IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

STATE OF NEW YORK, BY ATTORNEY GENERAL ANDREW M. CUOMO, Plaintiff, v. INTEL CORPORATION, a Delaware corporation, Defendant.	Case No. - 09 - 827 **Trial By Jury Demanded**

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COMPLAINT

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Plaintiff State of New York, by its Attorney General Andrew M. Cuomo, alleges upon information and belief the following against Defendant Intel Corporation ("Intel"):

I. INTRODUCTION

1. Intel has engaged in a systematic worldwide campaign of illegal, exclusionary conduct to maintain its monopoly power and prices in the market for x86 microprocessors, the "brains" of Personal Computers ("PCs"). By exacting exclusive or near-exclusive agreements from large computer makers ("Original Equipment Manufacturers" or "OEMs") in exchange for payments totaling billions of dollars, and threatening retaliation against any company that did not heed its wishes, Intel robbed its competitors of the opportunity to challenge Intel's dominance in key segments of the market. This illegal behavior was highly detrimental to consumers, competition, and innovation.

2. Starting in 2001, the threat from competition became salient at Intel. Intel's biggest CPU competitor, Advanced Micro Devices, Inc. ("AMD"), had begun developing x86 chips that not only competed with Intel's offerings, but were in many ways more desirable. Business customers and consumers increasingly sought AMD-based computers. OEMs began to comply.

3. In response, Intel launched an illegal campaign to deprive AMD of distribution channels and consumers of product choice and lower prices. In order to achieve exclusivity or severe limitations on an OEM's purchase and offering of AMD products, Intel paid hundreds of millions – in some cases billions – of dollars in "rebates." Although Intel tried to disguise the anticompetitive nature of these payments, they bore no genuine relationship to pro-competitive, volume-based discounts or reasonable efforts to meet specific competitive offers.

4. At the same time, Intel threatened OEMs with retaliation if they persisted in dealing with AMD. These threats took a variety of forms, including funding an OEM's competitors to directly compete against it, ending any current payments that the OEM received from Intel, and ending joint development ventures.

5. The OEMs, struggling with narrow profit margins and fearing that Intel would retaliate by subsidizing their competitors to undersell them, often conformed to Intel's demands. For example, in exchange for billions of dollars in rebate payments and other benefits, Dell agreed not to sell any AMD products from 2001 to 2006.

6. When Intel could not prevent OEMs from dealing with AMD altogether, it generally succeeded in greatly limiting the extent to which the OEMs brought AMD-based products to market. In 2002, Intel reached an agreement with HP – subsequently extended to 2004 – which, in exchange for hundreds of millions of dollars, capped HP's sales of AMD-based business desktop PCs at 5%, guaranteeing Intel 95%. Intel also exacted agreements from HP limiting the ways in which HP could distribute AMD's products, thereby inhibiting AMD's ability to reach even the 5% mark.

7. Moreover, in the highly profitable server microprocessor market, after being offered a $130 million payment from Intel and receiving various threats, IBM agreed to cancel one planned AMD-based product entirely and to market another only on an "unbranded" basis.

8. By these means and others, Intel has distorted competition and harmed consumers, depriving them of the lower prices and increased rates of innovation which competition would have yielded. Absent Intel's illegal acts, prices would likely have been lower, product innovation more dynamic, and consumer gains greater.

9. Nothing in the antitrust laws or this action seeks to prevent Intel from competing on the merits, by innovating and improving its products – as Intel has often done in the past – or by genuine price cuts. But Intel has instead used threats and coercion, bribing and bullying to preserve its market dominance. In a market which is itself a driver of productivity growth, this harm to competition radiates throughout the economy, decreasing productivity gains. This action therefore seeks injunctive relief, to restrain Intel's anticompetitive conduct, prevent its reoccurrence in the future, and to restore the competition which was lost. It also seeks damages, on behalf of New York State consumers and governmental entities.

