing architecture, and it undertook to manufacture x86 chips as a second source of supply.  
4 Assured that it would not be dependent upon a monopoly supplier of x86 chips, IBM introduced  
5 the PC in August 1981 – and its sales exploded.

6 17. Although an arbitrator later found that “AMD’s sponsorship helped propel Intel  
7 from the chorus line of semiconductor companies into instant stardom,” Intel soon set out to  
8 torpedo the 1982 AMD-Intel Technology Exchange Agreement (the “Agreement”) by which each  
9 would serve as a second source for products developed by the other. For example, Intel was  
10 required by the Agreement to send AMD timely updates of its second generation 80286 chip.  
11 Instead, in a “deliberate[]” effort “to shackle AMD progress,” Intel sent AMD information  
12 “deliberately incomplete, deliberately indecipherable and deliberately unusable by AMD  
13 engineers.” The conduct was, in the arbitrator’s words, “inexcusable and unworthy.” And it was  
14 not isolated. Intel elsewhere tried to “sabotage” AMD products, engaged in “corporate extortion”  
15 and demonstrated a near-malevolent determination “to use all of its economic force and power on a  
16 smaller competitor to have its way.”

17 18. In another underhanded effort to stifle AMD’s business, Intel decided in 1984 that,  
18 the agreement between the parties notwithstanding, Intel would become the sole-source for the  
19 promising 80386 chip. To fully realize its objective, Intel engaged in an elaborate and insidious  
20 scheme to mislead AMD (and the public) into erroneously believing that AMD would be a second  
21 source, thereby keeping AMD in the Intel “competitive camp” for years. This duplicitous strategy  
22 served a broader purpose than simply preventing AMD from competing with Intel. Customers’  
23 perception that AMD would continue to serve as Intel’s authorized second source was essential to  
24 Intel’s aim of entrenching the x86 family of microprocessors as the industry standard (as it had  
25 been essential to IBM’s original introduction of the PC). Intel was well aware that if computer  
26 manufacturers knew Intel intended to sole source its 32-bit product, they would be motivated to  
27 select alternative products produced by companies offering second sources. Intel could not  
28 preserve the appearance that AMD would second source the 386 if it terminated the contract or



1 otherwise disclosed its actual intent. Thus, Intel stalled negotiations over product exchanges, while  
2 at the same time allowing AMD to believe that it could ultimately obtain the 386. This injured  
3 competition by deterring and impeding serious competitive challenges to Intel and directly injured  
4 AMD by depriving it of the revenues and profits it would have earned from such a challenge.

5 19. Intel implemented this secret plan for the purpose of acquiring and maintaining an  
6 illegal monopoly in the x86 line of microprocessors, which it did by at least 1987. As was its plan,  
7 Intel's conduct drained AMD's resources, delayed AMD's ability to reverse-engineer or otherwise  
8 develop and manufacture competitive products, and deterred AMD from pursuing relationships  
9 with other firms. In so doing, Intel wrongfully secured the benefit of AMD's marketing skills and  
10 talent in support of the x86 line of microprocessors and related peripherals and secured the benefit  
11 of substantial competitively sensitive AMD information regarding its product development plans.  
12 When AMD petitioned to compel arbitration in 1987 for Intel's breach and bad faith, the arbitrator  
13 took notice of Intel's anticompetitive design: "In fact, it is no fantasy that Intel wanted to blunt  
14 AMD's effectiveness in the microprocessor marketplace, to effectively remove AMD as a  
15 competitor."

16 20. In 1992, after five years of litigation, the arbitrator awarded AMD more than \$10  
17 million plus prejudgment interest and a permanent, nonexclusive and royalty-free license to any  
18 Intel intellectual property embodied in AMD's own 386 microprocessor, including the x86  
19 instruction set. Confirmation of the award was upheld by the California Supreme Court two years  
20 later. In bringing the litigation to a close, the arbitrator hoped that by his decision, "the  
21 competition sure to follow will be beneficial to the parties through an expanded market with  
22 appropriate profit margins and to the consumer worldwide through lower prices." Not for the first  
23 time, and certainly not for the last, Intel's anticompetitive zeal was woefully underestimated.

#### 24 25 **B. AMD Moves from Second Source to Innovator**

26 21. Shortly after confirmation of the award, AMD settled its outstanding disputes with  
27 Intel in a 1995 agreement which gave AMD a shared interest in the x86 instruction set but required  
28 it to develop its own architecture to implement those instructions. The settlement had the

1 unintended benefit of forcing AMD to reinvent itself. Beginning in the late 1990s, AMD  
2 committed its resources to innovating not just to be different, but to deliver solutions of greatest  
3 benefit to its customers. Going its own way proved beneficial: AMD's first x86 chip without Intel  
4 pin-compatibility, the Athlon microprocessor delivered in 1999, marked the first (but not last) time  
5 AMD was to leapfrog Intel technologically and beat it to market with a new generation Windows  
6 microprocessor (and break the 1GHz speed barrier to boot).

7 22. But AMD's biggest breakthrough came four years later when it introduced an  
8 extension of x86 architecture that took Windows processors into the realm of 64-bit computing.  
9 Unlike Intel, which invested billions in its Itanium microprocessor and a new, uniquely 64-bit  
10 proprietary instruction set (which, because it was proprietary, would have been a game-ending  
11 development for AMD had it become the industry standard), AMD undertook to supplement the  
12 x86 instructions to accommodate 64-bit processing while allowing 32-bit software to be run as  
13 well. AMD's efforts culminated when, in April 2003, it brought to market its Opteron  
14 microprocessor for servers (the workhorse computers used by businesses to run corporate  
15 networks, e-commerce websites and other high-end, computationally-intense applications).  
16 Opteron was the industry's first x86 backward compatible 64-bit chip. Six months later, AMD  
17 launched the Athlon64, a backward compatible 64-bit microprocessor for desktops and mobile  
18 computers.

19 23. The computing industry hailed AMD's introduction of 64-bit computing as an  
20 engineering triumph. Said *Infoworld* in its August 27, 2004, issue,

21 You just gotta love a Cinderella story. . . . AMD's rapid rise from  
22 startup to \$5 billion semiconductor powerhouse is, as Humphrey  
23 Bogart's English teacher once said, the stuff of which dreams are  
24 made. . . . In the process, AMD has become known as the company  
25 that kept Intel honest, the Linux of the semiconductor world. . . .  
26 After decades of aping Intel architectures, the AMD64 architecture,  
rooted in Opteron and Athlon 64 processors, has actually been  
imitated by Intel in the form of Nocona, Intel's 64-bit version of  
Xeon. In a stunning reversal of fortune, Intel was forced to build that  
chip because Opteron was invading a server market that the Intel  
Itanium was supposed to dominate.

27 In what represented a paradigm shift in the microprocessor world, Microsoft endorsed AMD's 64-  
28 bit instruction set and announced that Windows would support it. As noted by *Infoworld*, Intel

1 then copied AMD's technology for its own 64-bit offerings – an event that poignantly marked  
2 AMD's technological emergence. Intel still has yet to catch up.

3 24. AMD has since extended its AMD64 technology to the balance of AMD's  
4 microprocessor line-up (which now includes AMD Athlon 64, AMD Athlon 64 FX, Mobile AMD  
5 Athlon 64, AMD Sempron, and AMD Turion64 products). Owing also to AMD's pioneering  
6 developments in dual-core processors and its introduction of an improved architecture that speeds  
7 up microprocessor communications with memory and input/output devices, AMD has seized  
8 technological leadership in the microprocessor industry. Its innovation has won for it over 70  
9 technology leadership and industry awards and, in April 2005, the achievement of being named  
10 "Processor Company of 2005" at, to Intel's embarrassment, an Intel-sponsored industry awards  
11 show.

12 25. Tellingly, AMD's market share has not kept pace with its technical leadership.  
13 Intel's misconduct is the reason. Intel has unlawfully maintained the monopoly IBM bestowed on  
14 it and systematically excluded AMD from any meaningful opportunity to compete for market share  
15 by preventing the companies that buy chips and build computers from freely deploying AMD  
16 processors; by relegating AMD to the low-end of the market; by preventing AMD from achieving  
17 the minimum scale necessary to become a full-fledged, competitive alternative to Intel; and by  
18 erecting impediments to AMD's ability to increase its productive capacity for the next generation  
19 of AMD's state of the art microprocessors. Intel's exclusionary acts are the subject of the balance  
20 of this complaint.

## 21 22 VI. THE X86 PROCESSOR INDUSTRY

### 23 A. Competitive Landscape

24 26. The x86 versions of Windows and Linux, the two operating systems that dominate  
25 the business and consumer computer worlds, have spawned a huge installed base of Windows- and  
26 Linux-compatible application programs that can only run the x86 instruction set. This has given  
27 Intel effective ownership of personal computing. Although other microprocessors are offered for  
28 sale, the non-x86 microprocessors are not reasonably interchangeable with x86 microprocessors

1 because none can run the x86 Windows or Linux operating systems or the application software  
2 written for them.

3 27. The relevant product market is x86 microprocessors because a putative monopolist  
4 in this market would be able to raise the prices of x86 microprocessors above a competitive level  
5 without losing so many customers to other microprocessors as to make this increase unprofitable.  
6 While existing end-users can theoretically shift to other operating system platforms, high switching  
7 costs associated with replacing existing hardware and software make this impractical. Further, the  
8 number of new, first-time users who could choose a different operating-system platform is too  
9 small to prevent an x86 microprocessor monopolist from imposing a meaningful price increase for  
10 a non-transitory period of time. Computer manufacturers would also encounter high switching  
11 costs in moving from x86 processors to other architectures, and no major computer maker has ever  
12 done it. In short, demand is not cross-elastic between x86 microprocessors and other  
13 microprocessors at the competitive level.

14 28. The relevant geographic market for x86 microprocessors is worldwide. Intel and  
15 AMD compete globally; PC platform architecture is the same from country to country;  
16 microprocessors can be easily and inexpensively shipped around the world, and frequently are; and  
17 the potential for arbitrage prevents chipmakers from pricing processors differently in one country  
18 than another.

19 29. Intel dominates the worldwide x86 Microprocessor Market. According to published  
20 reports, over the past several years it has consistently achieved more than a 90% market share as  
21 measured by revenue, while AMD's revenue share has remained at approximately 9%, with all  
22 other microprocessor manufacturers relegated to less than 1%. Intel has captured at least 80% of  
23 x86 microprocessor unit sales in seven of the last eight years. Since 1999, AMD's worldwide  
24 volume share has hovered at 15%, only once penetrating barely the 20% level. The following chart  
25 is illustrative:  
26  
27  
28

**x86 Worldwide CPU Unit Market Share**

	1997	1998	1999	2000	2001	2002	2003	2004
Intel	85.0%	80.3%	82.2%	82.2%	78.7%	83.6%	82.8%	82.5%
AMD	7.3%	11.9%	13.6%	16.7%	20.2%	14.9%	15.5%	15.8%
Others	7.5%	7.9%	4.2%	1.1%	1.1%	1.4%	1.7%	1.7%

30. Intel's x86 family of microprocessors no longer faces any meaningful competition other than from AMD. National Semiconductor acquired Cyrix in 1997 but shuttered it less than two years later. At the beginning of this year only two other x86 chip makers remained, Via Technologies, Inc. and Transmeta Corporation – which together account for less than 2% of the market. Transmeta has since announced its intention to cease selling x86 microprocessors, and Via faces dim prospects of growing its market share to a sustaining level.