II. JURISDICTION AND VENUE

10. This complaint alleges violations of the Sherman Act, 15 U.S.C. § 2. It is filed under, and jurisdiction is conferred upon this Court by, sections 4, 12 and 16 of the Clayton Act, 15 U.S.C. §§ 15, 22 and 26. The State of New York also alleges violations of state antitrust laws, and the New York State Executive Law, and seeks damages and civil penalties, as well as injunctive and other equitable relief under those state laws. All claims under federal and state law are based upon a common nucleus of operative facts, and the entire action commenced by this Complaint constitutes a single case that would ordinarily be tried in one judicial proceeding.

11. The Court further has jurisdiction over the federal claims under 28 U.S.C. §§ 1331 and 1337. The Court has jurisdiction over the state law claims under 28 U.S.C. § 1367 because those claims are so related to the federal claims that they form part of the same case or controversy.

12. Jurisdiction over Defendants is proper pursuant to 15 U.S.C. § 22 and N.Y. C.P.L.R. §§ 301 and 302(a)(1), (2) and (3).

13. Venue is proper in this District under 15 U.S.C. § 22 and 28 U.S.C. § 1391 because Defendant Intel resides and/or is found in this District.

III. PARTIES

14. Plaintiff, the State of New York, brings this action as a sovereign state, in its proprietary capacity and as otherwise authorized by law, including 15 U.S.C. § 15, N.Y. Gen. Bus. L. § 340 et seq., N.Y. Exec. L. §§ 63(1), 63(12) and the common law. Plaintiff State of New York sues on behalf of: (a) the State itself, including all of its branches, departments, agencies or other parts thereof; (b) non-State public entities; and (c) New York consumers who purchased x86 CPUs or x86 CPU-containing products directly or indirectly from Defendant. Under New York law, the Attorney General is the duly constituted officer authorized to represent the State of New York in these claims, as well as the non-state public entities and consumers.

15. Defendant Intel Corporation is a Delaware corporation with its principal executive offices at Santa Clara, California. It conducts business both directly and through wholly-owned and dominated subsidiaries worldwide. Intel and its subsidiaries design, produce, and sell a variety of microprocessors, flash memory devices, and silicon-based products for use in the computer and communications industries worldwide.

IV. INTEL'S ANTICOMPETITIVE CAMPAIGN

A. THE MARKET

1. x86 Microprocessor Technology

16. A microprocessor is a computer central processing unit ("CPU") – the "brains" of the computer – which is manufactured on a single, tiny wafer, or "chip." Such chips consist of

materials called semiconductors, because of physical properties which allow the rapid, controlled flow or "conducting" of electrons through miniature pathways called circuits. The manufacture of microprocessors is a highly specialized and costly process which takes place in factories called "fabs." The planning and construction of a single fab costs billions of dollars. Manufacture involves, among other highly complicated operations, the etching, using lasers, of circuitry into the chip on the model of a specially designed microarchitecture.

17. This microarchitecture, however, serves only to implement what from the computer user's perspective is a more significant attribute of the microprocessor, *i.e.*, its "instruction set." The instruction set provides the basic building blocks – the architecture – of the language which directs the computer's operations, and which supports each of the software programs written to run on that computer.

18. The CPUs at issue here are known as "x86" CPUs, in reference to the specific instruction set that the CPU recognizes. The x86 instruction set derives its name from the model numbers of Intel processors initially introduced in the late 1970's. It is now ubiquitous in desktop and notebook computers, and widespread in servers and workstations. The initial prominence of the x86 instruction set was largely due to the fact that it was chosen by IBM in the early 1980s, together with Microsoft's PC operating system, as one of the standard components of what became known as IBM-compatible PCs. Generally speaking, a specific version of software (including operating systems and/or applications) can only be run on machines that recognize a specific instruction set.

19. It was not IBM's intention, however, that Intel be the sole source of x86 microprocessors for its products. IBM arranged that AMD – which at that time produced

microprocessors with a competing architecture – would also be able to manufacture x86 microprocessors as a second source of supply. Intel, however, proved reluctant to share the intellectual property which underlay the x86 instruction set, until it was compelled to do by an arbitration award and a subsequent 1995 settlement with AMD. The settlement set the stage for AMD to morph from a low-margin "clone" manufacturer – an imitator – into a true competitor. The settlement secured AMD a shared interest in the x86 instruction set, but AMD was now required to develop its own microarchitecture in order to implement that instruction set in its own microprocessor products. When AMD attempted to do so, in the late 1990s, its efforts were met with remarkable success. Intel's anticompetitive reaction to that success is what gives rise to this action.

2. The x86 Microprocessor Market

20. Microprocessors are not sold directly for final use to businesses or consumers but as components – generally the most expensive and most important components – of desktop, mobile, and server computers. Those computers, in turn, are manufactured by "OEMs." The OEMs are therefore Intel's largest and most important customers. During the relevant period, the top 10 OEMs accounted for a large and increasing share of microprocessor sales worldwide - - approximately 70%.

21. It is not merely their size, but their strategic importance as "gatekeepers" to the lucrative commercial segment of the computer market which make the top OEMs – most prominently Dell, HP, and IBM[1] – Intel's most important customers. For example, the highest

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[1] In 2005, IBM sold its PC business and some other segments of its computer business to Lenovo.

margins are earned on server microprocessor products, and these are sold almost entirely through a handful of major OEMs. There are other avenues of distribution, but these are shrinking, as a result of OEM consolidation and other factors. Distribution through channels other than the OEMs serves principally to reach smaller, less profitable customers.

22. Moreover, the production volumes and the brand awareness, as well as market credibility and experience which a microprocessor firm needs depend on close cooperation with OEMs. Without detailed feedback and market intelligence from major OEMs, a microprocessor firm cannot adequately plan or test its products, for it is the OEMs who have the depth of customer and market knowledge required. Nor will any microprocessor firm be able to develop a strong and credible brand without the continuing support and cooperation of major OEMs.

3. Intel's Monopoly Power

23. Intel is a durable and extraordinarily powerful monopoly. For over a decade, it has had extremely high market shares, measured at approximately 80-90% by revenue and 75% by unit volume. All major computer manufacturers depend on Intel in a variety of ways and are reliant on it for microprocessors, since AMD is, and in the foreseeable future will remain, unable to fulfill more than a small share of their requirements.

24. Intel's monopoly power is protected by the extremely high barriers to entry into the x86 microprocessor market. First, design and manufacture of microprocessors requires access to intellectual property which only Intel and AMD have, so that substantial licensing issues would arise for any potential entrant. Second, manufacturing facilities for microprocessors ("fabs") cost billions of dollars to design and construct (not to mention a great deal of time and regulatory approval). Third, this is an industry characterized by economies of

scale, so that smaller manufacturers are at a cost disadvantage and often have difficulty achieving profits.

25. Intel is extremely profitable; in contrast, the margins of its primary customers, the "top tier" OEMs, tend to be thin – often in low single digits. This enables Intel to directly affect OEMs' bottom-line quarterly profits, by favoring certain OEMs with lower prices and other subsidies, while punishing others.

26. Intel's profits on its microprocessors reflect its monopoly power, as the OEMs that are compelled to do business with it know. A May 2002 internal HP document, comparing Intel's profitability with the narrow profit margins of OEMs, noted that "Intel has margins of a monopoly."

27. Michael Dell, founder and CEO of Dell, Intel's largest customer, pointed out in a February 2004 internal email that not even Microsoft could exercise the pricing power which Intel has displayed: "[Intel] profits in the 2nd half of 2001 were $1.397B on revenues of $13.528B. In the 2nd half of 2003 they were $4.885B on revenues of $16.574B. In other words their sales went up 22.5% and their profits went up 350%! Or said another way their revenues went up $3.046B and their profits went up $3.488B!! Not even Microsoft can do that. In other words these guys have massive operating leverage."