31. Intel is shielded from new competition by huge barriers to entry. A chip fabrication plant ("fab") capable of efficiently mass-producing x86 microprocessors carries a price tag of at least \$2.5 to \$3.0 billion. In addition, any new entrant would need the financial wherewithal to underwrite the billions more in research and development costs to design a competing x86 microprocessor and to overcome almost insurmountable IP and knowledge barriers.

#### **Customers for x86 Microprocessors**

32. Annual worldwide consumption of x86 microprocessors currently stands at just over 200 million units per year and is expected to grow by 50% over the remainder of the decade. Relatively few microprocessors are sold for server and workstation applications (8.75 million in 2004), but these command the highest prices. Most x86 microprocessors are used in desktop PCs and mobile PCs, with desktops currently outnumbering mobile by a margin of three to one. Of the total worldwide production of computers powered by x86 microprocessors, 32% are sold to U.S. consumers; U.S. sales of AMD-powered computers account for 29% of AMD's production.

33. The majority of x86 microprocessors are sold to a handful of large OEMs (original equipment manufacturers), highly visible companies recognized throughout the world as the leading computer makers. Regarded by the industry as "Tier One" OEMs over most product

categories are: Hewlett-Packard ("HP"), which now also owns Compaq Computer; Dell, Inc.; IBM, which as of May 1, 2005, sold its PC (but not server) business to Lenovo; Gateway/eMachines; and Fujitsu/Fujitsu Siemens, the latter a Europe-based joint venture. Toshiba, Acer, NEC and Sony are also commonly viewed as Tier One OEMs in the notebook segment of the PC market. HP and Dell are the dominant players, collectively accounting for over 30% of worldwide desktop and mobile sales, and almost 60% of worldwide server sales. Both are U.S.-based companies, as are IBM and Gateway/eMachines; and all but Gateway have U.S. manufacturing operations (as does Sony, which operates a North American production facility in San Diego).

34. Worldwide, the Tier One OEMs collectively account for almost 80% of servers and workstations (specialty high-powered desktops), more than 40% of worldwide desktop PCs, and over 80% of worldwide mobile PCs. According to industry publications, unit market share in 2004 among the Tier One OEMs were as follows:

**OEM Market Shares – 2004**

Company	Server/WS	Desktop	Mobile
Hewlett-Packard	29.86%	.69%	.23%
IBM/Lenovo	28.34%	16.18%	17.27%
Fujitsu/Siemens	3.70%	2.83%	6.88%
Acer	0.81%	1.85%	8.53%
Toshiba	0.31%	0.05%	12.73%
NEC	2.06%	2.02%	4.50%
Sony	—	0.76%	4.23%
Gateway/eMachines	0.16%	2.48%	1.45%
Total	79.70%	43.55%	81.02%

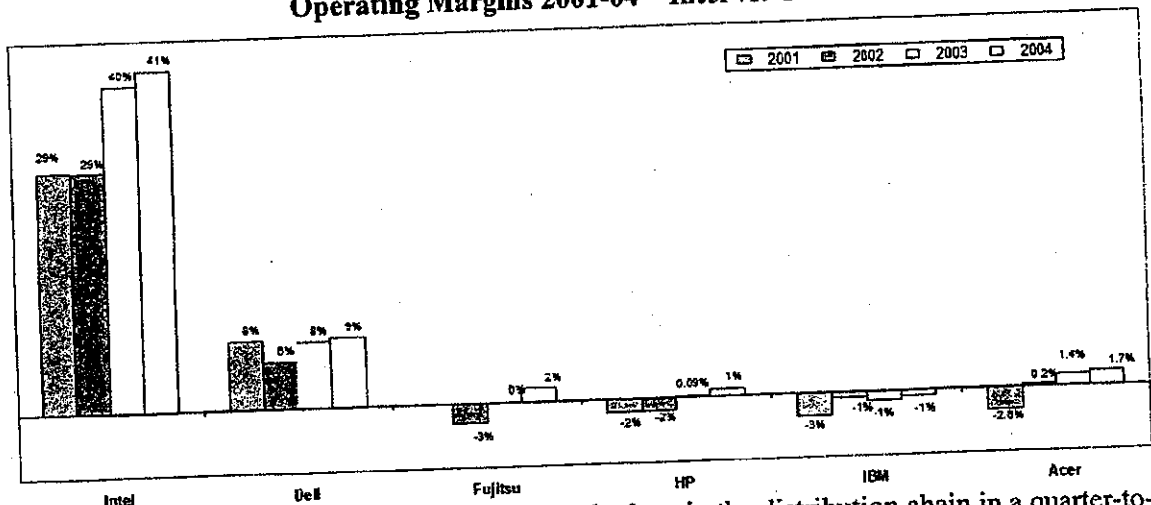
35. The balance of x86 production is sold to smaller system builders and to independent distributors. The latter, in turn, sell to smaller OEMs, regional computer assemblers, value-added resellers and other, smaller distributors. Currently, distributors account for over half of AMD's sales.



36. OEMs have adopted a variety of business models, including sales directly to customers through web-based e-commerce, sales through company-employed sales staffs (who target IT professionals and Fortune 1000 companies) and sales through a network of independent distributors (who focus on smaller business customers). With the exception of Dell, which markets to consumers only directly (mostly over the internet), most OEMs also sell through retail chains. Intel and AMD compete not only to have OEMs incorporate their microprocessors into their retail platforms but also to convince retailers to allocate shelf-space so that the platforms containing their respective microprocessors can be purchased in the retailers' stores.

37. Through its economic muscle and relentless marketing – principally its “*Intel Inside*” and “*Centrino*” programs which financially reward OEMs for branding their PCs as Intel machines – Intel has transformed the OEM world. While once innovative companies themselves, the OEMs have largely become undifferentiated distributors of the Intel platform, offering “*Intel Inside*” and “*Centrino*” computers largely indistinguishable from those of their rivals. As their products have become commoditized, the Tier One OEMs operate on small or negative margins, and, as shown in the following chart, the overwhelming portion of PC profit flows to Intel.

Operating Margins 2001-04 – Intel vs. OEMs



38. This profit drain has left OEMs and others in the distribution chain in a quarter-to-quarter struggle to eke out even a modest return on their assets, thereby making them continually susceptible to Intel's economic coercion, which is described next.

## VII. INTEL'S UNLAWFUL PRACTICES

39. Intel has maintained its x86 microprocessor monopoly by deploying a host of financial and other exclusionary business strategies that in effect limit its customers' ability and/or incentive to deal with AMD. Although differing from customer to customer and segment to segment, the Intel arsenal includes direct payments in return for exclusivity and near-exclusivity; discriminatory rebates, discounts and subsidies conditioned on customer "loyalty" that have the practical and intended effect of creating exclusive or near-exclusive dealing arrangements; threats of economic retaliation against those who give, or even contemplate giving, too much of their business to AMD, or who refuse to limit their AMD business to Intel-approved models, brands, lines and/or sectors, or who cooperate too closely with AMD's promotion of its competitive processors; and misuse of industry standards-setting processes so as to disadvantage AMD products in the marketplace.

40. Intel's misconduct is global. It has targeted both U.S. and offshore customers at all levels to prevent AMD from building market share anywhere, with the goal of keeping AMD small and keeping Intel's customers dependent on Intel for very substantial amounts of product. In this way, OEMs remain vulnerable to continual threats of Intel retaliation, AMD remains capacity-constrained, the OEMs remain Intel-dependent, and Intel thereby perpetuates its economic hold over them, allowing it to continue to demand that customers curtail their dealings with AMD. And the cycle repeats itself: by unlawfully exploiting its existing market share, Intel is impeding competitive growth of AMD, thereby laying foundation for the next round of foreclosing actions with the effect that AMD's ability to benefit from its current technological advances is curtailed to the harm of potential customers and consumers.

41. The following is not intended as an exhaustive catalog of Intel's misconduct, or a complete list of its unlawful acts, but only as examples of the types of improper exclusionary practices that Intel has employed.

1           **1. Practices Directed At OEMs**

2               **a. Exclusive and Near-Exclusive Deals**

3           42. **Dell.** In its history, Dell has not purchased a single AMD x86 microprocessor  
4 despite acknowledging Intel shortcomings and customer clamor for AMD solutions, principally in  
5 the server sector. As Dell's President and CEO, Kevin Rollins, said publicly last February:

6                       Whenever one of our partners slips on either the economics or  
7                       technology, that causes us great concern. . . . For a while, Intel  
8                       admittedly slipped technologically and AMD had made a step  
9                       forward. We were seeing that in customer response and requests.

10           43. Nonetheless, Dell has been and remains Intel-exclusive. According to industry  
11 reports, Intel has bought Dell's exclusivity with outright payments and favorable discriminatory  
12 pricing and service. In discussions about buying from AMD, Dell executives have frankly  
13 conceded that they must financially account for Intel retribution in negotiating pricing from AMD.

14           44. **Sony.** With the introduction of its Athlon microprocessor in 1999, AMD began to  
15 make notable inroads into Intel's sales to major Japanese OEMs, which export PCs internationally  
16 including into the U.S. By the end of 2002, AMD had achieved an overall Japanese unit market  
17 share of approximately 22%. To reverse the erosion of its business, in 2003 Intel paid Sony  
18 multimillion dollar sums, disguised as discounts and promotional support, in exchange for absolute  
19 microprocessor exclusivity. Sony abruptly cancelled an AMD Mobile Athlon notebook model.  
20 Soon thereafter, it cancelled plans to release AMD Athlon desktop and notebook computers. As a  
21 result, AMD's share of Sony's business dropped from 23% in 2002 to 8% in 2003, and then to 0%,  
22 where it remains today. In proceedings brought by the JFTC, Intel has accepted the JFTC charges  
23 of misconduct with respect to Sony.

24           45. **Toshiba.** Like Sony, Toshiba was once a significant AMD customer, but also Like  
25 Sony, Toshiba received a very substantial payment from Intel in 2001 not to use AMD processors.  
26 Toshiba thereupon dropped AMD. Its executives agreed that Intel's financial inducements  
27 amounted to "cocaine," but said they were hooked because reengaging with AMD would  
28 jeopardize Intel market development funds estimated to be worth \$25-30 million per quarter.  
Toshiba made clear to AMD that the tens of millions of dollars of additional marketing support was

1 provided on the explicit condition that Toshiba could not use AMD microprocessors. In  
2 proceedings brought by the JFTC, Intel has accepted the JFTC charges of misconduct with respect  
3 to Toshiba.

4 46. **NEC.** AMD also enjoyed early success with NEC, capturing nearly 40% of its  
5 microprocessor purchases for notebooks and desktops in the first quarter of 2002. In May 2002,  
6 Intel agreed to pay NEC more than 300 million yen per quarter in exchange for caps on NEC's  
7 purchases from AMD. The caps assured Intel at least 90% of NEC's business in Japan, and they  
8 established an overall worldwide quota on NEC's AMD dealings. The impact was immediate.  
9 While AMD had maintained an 84% share of NEC's Japanese consumer desktop business in the  
10 third quarter of 2002, after the payments, AMD's share quickly plummeted to virtually zero in the  
11 first quarter of 2003. NEC has made clear to AMD that its Japanese share must stay in the single  
12 digits pursuant to NEC's agreement with Intel. Worldwide, AMD's share dipped from nearly 40%  
13 to around 15%, where it stands today. In proceedings brought by the JFTC, Intel has accepted the  
14 JFTC charges of misconduct with respect to NEC.

15 47. **Fujitsu.** In the summer of 2002, Fujitsu informed AMD that Intel had pressured  
16 Fujitsu to remove Fujitsu's AMD-powered desktop models from Fujitsu's website. Fujitsu  
17 complied by making any potential AMD-buyer click past Intel products to get to the AMD  
18 offerings. Then, in early 2003, Intel moved to lock up an even greater share of Fujitsu's business.  
19 Intel offered an undisclosed package of financial incentives in return for Fujitsu's agreement to  
20 restrict its dealings with AMD. Fujitsu's catalog currently limits AMD to a single notebook  
21 product. In proceedings brought by the JFTC, Intel has accepted the JFTC charges of misconduct  
22 with respect to Fujitsu.

23 48. **Hitachi.** According to the JFTC, Intel has also purchased an exclusive-dealing  
24 arrangement with Hitachi, which had been a substantial AMD customer. The agreement caused  
25 AMD's Hitachi business to fall precipitously. For example, during the first part of 2002, AMD  
26 was shipping 50,000 Athlon microprocessors to Hitachi per quarter. But by the middle of the year,  
27 AMD sold no microprocessors to Hitachi at all. In proceedings brought by the JFTC, Intel has  
28 accepted the JFTC charges of misconduct with respect to Hitachi.

1           49.     **Gateway/eMachines.** From 2001 to 2004, Gateway was exclusively Intel. In 2001  
2 former Gateway CEO, Ted Waitt, explained to an AMD executive that Intel offered him large  
3 sums not to deal with AMD, which he could not refuse: "I have to find a way back to profitability.  
4 If by dropping you, I become profitable, that is what I will do." Shortly thereafter, Gateway  
5 stopped purchasing from AMD and issued a press release announcing its Intel exclusivity. The  
6 announcement came within weeks of similar public announcements of Intel exclusivity by both  
7 IBM and Micron.

8           50.     **Supermicro.** Intel's exclusive dealing also extends to small, specialty OEMs of  
9 which Supermicro is a good example. Supermicro, the preeminent system assembler for servers  
10 and other high-end computers, historically has followed the Dell strategy of never buying from  
11 AMD. This arrangement foreclosed AMD from a large part of the approximately one fifth of the  
12 server sector not controlled by the Tier One OEMs. Following two years of negotiation,  
13 Supermicro finally agreed last year to begin developing an Opteron-powered server; however, it so  
14 feared Intel retaliation that it secretly moved the AMD development to quarters behind  
15 Supermicro's main manufacturing facility. Further, it forbade AMD from publicizing the product  
16 or beginning any marketing prior to its actual release. When, in April 2005, Supermicro finally  
17 broke away from years of Intel exclusivity, it restricted distribution of its newly-released Opteron-  
18 powered product to only sixty of its customers and promoted them with a glossy, upscale brochure  
19 devoid of its name and labeled "secret and confidential".

20  
21           b.     **Product-Line, Channel or Geographic Restrictions**

22           51.     Intel has also bought more limited exclusivity from OEMs in order to exclude AMD  
23 from the most profitable lines or from channels of distribution best tailored to take advantage of  
24 AMD's price/performance advantage over Intel. In exchange for discriminatory discounts,  
25 subsidies or payments, for example, Intel has largely foreclosed AMD from the lucrative  
26 commercial desktop sector. Intel has focused on the major OEMs because, when IT executives  
27 from Fortune 1000 companies purchase desktop computers, they look for a strong brand on the box  
28 - Dell, IBM or HP. Knowing this, Intel has relentlessly fought to block the introduction of an



1 AMD-powered commercial desktop by the major OEMs who have not ceded total exclusivity to  
2 Intel. What follows, again, are only representative examples of Intel misconduct.

3 52. HP. In 2002, when AMD set out to earn a place in HP's commercial desktop  
4 product roadmap, HP demanded a \$25 million quarterly fund to compensate it for Intel's expected  
5 retaliation. Eager to break into the commercial market, and to earn a place in HP's successful  
6 "Evo" product line, AMD agreed instead to provide HP with the first million microprocessors for  
7 free in an effort to overcome Intel's financial hold over HP. On the eve of the launch, HP  
8 disclosed its plan to Intel, which told HP it considered AMD's entry into HP's commercial line a  
9 "Richter 10" event. It immediately pressured HP into (1) withdrawing the AMD offering from its  
10 premier "Evo" brand and (2) withholding the AMD-powered computer from HP's network of  
11 independent value-added resellers, the HP's principal point of access to small business users for  
12 whom the computer was designed in the first place. Intel went so far as to pressure HP's senior  
13 management to consider firing the HP executive who spearheaded the AMD commercial desktop  
14 proposal. As a result of Intel's coercion, the HP-AMD desktop offering was dead on arrival. HP  
15 ended up taking only 160,000 of the million microprocessors AMD offered for free. As of today,  
16 HP's AMD-equipped commercial desktops remain channel-restricted, and AMD's share of this  
17 business remains insignificant.

18 53. Intel also purchased HP's exclusivity for its most popular notebook line. HP  
19 captured 15% of the U.S. retail market last Christmas with an Intel-powered 14.1" display  
20 notebook (the "DV 1000") with a popular power saving feature called Quick Play. When AMD  
21 sought to convince HP to carry a similar AMD-powered notebook, HP declined. It explained that  
22 Intel had paid between \$3 and \$4 million to lock up this product line for at least one year.

23 54. Gateway. After Gateway's 2004 merger with eMachines, AMD attempted to  
24 revive the relationship it had enjoyed with Gateway until 2001, but experienced extremely limited  
25 success. While Gateway built one AMD-powered desktop model at the request of Circuit City,  
26 AMD remains locked out entirely of Gateway's direct internet sales, its commercial offerings and  
27 its server line. According to Gateway executives, their Company has paid a high price for even its  
28 limited AMD dealings. They claim that Intel has beaten them into "guacamole" in retaliation.



1           55.     **IBM.** AMD and IBM began negotiations in August 2000 over a proposed  
2 commercial PC business partnership. After seven months and with a deal nearing completion, Intel  
3 approached IBM with an incentive-based program under which Intel would become IBM's  
4 "preferred supplier" for processors in commercial products. "Preferred" meant exclusive. IBM  
5 accepted Intel's proposal and terminated discussions with AMD. In return for that exclusivity,  
6 according to IBM executive Ed Thum, Intel paid IBM "millions of dollars in market development  
7 funds."

8           56.     Intel also acted to thwart AMD efforts to partner with IBM on servers. Although  
9 IBM joined AMD as a launch partner when it introduced its Opteron 64-bit server chip in April  
10 2003 – signaling to the industry and IT professionals its confidence in the product – Intel soon  
11 dissuaded IBM from aggressively marketing Opteron servers. After investing heavily in its design,  
12 IBM consigned its one Opteron computer model to a single target market segment (High  
13 Performance and Technical Computing). This was done, according to an industry report  
14 (confirmed by an IBM executive), because Intel paid IBM to shelve any further Opteron  
15 development. IBM also took Intel money in 2004 to scrap plans for a multiple-microprocessor  
16 Opteron server it had already designed and previewed with customers.

17           57.     Intel has also purchased IBM exclusivity in its "ThinkCentre" line of commercial  
18 desktops. When AMD pressed IBM to add an Athlon 64 model to its "ThinkCentre" roadmap,  
19 IBM executives explained that the move would cost them important Intel subsidies, and they  
20 declined.

21           58.     **Fujitsu.** In 2002, Fujitsu and AMD formed an alliance to develop a low-power  
22 commercial notebook (FMV Lifebook MG Series) scheduled to go to market in the first quarter of  
23 2003, which AMD spent over 20 million yen designing. Shortly before the launch, Fujitsu told  
24 AMD that Intel would not allow it to launch an AMD-powered commercial notebook, and the  
25 project died. To this day, AMD remains locked out of Fujitsu's commercial notebook lines.  
26 Intel's exclusionary conduct with Fujitsu extends beyond commercial notebooks. In the consumer  
27 space, for example, Intel purchased total exclusivity for Fujitsu's FM-Biblo NB consumer  
28 notebook line. When AMD tried to break Intel's lock on Fujitsu notebooks by offering to match

1 any Intel discount, Fujitsu made clear that there was no price AMD could pay because Intel simply  
2 would not allow it. To this day, AMD remains locked out of Fujitsu's Biblo line.

3 59. **Fujitsu-Siemens.** Fujitsu-Siemens, a European joint-venture, was once a mainstay  
4 for AMD's desktop business, with AMD chips powering over 30% of Fujitsu-Siemens' offerings in  
5 the consumer sector. In early 2003, Intel offered Fujitsu-Siemens a "special discount" on Celeron  
6 processors which Fujitsu-Siemens accepted in exchange for hiding its AMD computers on its  
7 website and removing all references to commercial AMD-powered products in the company's  
8 retail catalog.

9 60. Intel has also succeeded in convincing Fujitsu-Siemens to impose market  
10 restrictions on its AMD-powered PCs. Its parent, Fujitsu, currently sells an AMD-equipped  
11 Lifebook S2010, a commercial notebook, but only in the U.S. and Japan. Fujitsu-Siemens has  
12 declined AMD's plea to offer the machine in the European market as well. Similarly, Fujitsu-  
13 Siemens designed for the European market the FMC Lifebook MG Series notebook. But it refused  
14 to offer that computer in Asia or North America. Finally, although Fujitsu-Siemens produces an  
15 AMD commercial desktop, the Scenico, it refuses to advertise it on its website, offering it instead  
16 only as a build-to-order product. Having invested significantly to bring these computers to market,  
17 Fujitsu-Siemens has been able to offer no explanation for its refusal to exploit them worldwide.  
18 AMD's unit share of Fujitsu-Siemens' business recently fell below 30% for the first time in four  
19 years.

20 61. **NEC.** Intel was forced to relax its hold on NEC's business when long-time NEC  
21 customer, Honda Motor Company, demanded that NEC supply it with servers powered by AMD's  
22 Opteron microprocessors. After underwriting the considerable expense of designing and  
23 manufacturing an Opteron server for Honda, NEC then inexplicably refused to market the product  
24 to any of its other customers.

25 62. There is no reason, other than Intel's chokehold on the OEMs, for AMD's inability  
26 to exploit its products in important sectors, particularly commercial desktops. These computers,  
27 which large corporate customers buy in the tens of thousands at a time, represent a lucrative  
28 opportunity for the supplier. Yet, the microprocessors that power them are identical to

1 microprocessors in consumer computers, a sector in which AMD has won both praise and market  
2 share. The only material difference between the consumer and commercial segments is that many  
3 more system builders supply desktops to consumers, making it more difficult for Intel to control  
4 their microprocessor choice.