28. OEMs also depend on Intel in such vital matters as allocation of products, marketing support, and access to technical information. An internal 2002 HP document presentation slide noted that "[r]egardless of [s]cenario, Intel's [m]onopoly [will] [l]ikely [be] [s]ustained" because of Intel's:

- Relationships
  - PC manufacturers, distributors, ISVs [Independent Software Vendors], BIOS

[Basic Input/Output System] suppliers, etc.
  - Exerts substantial influence over PC manufacturers and their channels of distribution through the 'Intel Inside' brand program and other marketing programs
- Technology
  - Design capabilities for microprocessors, memory, chip sets, etc.
- Resources
  - Manufacturing, R&D, Marketing

* * *

- Control of industry standards
  - Intel has been able to control x86microprocessor and PC system standards; can dictate type of products market requires of Intel's competitors

29. Intel has also created alliances with major OEMs which give it substantial leverage over these OEMs. Because OEMs rely on Intel's active participation in these alliances in the form of funding, marketing, and intellectual property, OEMs cannot easily disregard Intel's wishes..

30. At the highest levels, Intel routinely takes steps to make its displeasure felt when it feels threatened by OEM actions – even when those actions appear to be routine commercial behavior. Intel's customers are constantly reminded where their primary loyalty should lie. For example, in March 2006, Intel's CEO Paul Otellini received a courtesy "heads-up" from an HP executive that HP was sponsoring an advertisement featuring HP's relationship with AMD and the theme of customer choice. Otellini reacted: "So, ... why did you feel compelled to do this? It is certainly insulting to us and I do not see how it helps you.... If we are your key partner, this is nothing but a slap at us ... I really don't want to get in a pissing contest over this ... But running an ad touting 10 years with amd [sic] and 'choice' is not the behavior of someone who wants to bring our two companies together."

31. Similarly, in November, 2004, Otellini directly expressed his displeasure at increases in IBM's AMD Opteron server sales to a senior IBM executive and reminded him of IBM's reliance on Intel: "I just saw the [sales] tracker data for Q3 .... IBM opteron shipments in 2P [dual-processor servers] doubled from 3.5Ku [thousand units] to 7. 5Ku ... IBM was the fastest growing opteron system seller!! ... It is a bit disheartening to see IBM outgrow both Sun and HP in Opteron shipments given our current engagement."

4. The Threat From AMD's New Products

32. In the late 1990s, Intel and AMD each began developing a new generation of microprocessor products. Both were intended to increase processing speed by enabling computers to address larger chunks of data at one time – in technical terms, to make the transition from 32-bit to 64-bit computing.

33. Intel (working together with HP) planned a new, more advanced microprocessor product named Itanium, directed primarily at powerful, high-end servers or computers. Itanium would not be "backwards compatible" with the thousands of software applications and operating systems which Intel's corporate customers currently used. In other words, if a corporate customer wanted to use Intel's Itanium product, it would require it to make large new investments in software and programming, as well as computer hardware. For these and other reasons, Itanium was not well received by either the OEMs or their customers.

34. At the same time, AMD was bringing its new products – including the Athlon microprocessor for PCs and the Opteron server microprocessor—to market. These products represented AMD's first attempt at competing directly with Intel in the high-end segments of the market and had cost billions of dollars to develop. Opteron garnered virtually unanimous

industry acclaim; AMD had succeeded with an innovative product design yielding performance advantages which effectively "leapfrogged" Intel. According to one publication, for example, tests performed by HP in 2004 for data-intensive applications showed that Opteron's performance was "anywhere from 40% all the way up to several hundred percent" over Intel's latest competitive product.