5 **c. Exclusionary Rebates**

6 63. Intel has also imposed on OEMs a system of first-dollar rebates that have the  
7 practical and intended effect of creating exclusive or near-exclusive dealing arrangements and  
8 artificially foreclosing AMD from competing for a meaningful share of the market. In general, the  
9 rebate schemes operate as follows: quarterly, Intel unilaterally establishes for each of its customers  
10 a target level of purchases of Intel microprocessors. If the customer achieves the target, it is  
11 entitled to a rebate on all of the quarter's purchases of all microprocessors -- back to the very first  
12 one -- generally in the neighborhood of 8-10% of the price paid. Intel provides the rebate in cash at  
13 the quarter's close. OEMs operate on razor-thin margins, so qualifying for an Intel rebate  
14 frequently means the difference between reporting a profit or a loss in the coming -- and closely  
15 watched -- quarterly earnings.

16 64. In contrast to "volume discounts" that sellers offer on a graduated and  
17 nondiscriminatory basis to reflect cost efficiencies that accrue when dealing in larger quantities,  
18 Intel's is a system of "penetration" or "loyalty" rebates designed to exclude AMD from a  
19 substantial portion of the market. Intel intentionally sets a rebate trigger at a level of purchases it  
20 knows to constitute a dominant percentage of a customer's needs. It is able to develop  
21 discriminatory, customer-by-customer unit or dollar targets that lock that percentage (without ever  
22 referencing it) because industry publications accurately forecast and track anticipated sales and  
23 because OEM market shares -- which industry publications also report weekly, monthly and  
24 quarterly -- do not change significantly quarter to quarter.

25 65. Intel's retroactive discounts can operate to price microprocessors so low that AMD  
26 is put at a competitive disadvantage it cannot overcome. Consider an OEM which anticipates  
27 purchasing 100 microprocessors that both Intel and AMD sell for \$100 each. Intel knows that  
28 because of its prior model introductions, the customer will have to buy 60 from Intel. The

1 customer considers buying its expected balance for its new models from AMD, but Intel offers it a  
2 rebate that will entitle it to a 10% retroactive discount if, but only if, it purchases 90 units or more.  
3 If the customer buys 30 of the 40 additional units from Intel to qualify for the rebate, its  
4 incremental cost for the 30 will be \$3,000 (30 units at \$100/unit) less the 10% rebate going back to  
5 the first unit it purchased, which amounts to \$900 (90 units x \$10/unit), for a total of \$2,100.

6 66. AMD can only capture the 30 units if it offers a price that makes the customer  
7 indifferent between getting the Intel rebate and getting an overall equivalent deal on AMD  
8 microprocessors. Thus, for the 30 units that are up for grabs, AMD would have to lower its price  
9 to \$70 per unit (because 30 units x \$70/unit equals the \$2,100 net cost for buying from Intel). In  
10 effect, the rebate forces AMD to charge \$20 dollars less than the \$90 discounted Intel price if it  
11 attempts to get any business from the customer at all. That is because it is selling the customer  
12 only 30 units over which it has to spread a \$900 discount while Intel can spread it out over 90. At  
13 the end of the day, this creates a serious competitive disadvantage for AMD. As shown in the  
14 example, AMD is forced to discount its price three times as much as Intel just to match the Intel  
15 discount – not because its processors are inferior – far from it – but because Intel has assured for  
16 itself – by its past predatory practices – a significant base of assured demand which enables Intel to  
17 inexpensively spread its first-dollar discount. Importantly, this new base of demand – driven by  
18 the OEM's purchasing – will enable Intel to repeat its exclusionary practice when the next line of  
19 models is unveiled.

20 67. At least in the short run, most if not all of the major OEMs must engage  
21 significantly with Intel (1) because AMD is too small to service all their needs while continuing to  
22 satisfy other customer demand; (2) because to meet customer expectations, OEMs must assure  
23 commercial computer buyers that specifications, including the microprocessor, will remain  
24 unchanged during the product's lifecycle; and (3) because Intel has encouraged end-users to  
25 specify that processors be of the same family among similar computers in one installation, as this is  
26 perceived to increase reliability (although technically this is not the case). Intel uses its retroactive  
27 discounts to make its large, captive market share self-perpetuating. In any one quarter, AMD  
28 cannot economically match Intel's retroactive rebate because it competes for too small a share of

1 the customer's volume over which to spread the dollars necessary to equal the customer's total  
2 Intel cost savings. As a result, it loses the business and thus goes into the next selling cycle with  
3 Intel imbedded in additional customer product over which Intel can spread its rebates. This serves  
4 again to artificially constrain AMD's opportunity to match Intel's ensuing round of retroactive  
5 discounts. Intel's intertemporal leveraging of its market share effectively forecloses AMD from  
6 ever having a fair opportunity to compete.

7 68. Intel exacts a severe penalty from OEMs who fail to meet their targets. For  
8 example, during the fourth quarter of 2004, AMD succeeded in getting on the HP retail roadmap  
9 for mobile computers, and its products sold very well, helping AMD capture nearly 60% of HP's  
10 U.S. retail sales for the quarter. Intel responded by withholding HP's fourth quarter rebate check  
11 and refusing to waive HP's failure to achieve its targeted rebate goal. Instead, Intel "allowed" HP  
12 to make up the shortfall in succeeding quarters when HP promised Intel at least 90% of HP's  
13 mainstream retail business.

14 69. Intel has deployed a variety of variants of this basic rebate scheme. In the case of  
15 one European OEM, for example, Intel imposes the additional condition that the customer purchase  
16 target volumes of specific processors, generally microprocessors against which AMD's products  
17 compete particularly well. In the case of another, Intel offers as an inducement discounted  
18 microprocessors rather than rebates. In the case of the European division of one U.S. OEM, Intel  
19 has imposed a target of between 70-90% of the customer's requirements. Rather than qualifying  
20 the customer for a cash rebate, however, meeting the target entitles the OEM to purchase  
21 designated processors at up to 20% below "normal" cost, thereby enabling the customer to obtain  
22 favorable pricing on bundled products (e.g., a Centrino-series processor and chipset) and/or to  
23 receive product offerings not available to competitors.

24 70. Intel makes similar offers to smaller OEMs but they are generally unwritten, and  
25 Intel leaves undefined the consequences of failing to meet a target. Thus, a customer falls short at  
26 its peril, knowing only that it may lose its account with Intel and have to source future products  
27 from Intel distributors, which is both more expensive and provides less security of supply than  
28 direct purchase.



1           71. The salient features of all of Intel's rebate schemes are that they are discriminatory  
2 and market-foreclosing. If the customer chooses to purchase any significant quantity of  
3 microprocessors from AMD, it will not qualify for its rebate, and its price will be higher on all the  
4 Intel processors it buys across the board. By tailoring targets to each customer's size and  
5 anticipated volume, Intel locks up significant percentages of the market much more effectively and  
6 at a lesser cost to itself – but to a greater harm to AMD and ultimately consumers – as compared to  
7 offering such rebates for comparable purchase levels to all customers on a nondiscriminatory basis.

8           72. Intel's use of retroactive rebates leads, in some cases, to below-cost pricing on  
9 incremental sales. The following example shows why a customer's incremental cost of purchasing  
10 from Intel those units that both Intel and AMD could supply (the "contested sales") can be zero or  
11 even negative – a price AMD cannot match. Consider an OEM which has purchased 90 units of  
12 Microprocessor A at \$100 per unit under an Intel rebate scheme that entitles it to a 10% first-dollar  
13 discount but only after it purchases more than 90 units. Its cost for the 90 processors is \$9,000.  
14 The OEM is now considering an additional purchase of a further 10 units. If it makes the  
15 additional purchase from Intel, the OEM will meet the expenditure condition and will qualify for  
16 the 10% per unit discount on all units. Accordingly, the total spent will remain \$9,000. The  
17 incremental cost of the 10 additional microprocessors – as well as Intel's incremental revenue –  
18 will be zero (the \$1,000 additionally spent, less the \$1,000 thereby saved). In other words, this  
19 scheme leads to incremental units being offered to the OEMs for nothing, leaving AMD hopelessly  
20 boxed out.

21           73. Importantly, even if Intel were to earn some incremental revenue on these marginal  
22 units, these additional revenues could be below the incremental cost of their production. As a  
23 result, Intel's additional profit on the sale would be negative, but for the fact that it had a long-run  
24 exclusionary effect on AMD. (Obviously, if Intel earns no revenues on its additional sales, it has to  
25 be foregoing profits.) As this analysis shows, some of Intel's discriminatory, retroactive rebates  
26 amount to unlawful, predatory below-cost pricing.

27           74. Even where Intel's prices are above cost on the incremental volumes and overall  
28 despite its retroactive rebate schemes, these rebates enable Intel to lower prices selectively in the



1 contested market segment while maintaining higher prices in its captive market. For example, Intel  
2 can offer rebates which are granted across the entire volume of sales but which are triggered only if  
3 the OEM increases its purchases beyond the portion of its requirements which is captive to Intel.  
4 Indeed, Intel can even price above the "monopoly" level for the volumes below the benchmark and  
5 offer huge discounts for additional purchases knowing full well that the OEM will not buy less than  
6 the benchmark and, instead, source the overwhelming share of its purchases from Intel thereby  
7 "qualifying" for the putative rebate while at the same time denying AMD any reasonable volume  
8 opportunity.

9 75. The use of retroactive rebates to limit AMD to a small share of an OEM's business  
10 heightens the obstacle to inducing the OEM to launch AMD-powered platforms. OEMs incur  
11 substantial expense in designing and engineering a new computer, and make the investment only if  
12 they foresee a substantial chance of selling a sufficient volume to recoup it. Intel's rebate and other  
13 business strategies effectively cap the volumes of AMD-powered products that an OEM can sell.  
14 Hence, Intel's practices exacerbate normal impediments to entry and expansion.

15  
16 **d. Threats of Retaliation**

17 76. Beyond exclusive dealing, product and channel restrictions and exclusionary  
18 rebates, Intel has resorted to old-fashioned threats, intimidation and "knee-capping" to deter OEMs  
19 from dealing with AMD. Intel has a variety of pressure points at its disposal: it can unilaterally  
20 reduce or withdraw a discount, rebate or subsidy; it can impose a discriminatory price increase on a  
21 disfavored customer, extend a price cut to that customer's competitor, or force retailers into  
22 dropping the customer's computers and buying from its competitor instead; or it can delay or  
23 dispute an allowance or rebate – all of which can turn a profitable quarter for an OEM into an  
24 unprofitable one. Other pressure points on accounts it deems disloyal include threatening to delay  
25 or curtail supplies of scarce processors or essential technical information. Examples abound.

26 77. As Gateway executives have recounted, Intel's threats beat them into "guacamole."  
27 But Gateway is not alone. Prior to its merger with HP, Compaq Computer received Intel threats  
28 every time it engaged with AMD. In late 2000, for example, Compaq's CEO, Michael Capellas,

1 disclosed that because of the volume of business he had given to AMD, Intel withheld delivery of  
2 server chips that Compaq desperately needed. Reporting that "he had a gun to his head," Capellas  
3 informed an AMD executive that he had to stop buying AMD processors.

4 78. In 2002, Intel pointed its gun at NEC. Intel threatened to discontinue providing  
5 NEC with the technological roadmap of future Intel products if NEC did not convert its entire line  
6 of Value Star L computers to Intel microprocessors. Without that roadmap, NEC would be at a  
7 distinct competitive disadvantage. Predictably, NEC succumbed and eliminated AMD from the  
8 Value Star L series in 2002 and 2003.

9 79. NEC's European subsidiary, NEC-CI, which operates NEC's European and non-  
10 Japanese Asian divisions, reported that Intel executives said they would "destroy" NEC-CI for  
11 engaging with AMD in the commercial desktop segment. Intel told NEC-CI's retailers that NEC-  
12 CI's AMD dealings could impair its ability to supply products to its customers, and when NEC-CI  
13 resisted the pressure, Intel imposed a discriminatory price increase.

14 80. AMD had been engaged in discussions with IBM about introducing an Opteron  
15 "blade" server, when IBM suddenly announced that any such product it distributed could not bear  
16 an IBM logo. When pressed for an explanation, IBM reported that it could not appear overly  
17 supportive of AMD server products because it feared Intel retaliation.

18  
19 **e. Interference with AMD Product Launches**

20 81. Key to gaining quick market acceptance of a new microprocessor is a chipmaker's  
21 ability to develop a lineup of reputable launch partners, consisting of OEMs prepared to roll out  
22 products featuring the chip, major customers who are willing to buy and embrace it, and other  
23 industry allies, such as major software vendors and infrastructure partners who can attest to its  
24 quality and reliability. Particularly for commercial and enterprise (i.e., server-work station)  
25 purchasers, a successful and impressive "launch" is essential to generating confidence among the  
26 computer professionals who will be the potential audience for the new microprocessor.

27 82. Aware of the importance of product launches, Intel has done its utmost to  
28 undermine AMD's. Set forth below are several examples.

1           83.     AMD's September 23, 2003, launch of Athlon64 was a watershed event for the  
2     Company. Upon learning the launch schedule, Intel did its best to disrupt it. For example, Acer  
3     committed to support the AMD rollout by making a senior executive available for a videotaped  
4     endorsement and by timing the introduction of two computers, a desktop and a notebook, to  
5     coincide with AMD events planned for Cannes, San Francisco and Taiwan. Days before the event,  
6     Intel CEO, Craig Barrett, visited Acer's Chairman, CEO and President in Taiwan, expressed to  
7     them Intel's "concern" and said Acer would suffer "severe consequences" if it publicly supported  
8     AMD's launch. The Barrett visit coincided with an unexplained delay by Intel providing \$15-20  
9     million in market development funds owed to Acer. As a result, Acer withdrew from the launch in  
10    the U.S. and Taiwan, pulled its promotional materials, banned AMD's use of the video, and  
11    delayed the announcement of its Athlon64-powered computers. Acer's President subsequently  
12    reported that the only thing different about Intel's threats was the messenger – they were "usually  
13    done by lower ranking managers," not Intel's CEO.

14           84.     HP also withdrew precipitously from the Athlon64 launch after committing to  
15    participate. HP had agreed to support the launch by producing a promotional video and by sending  
16    senior executives to all three launch sites. Just before launch, however, HP manager, John  
17    Romano, pulled the video and announced that HP would only be sending a junior manager, and  
18    then only to Europe.

19           85.     Other AMD customers and channel partners reporting Intel coercion to withdraw  
20    from the Athlon64 launch were Lenovo, NEC-CI and Best Buy.

21           86.     Intel also disrupted AMD's launch of its Opteron server chip, which was rolled out  
22    on April 22, 2003, with few in attendance and little industry support. A computer industry journal  
23    reported Intel's fingerprints: "They all [vendors] told me that prior to the launch, they received a  
24    phone call from Intel. Intel asked if they were going to the launch. If they replied yes, the Intel rep  
25    asked them if it was 'important to them to go,' or 'if they really wanted to go.' Pressing the  
26    vendors, I got the same response, 'Intel is too smart to threaten us directly, but it was quite clear  
27    from that phone call that we would be risking our various kickback money if we went.'"  
28

1           87. Other companies that reported being intimidated from participating in the Opteron  
2 launch were MSI, Atipa, Solectron and Fujitsu-Siemens. Indeed, Intel representatives told Fujitsu-  
3 Siemens' executives in the weeks preceding the Opteron launch that if they attended, they would  
4 be the only Tier One OEM showing its support as all of the others would back out. With the  
5 exception of IBM, Intel was right.

6           88. These are not isolated examples, but rather illustrations of Intel's relentless  
7 campaign to undermine marketing efforts by its one remaining competitor. For example, IBM  
8 pulled its AMD-powered computers from the 2004 Palisades eServer and PC Show, citing a  
9 contractual agreement with Intel said to prohibit it from endorsing those competitive products.  
10 And at the 2004 Super Computing Show, an annual conference devoted to high performance  
11 computing, Intel offered two other AMD customers money to remove AMD systems from their  
12 booths. At CeBit, Intel threatened to pull a half million dollars of support from Fujitsu-Siemens for  
13 displaying AMD products (which were removed).

14                   **f. Product Bundling**

15           89. Intel also uses product bundling as an exclusionary weapon in a variety of ways.  
16 Intel's most common deployment is in bidding for a new OEM platform: it bundles  
17 microprocessors with free (or heavily discounted) chipsets or motherboards, often offered in  
18 amounts exceeding the OEM's requirements for the new platform. (The excess, of course, is only  
19 compatible with Intel processors, thereby providing the OEM a strong inducement to go with Intel  
20 rather than AMD on uncommitted models.) AMD does not sell chipsets or motherboards; they are  
21 provided by independent suppliers such as ATI, nVidia and Via which incur their own costs and  
22 control their own pricing. Hence, to match Intel's bundled microprocessor-chipsets-motherboards  
23 offer, AMD must extend a discount on its microprocessors that will not only match any Intel  
24 discount on the microprocessors themselves but also will compensate the OEM for the savings it  
25 will lose on independent Intel chipset and motherboard purchases. The additional compensation  
26 AMD is forced to provide through a discount on the sale of microprocessors alone makes AMD's  
27 sale of microprocessors potentially unremunerative, and it also enables Intel to avoid competing  
28 with AMD directly on microprocessor price and quality by imposing disproportionate burdens on

1 AMD that are wholly unrelated to AMD's product quality which, as has been demonstrated, is  
2 frequently superior to that of Intel's.

3 90. As retaliation for dealing with AMD, Intel has also used chipset pricing as a  
4 bludgeon. For example, in 2003, Acer had committed to launch the AMD Athlon XP. Acer  
5 executives worldwide had been working with AMD to bring the product to market post-launch.  
6 But, on the eve of the launch the Acer management in Taiwan pulled the plug. AMD learned from  
7 Acer executives that Intel had threatened to raise chipset prices by \$10 on all Intel-based Acer  
8 systems if *any* processor business was awarded to AMD outside of Europe. ~

9 91. Intel's dealings with OEMs are unlawfully exclusionary, have no pro-competitive  
10 justification, and are intended to maintain its monopoly.

11  
12 **2. Practices Directed At Distributors**

13 92. Intel uses many of the same tactics it practices on OEMs to restrict distributors from  
14 carrying AMD processors or selling AMD products into markets it deems strategic. For example,  
15 it entered into an exclusive deal with Synnex, which is one of the largest U.S. distributors. Given  
16 Intel's 80% plus market share, there is no pro-competitive justification for this arrangement.

17 93. As with OEMs, Intel offers discounts and rebates to distributors on the condition  
18 that they not do business with AMD, either worldwide or in strategic sub-markets. For example, in  
19 December 2004, Ingram Micro, Intel's biggest distributor in China, suddenly cut off discussions to  
20 distribute AMD chips as well. A high-ranking Ingram Micro official later reported to AMD that  
21 Ingram Micro had no choice because Intel proffered loyalty rebates that were too lucrative to pass  
22 up.

23 94. Intel also offers a panoply of special programs for distributors who carry Intel  
24 microprocessors exclusively: marketing bonuses, increased rebates, credit programs for new  
25 customers (credits that can be used for all products from Intel and any other suppliers), payment for  
26 normal freight charges, and special inventory assistance such as credits to offset inventory costs.  
27 When such more nuanced means of achieving exclusivity fail, Intel has simply bribed distributors  
28 not to do business with AMD. For example, a high-ranking Tech Data executive turned down \$1

1 million to stop doing business with AMD, which caused the Intel representatives to ask, "How  
2 much would it take?"

3 95. Intel also offers retroactive rebates triggered when a distributor reaches a prescribed  
4 buying quota. Like the rebates offered to OEMs, the intent is to inflict economic punishment on  
5 those who do too much AMD business. But, unlike OEMs, distributors remain ignorant of the  
6 goals Intel has set for them or the precise consequences of failing to meet them. Intel does not  
7 share this information with them; they simply receive a check at the end of a quarter. As a result,  
8 every AMD chip they purchase, they buy at their peril.

9 96. Finally, those distributors who choose to do business with AMD have been  
10 conditioned to expect Intel retaliation. For example, when ASI, one of the largest computer  
11 hardware and software distributors, began distributing AMD processors, Intel demanded that it  
12 exclude AMD personnel from its ASI Technology Shows and its General Managers' meetings.  
13 Until recently, ASI refused master distributor status from AMD, despite the financial benefits  
14 attached, because it feared that such a public alignment with AMD would trigger Intel retaliation.  
15 When, in January 2005, it finally accepted Master Distributor status, Intel began reducing the level  
16 of market development funds ASI received.

17 97. Avnet Inc., one of the world's largest computer equipment distributors and an avid  
18 AMD supporter, has also received its share of Intel intimidation. Thus, Avnet cited Intel as the  
19 reason it could not distribute AMD parts to the industrial sector. And when AMD launched its  
20 Opteron server chip, Intel made clear it would make it "painful" for Avnet were it to begin  
21 distributing that chip. When Avnet did so anyway, Intel threatened to cut it off. Another  
22 distributor got even worse treatment. In retaliation for Supercom's AMD dealings in Canada, Intel  
23 pressured Supercom's customers to switch to another distributor.

24 98. These are not the only distributors that Intel has attempted to coerce from doing  
25 business with AMD. Others include R.I.C. in Germany, Paradigit in the Netherlands, and Quote  
26 Components, also in the Netherlands.

27 99. Intel's dealings with distributors are unlawfully exclusionary, have no  
28 procompetitive justification, and are intended to maintain its monopoly.



1  
2           **3. Practices Directed At Retailers**

3           100. In both the U.S. and internationally, approximately one fifth of desktop and  
4 notebook computers are purchased at retail stores. A handful of retailers dominate the U.S. PC  
5 market: Best Buy and Circuit City are the largest. Other significant but smaller retailers are  
6 Walmart/Sams Club, Staples, Office Depot and Office Max.

7           101. Most of the PCs sold at retail are sold during four or five "buying seasons" that  
8 correspond to events on the calendar ("Dads and Grads," "Back to School," "Holiday," etc.), and  
9 retailers refresh their inventory for each. A chipmaker faces a two-step process to get its platform  
10 on retail shelves: first, it must convince one or more OEMs to build machines using its  
11 microprocessor at a suggested price point (called "getting on the roadmap"); and second, it must  
12 convince the retailer to stock and devote shelf space to these machines. Shelf space does not come  
13 for free. The major retailers demand market development funds ("MDF") in exchange. MDF can  
14 consist of cooperative advertising support, but more frequently it comprises a marketing-related  
15 opportunity that a chipmaker must buy for tens of thousands of dollars, for example, space in a  
16 Sunday circular, an in-store display or an internet training opportunity with the chain's sales staff.  
17 The MDF required to secure shelf space can run as high as \$25 per box depending on the computer  
18 price point and how urgently the competing chipmakers want the shelf space.

19           102. Intel has historically enjoyed an advantage over AMD at retail because, using many  
20 of the strategies described above, it has had greater access to the OEMs' roadmaps and the ability  
21 to exert pressure to keep AMD out of their product plans. Also, it has significantly greater  
22 financial resources with which to buy retail shelf space.

23           103. But to leverage those advantages, Intel has also made exclusive deals with many key  
24 retailers around the world. For example, until recently Office Depot declined to stock AMD-  
25 powered notebooks regardless of the amount of MDF AMD offered, citing its "premier" status  
26 with Intel that would be put at risk. Fry's is Fujitsu's only retailer in the United States. When Intel  
27 learned that Fry's was very successfully marketing a Fujitsu's Athlon™ XP-based notebook, it  
28 offered Fry's a large payment to remove it from its shelves.

1           104. The story is even worse in Europe. AMD has been entirely shut out from Media  
2 Markt, Europe's largest computer retailer, which accounts for 35% of Germany's retail sales. Intel  
3 provides Media Markt between \$15-20 million of MDF annually, and since 1997 Media Markt has  
4 carried Intel computers exclusively. Intel subsidies also foreclose AMD from Aldi, a leading  
5 German food retail chain, whose PC sales account for an additional 15-20% of the German market.

6           105. In the United Kingdom, Intel has locked up substantially all of the business of DSG  
7 (Dixon Services Group), operator of three major chains including Dixon and PC World that  
8 collectively account for two thirds of the U.K. PC market. In exchange for Intel payments, DSG  
9 has agreed to keep AMD's share of its business below 10%. Like Media Markt, DSG reports that  
10 Intel penalizes it with reduced MDF just on account of the small amount of business it does with  
11 AMD. Toys 'R' Us in the U.K. is also exclusive to Intel. Time, another U.K. retailer (which builds  
12 computers as well), took a substantial MDF payment from Intel in exchange for near-exclusivity on  
13 notebooks during the first half of 2004, and it reports that Intel has withheld discounts because  
14 Time has introduced too many AMD Athlon64 desktop models. In France, Intel has brought  
15 pressure on the largest retailers, including Conforama, Boulanger, causing them to cease dealing  
16 with AMD or drastically reduce their AMD business.

17           106. AMD has nonetheless made some progress in gaining retail market share. Because  
18 of price/performance advantages, which are key in retail, OEMs build approximately 15% of their  
19 U.S. domestic market desktops with AMD processors; within notebook roadmaps, AMD represents  
20 approximately 10%. On a shelf-space to sales basis, AMD has generally outperformed Intel. For  
21 instance, in the desktop segment during the fourth quarter of 2004, AMD-equipped computers  
22 captured between a 33%-38% share of Circuit City's sales, despite being limited to five of the 25  
23 models (20%) on the Circuit City shelves. And with approximately 15% of the shelf space allotted  
24 to its products at Best Buy and CompUSA, AMD computers accounted for roughly 30% and 22%  
25 of their sales, respectively. These numbers confirm that AMD's products perform well at retail,  
26 provided that space is available.

27           107. In fact, Intel's sales staff was instructed "not to let this happen again." As a result,  
28 Intel instituted a rebate program similar to what it foisted on OEMs, with similar exclusionary

1 effect. Under this program, Intel provides full MDF payments to retailers, such as Best Buy and  
2 Circuit City, only if they agree to limit to 20% not just the shelf space devoted to AMD-based  
3 products, but also the share of revenues they generate from selling AMD platforms. If AMD's  
4 share exceeds 20%, the offending retailer's marketing support from Intel is cut by 33% *across all*  
5 *products*.

6 108. This is how the program works at Circuit City. If less than 20% of Circuit City's  
7 notebook revenue derives from AMD-based computers (30% for desktops), Intel has agreed to pay  
8 Circuit City \$15 in MDF per Intel-powered machine; but if the AMD percentage reaches or  
9 exceeds 20%, Circuit City's MDF subsidy is cut to \$10. This creates a \$5 per box "tax" on the  
10 retailer for doing 20% or more of its dollar volume with AMD-powered machines; and this "tax" is  
11 applicable to all of the Intel-powered machines that the retailer buys, back to the very first  
12 machine.

13 109. The following illustrates the competitive disadvantage this creates for AMD: if  
14 Circuit City were to purchase only Intel-powered notebooks for its 200,000-unit inventory in a  
15 quarter, Intel would pay it \$15 of MDF per computer, or a total of \$3 million. However, if Circuit  
16 City were to reduce its purchases of Intel-based notebooks to 80% (160,000 units) so that it could  
17 stock a modest number of AMD-powered computers, Intel MDF would fall to \$1.6 million (\$10  
18 MDF/unit times 160,000 units). Were AMD to match Intel's \$10 per unit MDF on the 40,000 units  
19 it supplied, Circuit City would receive an additional \$400,000, bringing its total MDF to \$2  
20 million, leaving it \$1 million worse off for doing business with AMD. For AMD to make Circuit  
21 City "whole," it would have to vastly increase its MDF on its 20% share to \$35 MDF per unit  
22 (40,000 x \$35 = \$1.4M), which together with Intel's \$1.6 million would bring the total MDF back  
23 to \$3 million. In other words, to just capture a 20% share, AMD must offer two or three times as  
24 much MDF as Intel – because it has far fewer units over which to spread the difference. Given  
25 these perverse economies, Circuit City is not likely to allocate less than 80% of its notebook sales  
26 to Intel, even if it means taking AMD stock off the shelves at the end of a quarter. (Indeed, to  
27 avoid inadvertently running afoul of the limitation, a prudent distributor would keep AMD's share  
28 well short of 20%.)

1 110. Nor is Intel above threatening retailers to gain preferred treatment. For example, at  
2 the recent CeBit computer show in Hanover, Germany (the largest computer show in the world), a  
3 German chain, Vobis, hung an AMD Turion64 banner from its booth as part of a co-marketing  
4 agreement with AMD and its OEM partner (Yakamo) to announce AMD's new mobile  
5 microprocessor. Intel's German general manager and its vice president for mobile products  
6 demanded that the Turion64 banner be removed. When Vobis' CEO declined, the Intel  
7 representatives threatened immediately to stop microprocessor shipments to Vobis' supplier. The  
8 banner was removed before the CeBit show opened.

9 111. Intel's dealings with retailers are unlawfully exclusionary, have no procompetitive  
10 justification, and are intended to maintain its monopoly.

11  
12 **4. Intel's Standard Setting and Other Technical Abuses**

13 **a. Intel's Exclusion of AMD from Industry Standards**

14 112. Companies within the computer industry often agree to design certain aspects of  
15 their products in accordance with industry standards to ensure broad compatibility. Indeed,  
16 standards are not only ubiquitous in the computer industry, they are essential. But when a  
17 company is unfairly excluded from the standards-setting process or is denied timely access to the  
18 standard, competition can be restrained in a way that reverberates throughout the entire market.  
19 Intel has employed, and continues to employ, a variety of tactics that have the purpose and effect of  
20 excluding and/or hampering AMD's full and active participation in the development of important  
21 industry standards. It has also worked to deny AMD timely access to such standards. Its efforts  
22 have hampered AMD's ability to vigorously compete in the market.

23 113. By way of example, Intel and AMD each develop and manufacture memory  
24 controller technologies that allow their processors and related components to communicate with  
25 memory. Intel designs and manufactures an entirely separate chip for this purpose, known as the  
26 Graphics and Memory Controller Hub, but AMD embeds its memory controllers directly into its  
27 processors, thus dispensing with the need for an extra chip and speeding up communication. Both  
28 companies need to know and have access to memory standards well in advance of producing their

1 processors and/or chipsets so that their memory controller designs will be compatible with the next  
2 generation of memory devices.

3 114. The Joint Electron Device Engineering Council ("JEDEC") is the industry  
4 organization responsible for the standards governing the most recent generations of computer  
5 memory chips. Even though JEDEC was already developing the standards for the next generation  
6 of memory chips, Intel convened a secret committee that it dubbed the Advanced microprocessors  
7 Technology ("ADT") Consortium to develop a competing memory standard.

8 115. The ADT Consortium was cleverly structured with multiple tiers of membership,  
9 each with different levels of access to information. The majority of companies were consigned to  
10 the lowest tier, meaning that they would receive access to the memory standard only upon its  
11 completion, but not during its development. The actual development effort was undertaken by  
12 companies with the highest tier membership status, which Intel reserved for itself and the major  
13 memory manufacturers. No other companies were allowed input or full access to the standard  
14 during its development by the ADT Consortium.

15 116. AMD desperately needed access to the developing standard, and input into its  
16 definition, in order to be able to launch a microprocessor with updated memory controller  
17 technology at the same time as Intel. AMD lobbied repeatedly for higher tier membership status,  
18 but was continually turned down. Intel had structured the ADT Consortium's rules to require a  
19 unanimous vote – a rule that gave Intel veto power – over any decision to allow AMD to join the  
20 development committee; and it used that veto power to cause the Consortium arbitrarily to reject  
21 AMD's application.

22 117. By foreclosing AMD from input or access to the memory standard during its  
23 development process, Intel deliberately placed AMD at a severe competitive disadvantage. As a  
24 consequence of its exclusion, AMD had no opportunity to monitor participants' suggestions and to  
25 object to Intel-proposed features that were without substantial benefit to consumers and were  
26 instead motivated by Intel's desire to disadvantage AMD's microprocessor architecture.  
27 Furthermore, by keeping the ADT Consortium memory standard-setting process shrouded in  
28 secrecy, Intel was able to gain a significant head start. While the ADT Consortium was ultimately

1 unsuccessful in implementing an industry standard, this type of exclusionary conduct exemplifies  
2 Intel's attempts to use industry standard-setting to competitively disadvantage AMD in an  
3 unlawfully exclusionary manner.

4 118. Indeed, Intel is attempting a repeat performance with respect to a new memory  
5 standard, this time excluding AMD by avoiding the open standard-setting committee entirely. Intel  
6 is currently coercing the major memory producers into signing non-disclosure agreements and  
7 working exclusively with Intel in a "secret" committee to develop the next generation memory  
8 interface standard. Once under this agreement, the memory manufacturers are prohibited from  
9 sharing information about their own product designs implementing the memory interface standard.  
10 This has the effect of preventing AMD from completing the design of its processor memory  
11 controllers until Intel permits memory manufacturers to communicate their interface specifications  
12 to the industry.

13 119. By this scheme, Intel tightens its control over the industry by converting what the  
14 component manufacturers intend as a public standard into a proprietary one, and thereby  
15 guarantees itself an undeserved head-start and unfair competitive advantage.  
16

17 **b. Intel's Promotion of Industry Standards that Disadvantage AMD**

18 120. Even where it has been unable to exclude AMD from participating in the  
19 development of industry standards, Intel has attempted to drive the adoption of standards having no  
20 substantial consumer benefit and whose sole or dominant purpose was to competitively  
21 disadvantage AMD based on its highly integrated microprocessor architecture.

22 121. As an example, in 2004, JEDEC began developing standards governing the design  
23 of the memory modules for next generation ("DDR3") memory devices. These modules, known as  
24 dual inline memory modules, or "DIMMs," consisted of printed circuit boards upon which a  
25 number of memory chips were mounted. The DIMMs connected the memory chips to the  
26 computer's motherboard through a series of metal connectors known as "pins." One purpose of the  
27 JEDEC standards was to define the functions of these pins so as to enable chipmakers to design  
28



1 compatible memory controllers that would allow their microprocessors and the memory on the  
2 DIMMs to communicate.

3 122. The JEDEC committee, which consists of members representing companies  
4 throughout the computer industry, had already adopted a scheme for defining the pins for the  
5 previous generation ("DDR2") DIMMs used in desktop and laptop computers. When the JEDEC  
6 committee began work on standards for DDR3 memory modules for desktop computers, Intel  
7 proposed that the committee adopt a pin definition similar to that used for the DDR2 memory  
8 modules. This proposal made perfect sense, as Intel explained to the committee, because it allowed  
9 DDR3 memory controllers to be compatible with DDR2 and DDR3 memory modules.

10 123. However, when the JEDEC committee began to define the pins for DDR3 laptop  
11 memory modules in this consistent manner, Intel completely reversed its position,  
12 counterproposing instead that the committee rearrange the pin definitions. Intel's proposal had no  
13 discernable technical merit or basis.

14 124. In fact, Intel's motivation for proposing modification of the laptop memory module  
15 pin definition was to competitively disadvantage AMD. Any modification to the laptop memory  
16 module pin definition would require Intel and AMD to make corresponding modifications of their  
17 memory controllers. AMD's microprocessor design, while representing a huge breakthrough in  
18 integration, embeds the memory controller directly into its microprocessor. While this produces  
19 significant computing advantages, modification of an embedded memory controller requires  
20 significantly more time and expense.

21 125. Knowing this vulnerability, Intel proposed its modified DDR3 memory module pin  
22 definition for laptop computers for the purpose of delaying AMD's introduction of a  
23 technologically superior part. While Intel's proposal was ultimately rejected by the JEDEC  
24 committee, confirming the proposal's complete lack of technical merit, this is yet another example  
25 of how Intel has attempted to drive industry standards to achieve its exclusionary ends.  
26  
27  
28

**c. Intel's Leveraging of Its Other Product Lines to Unfairly Disadvantage**

**(1) AMD in the Marketplace**

126. Intel has also designed and marketed microprocessor-related products with the goal of compromising performance for those who opt for AMD solutions, even if it requires sacrificing its own product quality and integrity.

127. An example is Intel's compilers. Generally, independent software vendors ("ISVs") write software programs in high-level languages, such as C, C++, or Fortran. Before these programs can be understood by a computer system, they must be translated into object code – a machine-readable language – by a software program called a compiler. Different companies write compilers for different operating systems (Windows, Linux, etc.) and for different programming languages (C, C++, Fortran, etc.). Intel offers compilers for use with a variety of different operating systems and programming languages.

128. Intel's compilers are designed to perform specialized types of optimizations that are particularly advantageous for ISVs developing software programs that rely heavily upon floating point or vectorized mathematical calculations. Such programs include, for example, mathematical modeling, multimedia, and video game applications.

129. Intel has designed its compiler purposely to degrade performance when a program is run on an AMD platform. To achieve this, Intel designed the compiler to compile code along several alternate code paths. Some paths are executed when the program runs on an Intel platform and others are executed when the program is operated on a computer with an AMD microprocessor. (The choice of code path is determined when the program is started, using a feature known as "CPUID" which identifies the computer's microprocessor.) By design, the code paths were not created equally. If the program detects a "Genuine Intel" microprocessor, it executes a fully optimized code path and operates with the maximum efficiency. However, if the program detects an "Authentic AMD" microprocessor, it executes a different code path that will degrade the program's performance or cause it to crash.

130. ISVs are forced to choose between Intel's compilers, which degrade the performance of their software when operated with AMD microprocessors, or third-party compilers,

1 which do not contain Intel's particular optimizations. Sadly for AMD and its customers, for  
2 legitimate reasons Intel's compilers appeal to certain groups of ISVs, especially those developing  
3 software programs that rely heavily on floating point and vectorized math calculations.  
4 Unbeknownst to them, performance of their programs is degraded when run on an AMD  
5 microprocessor not because of design deficiencies on the part of AMD, but deviousness on the part  
6 of Intel.

#### 7 **VIII. EFFECTS OF INTEL'S MISCONDUCT**

8 131. Intel's unlawful conduct has caused and will continue to cause substantial harm to  
9 competition in the market for x86 microprocessors in domestic, import, and export trade. Were it  
10 not for Intel's acts, AMD and others would be able to compete for microprocessor business on  
11 competitive merit, both domestically and internationally, bringing customers and end-product  
12 consumers lower prices, enhanced innovation, and greater freedom of choice.

13 132. Intel's anticompetitive acts both inside and outside the territorial boundaries of the  
14 United States have a direct, substantial, and reasonably foreseeable effect on trade and commerce  
15 that is not trade and commerce with foreign nations, and on United States import trade and  
16 commerce. In maintaining its monopoly by unlawfully denying rivals a competitive opportunity to  
17 achieve minimum levels of efficient scale, Intel must necessarily exclude them from the product  
18 market world wide. As the domestic U.S. market is but an integral part of the world market,  
19 successful monopolization of the U.S. market is dependent on world market exclusion, lest foreign  
20 sales vitalize a rival's U.S. competitive potential.

21 133. Intel's Sherman Act violative conduct throughout the world has caused and will  
22 continue to cause substantial harm to the business of AMD in the domestic, import, and export  
23 trades, in the form of artificially constrained market share, lost profits and increased costs of  
24 capital. Additionally, that same conduct has had, and will continue to have, a direct, substantial,  
25 and reasonably foreseeable effect on AMD's ability to sell its goods to foreign customers in  
26 restraint of its U.S.-based and directed business, including its U.S. export business. These harms  
27 are evidenced by the following:  
28

1           • When AMD first entered the server market in 2002 with its Athlon microprocessor – a  
2 part designed for desktops, not servers – the small OEMs and white-box vendors deploying the  
3 chip nonetheless managed to secure approximately 3% of the worldwide server market. AMD  
4 introduced its next generation Opteron microprocessor for servers the following year, and the chip  
5 won rave reviews and passionate customer testimonials, including Best of Show at the June 2003  
6 ClusterWorld Conference and Expo and Best Processor award in July 2003 from InfoWorld.  
7 Nonetheless, by means of its exclusionary and anticompetitive conduct, as of the Fourth Quarter  
8 2004, Intel had limited AMD's worldwide server market share to less than 5%, not appreciably  
9 more than before it introduced the Opteron.

10           • Intel's exclusionary conduct has successfully boxed AMD out of the notebook sector. Its  
11 exclusive deals with Dell, Sony and Toshiba alone bar AMD from a third of the world market and  
12 half of U.S. domestic sales. Intel's economic coercion and fidelity rebates have foreclosed AMD  
13 from an appreciable share of the remainder.

14           • AMD's Athlon64 is widely recognized as fully competitive with Intel's best desktop  
15 offering with the added benefit that it can run 64-bit software. Nonetheless, with the exception of a  
16 channel-restricted HP machine and a single Fujitsu-Siemens' model, AMD has failed to get a  
17 single major OEM – which collectively dominate the lucrative commercial desktop sector – to  
18 launch broadly an Athlon64 commercial desktop. Fortune 500 companies won't take a chance on  
19 AMD unless it partners with a Tier One desktop OEM, but Intel's exclusionary conduct, including  
20 its economic coercion of Dell, HP, IBM, Gateway and Acer, prevents that from happening. As a  
21 result, AMD's commercial desktop share is no greater now than it was in 2002.

## 22 23           IX. CLAIMS FOR RELIEF

### 24           First Claim for Relief

#### 25           (Violation of Section 1 of the Sherman Act)

26           134. Plaintiff incorporates and realleges, as though fully set forth herein, each and  
27 every allegation set forth in the preceding paragraphs of this complaint.  
28

1           135. Beginning at a time presently unknown to Plaintiff, but at least as early as June 28,  
2 2001, and continuing thereafter at least up to and including the present, the exact dates being  
3 unknown to Plaintiff, Defendant and various co-conspirators entered into a continuing agreement,  
4 understanding, and conspiracy in restraint of trade to artificially raised, fix, maintain, and/or  
5 stabilize prices for microprocessors in the United States in violation of Section 1 of the Sherman  
6 Act, 15 U.S.C. § 1.

7           136. In formulating and carrying out the alleged agreement, understanding, and  
8 conspiracy, the Defendant and its co-conspirators did those things that they combined and  
9 conspired to do, including but not limited to the acts, practices and course of conduct set forth  
10 above, and the following, among others:

- 11           a. To fix, raise, maintain and stabilize the price of microprocessors;
- 12           b. To allocate markets for microprocessors among themselves;
- 13           c. To submit rigged bids for the award and performance of certain  
14 microprocessors contracts; and
- 15           d. To allocate among themselves the production of microprocessors.

16           137. The combination and conspiracy alleged herein has had the following effects,  
17 among others:

- 18           a. Price competition in the sale of microprocessors has been restrained,  
19 suppressed, and/or eliminated in the United States;
- 20           b. Prices for microprocessors sold by Defendant and its co-conspirators have  
21 been fixed, raised, maintained and stabilized at artificially high, non-  
22 competitive levels throughout the United States; and
- 23           c. Those who purchased microprocessors directly or indirectly from Defendant  
24 and its co-conspirators have been deprived of the benefits of free and open  
25 competition.

26           138. Plaintiff has been injured and will continue to be injured in his business and  
27 property by paying more for microprocessors purchased indirectly from the Defendant and various  
28 co-conspirators than they would have paid and will pay in the absence of the combination and

1 conspiracy, including paying more for personal computers and other products in which  
2 microprocessors are a component as a result of higher prices paid for microprocessors by the  
3 manufacturers of those products.

4 139. Plaintiff and the Class are entitled to injunction against Defendant, preventing and  
5 restraining the violations alleged herein.

6 **Second Claim for Relief**

7 **(Violations of the California Cartwright Act)**

8 140. Plaintiff incorporates and realleges, as though fully set forth herein, each and every  
9 allegation set forth in the preceding paragraphs of this Complaint.

10 141. Defendant's contract, combination, trust or conspiracy was centered in, carried out,  
11 effectuated and perfected mainly within the State of California, and Defendant's conduct within  
12 California injured all members of the Class throughout the United States. Therefore, this claim for  
13 relief under California law is brought on behalf of all members of the Class, whether or not they  
14 are California residents.

15 142. Beginning at a time presently unknown to Plaintiff, but at least as early for years  
16 from the filing of this complaint, and continuing thereafter up to today, Defendant and its co-  
17 conspirators entered into and engaged in a continuing unlawful trust in restraint of the trade and  
18 commerce described above in violation of Section 16720, California Business and Professional  
19 Code. Defendant, and each of them, have acted in violation of Section 16720 to fix, raise, stabilize  
20 and maintain prices of, and allocate markets for, microprocessors at supra-competitive levels.

21 143. The aforesaid violations of Section 16720, California Business and Professions  
22 Code, consisted, without limitation, of a continuing unlawful trust and concert of action among the  
23 Defendant and its co-conspirators, the substantial terms of which were to fix, raise, maintain and  
24 stabilize the prices of, and to allocate markets for, microprocessors.

25 144. For the purpose of forming and effectuating the unlawful trust, the Defendant and its  
26 co-conspirators have done those things which they combined and conspired to do, including but in  
27 no way limited to the acts, practices and course of conduct set forth above and the following:

28 a. to fix, raise, maintain and stabilize the price of microprocessors;



- b. to allocate markets for microprocessors amongst themselves;
- c. to submit rigged bids for the award and performance of certain microprocessors contracts; and
- d. to allocate amongst themselves the production of microprocessors.

145. The combination and conspiracy alleged herein has had, *inter alia*, the following effects:

- a. price competition in the sale of microprocessors has been restrained, suppressed and/or eliminated in the State of California and throughout the United States;
- b. prices for microprocessors sold by Defendant and its co-conspirators have been fixed, raised, maintained and stabilized at artificially high, non-competitive levels in the States of California and throughout the United States; and
- c. those who purchased microprocessors from Defendant and its co-conspirators have been deprived of the benefit of free and open competition.

146. Plaintiff and the other members of the Class paid supra-competitive, artificially inflated prices for microprocessors.

147. As a direct and proximate result of Defendant's unlawful conduct, Plaintiff and the members of the Class have been injured in their business and property in that they paid more for microprocessors than they otherwise would have paid in the absence of Defendant's unlawful conduct. As a result of Defendant's violation of Section 16720 of the California Business and Professions Code, Plaintiff seeks treble damages and the costs of suit, including reasonable attorneys' fees, pursuant to Section 16750(a) of the California Business and Professions Code.

### **Third Claim for Relief**

#### **(Violations of the California Unfair Competition Law)**

148. Plaintiff incorporates and realleges, as though fully set forth herein, each and every allegation set forth in the preceding paragraphs of this Complaint.

149. Defendant's business acts and practices were centered in, carried out, effectuated and perfected mainly within the State of California, and Defendant's conduct within California injured all members of the Class throughout the United States. Therefore, this claim for relief

1 under California law is brought on behalf of all members of the Class, whether or not they are  
2 California residents.

3 150. Beginning on a date unknown to Plaintiff, but at least as early as June 28, 2001, and  
4 continuing thereafter at least up through and including the present, Defendant committed and  
5 continue to commit acts of unfair competition, as defined by Sections 17200, *et seq.* of the  
6 California Business and Professions Code, by engaging in the acts and practices specified above.

7 151. This Claim is instituted pursuant to Sections 17203 and 17204 of the California  
8 Business and Professions Code, to obtain restitution from the Defendant for acts, as alleged herein,  
9 that violated Section 17200 of the California Business and Professions Code, commonly known as  
10 the Unfair Competition Law.

11 152. The Defendant's conduct as alleged herein violated Section 17200. The acts,  
12 omissions, misrepresentations, practices and non-disclosure of Defendant, as alleged herein,  
13 constitute a common continuous and continuing course of conduct of unfair competition by means  
14 of unfair, unlawful and/or fraudulent business acts or practices within the meaning of California  
15 Business and Professions Code, Section 17200, *et seq.*, including, but not limited to, the following:

16 a. The violations of Section 1 of the Sherman Act, as set forth above;

17 b. The violations of Section 16720, *et seq.*, of the California Business and  
18 Professions Code, set above;

19 c. Defendant's acts, omissions, misrepresentations, practices and non-  
20 disclosures, as described above, whether or not in violation of Section 16720, *et seq.* of the  
21 California Business and Professions Code, and whether or not concerted or independent acts, are  
22 otherwise unfair, unconscionable, unlawful or fraudulent.

23 d. Defendant's act and practices are unfair to consumers of microprocessors in  
24 the State of California and throughout the United States, within the meaning of Section 17200,  
25 California Business and Professions Code; and

26 e. Defendant's acts and practices are fraudulent or deceptive within the  
27 meaning of Section 17200 of the California Business and Professions Code.  
28

153. Plaintiff and each of the Class members are entitled to full restitution and/or disgorgement of all revenues, earnings, profits, compensation and benefits which may have been obtained by Defendant as a result of such business acts or practices.

154. The illegal conduct alleged herein is continuing and there is no indication that Defendant will not continue such activity into the future.

155. The unlawful and unfair business practices of Defendant, as described above, have caused and continue to cause Plaintiff and the members of the Class to pay supra-competitive and artificially-inflated prices for microprocessors. Plaintiff and the members of the Class suffered injury in fact and lost money or property as a result of such unfair competition.

156. The conduct of Defendant as alleged in this Complaint violates Section 17200 of the California Business and Professions Code.

157. As alleged in this Complaint, Defendant and its co-conspirators have been unjustly enriched as a result of their wrongful conduct and by Defendant's unfair competition. Plaintiff and the members of the Class are accordingly entitled to equitable relief including restitution and/or disgorgement of all revenues, earnings, profits, compensation and benefits which may have been obtained by Defendant as a result of such business practices, pursuant to the California Business and Professions Code, Sections 17203 and 17204.

#### **Fourth Claim for Relief**

**(Violations of State Antitrust and Unfair Competition Laws)**

158. Plaintiff incorporates and realleges, as though fully set forth herein, each and every allegation set forth in the preceding paragraphs of this Complaint.

159. Should California law not be applied by reason of the foregoing, Defendant has entered into agreements in restraint of trade in violation of Alabama Code §§ 8-10-1 *et seq.*

160. By reason of the foregoing, Defendant has entered into agreements in restraint of trade in violation of Arizona Revised Stat. Code §§ 44-1401 *et seq.*

161. By reason of the foregoing, Defendant has entered into agreements in restraint of trade in violation of California Bus. & Prof. Code §§ 16700 *et seq.* and Cal. Bus. & Prof. Code §§ 17200 *et seq.*

1           162. By reason of the foregoing, Defendant has entered into agreements in restraint of  
2 trade in violation of District of Columbia Code Ann. §§ 28-4503 *et seq.*

3           163. By reason of the foregoing, Defendant has entered into agreements in restraint of  
4 trade in violation of Iowa Code §§ 553.1 *et seq.*

5           164. By reason of the foregoing, Defendant has entered into agreements in restraint of  
6 trade in violation of Kansas Stat. Ann. §§ 50-101 *et seq.*

7           165. By reason of the foregoing, Defendant has entered into agreements in restraint of  
8 trade in violation of Maine Rev. Stat. Ann. 10, §§ 1101 *et seq.*

9           166. By reason of the foregoing, Defendant has entered into agreements in restraint of  
10 trade in violation of Michigan Comp. Laws. Ann. §§ 445.773 *et seq.*

11           167. By reason of the foregoing, Defendant has entered into agreements in restraint of  
12 trade in violation of Minnesota Stat. §§ 325D.52 *et seq.*

13           168. By reason of the foregoing, Defendant has entered into agreements in restraint of  
14 trade in violation of Mississippi Code Ann. § 75.21.1 *et seq.*

15           169. By reason of the foregoing, Defendant has entered into agreements in restraint of  
16 trade in violation of Nebraska Rev. Stat. §§ 59-801 *et seq.*

17           170. By reason of the foregoing, Defendant has entered into agreements in restraint of  
18 trade in violation of Nevada Rev. Stat. Ann. §§ 598A *et seq.*

19           171. By reason of the foregoing, Defendant has entered into agreements in restraint of  
20 trade in violation of New Mexico Stat. Ann. §§ 57-1-1 *et seq.*

21           172. By reason of the foregoing, Defendant has entered into agreements in restraint of  
22 trade in violation of North Carolina Gen. Stat. §§ 75-1 *et seq.*

23           173. By reason of the foregoing, Defendant has entered into agreements in restraint of  
24 trade in violation of North Dakota Cent. Code §§ 51-08.1-01 *et seq.*

25           174. By reason of the foregoing, Defendant has entered into agreements in restraint of  
26 trade in violation of Ohio Rev. Code Ann. §§ 1331.01 *et seq.*

27           175. By reason of the foregoing, Defendant has entered into agreements in restraint of  
28 trade in violation of Pennsylvania common law.

181. Class members in each of the states listed above paid supra-competitive, artificially inflated prices for microprocessors. As a direct and proximate result of Defendant's unlawful conduct, such members of the Class have been injured in their business and property in that they paid more for microprocessors than they otherwise would have paid in the absence of Defendant's unlawful conduct.

**(Unjust Enrichment and Disgorgement of Profits)**

185. Plaintiff seeks disgorgement of all profits resulting from such overpayments and establishment of a constructive trust from which Plaintiff and Class members may seek restitution.

**WHEREFORE, Plaintiff prays:**

1           A.     That the Court determine that the Sherman Act, state antitrust law, and state  
2 consumer protection and/or unfair competition law claims alleged herein may be maintained as a  
3 class action under Rule 23(a), (b)(2), and (b)(3) of the Federal Rules of Civil Procedure;

4           B.     That the unlawful conduct, contract, conspiracy or combination alleged herein the  
5 adjudged and decreed to be:

6               a.     A restraint of trade or commerce in violation of Section 1 of the Sherman  
7 Act, as alleged in the First Claim for Relief;

8               b.     An unlawful combination, trust, agreement, understanding, and/or concert of  
9 action in violation of the state antitrust laws identified in the Second and Fourth Claims for Relief  
10 herein;

11              c.     Violations of the state consumer protection and unfair competition laws  
12 identified in the Third Claim for Relief herein; and

13              d.     Acts of unjust enrichment as set forth in the Fifth Claim for Relief herein.

14           C.     That Plaintiff and the Class recover damages, as provided by state antitrust laws,  
15 and that a joint and several judgment in favor of Plaintiff and the Class be entered against the  
16 Defendant in an amount to be trebled in accordance with such laws;

17           D.     That Defendant, its affiliates, successors, transferees, assignees, and the officers,  
18 directors, partners, agents, and employees thereof, and all other persons acting or claiming to act on  
19 their behalf, be permanently enjoined and restrained from in any manner: (1) continuing,  
20 maintaining, or renewing the conduct, contract, conspiracy or combination alleged herein, or from  
21 entering into any other conspiracy alleged herein, or from entering into any other contract,  
22 conspiracy or combination having a similar purpose or effect, and from adopting or following any  
23 practice, plan, program, or device having a similar purpose or effect; and (2) communicating or  
24 causing to be communicated to any other person engaged in the sale of microprocessors,  
25 information concerning bids of competitors;

26           E.     That Plaintiff be awarded restitution, including disgorgement of profits obtained by  
27 Defendant as a result of its acts of unfair competition and acts of unjust enrichment.  
28



1 F. That Plaintiff and members of the Class be awarded pre- and post-judgment interest,  
2 and that that interest be awarded at the highest legal rate from and after the date of service of the  
3 initial complaint in this action;

4 G. That Plaintiff and members of the Class recover their costs of this suit, including  
5 reasonable attorneys' fees as provided by law; and

6 H. That Plaintiff and members of the Class have such other, further, and different relief  
7 as the case may require and the Court may deem just and proper under the circumstances.

8  
9 **X. DEMAND FOR TRIAL BY JURY**

10 186. Pursuant to Fed. R. Civ. P. 38(b), Plaintiff demands trial by jury of all issues so  
11 triable under the law.

12 DATED: July 15, 2005.

13 LAW OFFICES OF JEFFREY F. KELLER

14 By 

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