35. Moreover, Opteron was much more energy-efficient than Intel's competing chip. This was a major consideration for the administrators of corporate data centers, where the amounts of electricity used and heat generated were critical factors. AMD engineers had also succeeded in developing a "Direct Connect Architecture" which enabled more efficient processing of information – a microprocessor's basic task. By connecting processors more directly with each other and with processor memory, AMD design architects accomplished the equivalent of providing six lanes, instead of two, for busy highway commuters, thereby achieving a higher performance data flow throughout the chip. The value of this architectural breakthrough would increase as chips were designed to have multiple centers or "cores" for data processing.

5. AMD Begins To Gain OEM And Customer Approval

36. AMD's other task, however – using these products to enter the lucrative business segment of the market – was not one it could accomplish alone; that road led through the major OEMs. The business segment of the market included not only medium and small business customers, but also large enterprise customers – the Fortune 500 companies – which purchase expensive server computers. AMD was, as noted, helped by the fact that Intel's attempt to capture the high-end computing market with its Itanium product met with little enthusiasm from

corporate purchasers. Those customers now had an AMD alternative which would allow them to achieve higher performance with AMD products, but continue to use their legacy 32-bit software, and make the transition to 64-bit computing on a schedule of their own choosing.

37. By late 2004, Fortune Magazine was reporting on some initial success in AMD's enterprise strategy: "By employing its own chip-design innovations and exploiting strategic missteps by Intel, AMD has built alliances with the likes of Microsoft, Hewlett-Packard, Sun, Fujitsu, and IBM. These tech powers mostly ignored AMD before, but now they see the chipmaker as a means to build market share by helping customers lower the cost of their IT operations. Almost overnight, AMD has become a major supplier of chips to the high-priced and high-margin world of servers, the big machines that power the internet and corporate networks."

38. For Intel, AMD's opportunity was a competitive threat. Genuine competition with respect to server computers, which were generally sold to enterprise and government customers, would erode Intel's monopoly profits. And if large enterprise customers began to purchase AMD server products, they would consider purchases of AMD desktops and notebooks as well.

39. What made the situation critical beginning in 2002-03, as shown in internal Intel documents, was that Intel had recognized that it would be years before it was able to itself design and develop x86 products genuinely competitive with those AMD was already marketing. In the industry parlance, Intel had a "big competitive hole" in its product development "roadmap."

B. INTEL'S EXERTION OF MONOPOLY POWER

1. Intel Seeks To Limit AMD's Advances

40. Faced with AMD's advances, Intel took steps to ensure that consumers would have limited opportunity to buy AMD's products. It accomplished this by bribing or coercing OEMs either not to offer, or to severely limit, AMD CPUs. This took place in the context of regular quarterly "negotiations" between OEMs and Intel – in which each OEM was in the position of one among several competitors, and Intel was, with respect to each of them, in the position of its essential and irreplaceable supplier. Because Intel disposed of the monopoly power and resources described above – advance knowledge of technical developments, ability to control supply, and above all, the ability to grant or withhold "rebate" payments and marketing money – Intel was in a position in which it could virtually dictate the terms of its deals.

41. Intel's customers understood Intel's power and its strategy. As an internal HP document concluded in November, 2003: "[I]n this market, Intel dictates the rules of the game ... and most of their actions can be understood in the context of keeping their distribution outlets (their customers) in line."

42. Intel's acts and objectives were therefore radically different from legitimate marketing of its own products. Instead, Intel eliminated opportunities for AMD to gain sales, even when Intel's own sales would not directly benefit consumers. For example, Intel paid HP, as part of a 2002 agreement between the companies, to delay the launch of AMD-based commercial desktop PCs for a six-month period in Europe and for a period of at least two months in Latin America. And Intel repeatedly pressured OEMs to guarantee it specified market shares of their sales, to ensure that the OEMs' marketing decisions would be controlled by Intel.

rather than responsive to consumer demand.

43. Thus, Intel entered into an agreement with HP which "capped" AMD's share of the commercial desktop segment at 5% of HP's worldwide sales. The "cap" provision was suppressed and kept secret, but numerous drafts, subsequent emails, and testimony confirm that it was central to the agreement and was observed by HP and enforced by Intel. In another 2006 agreement with HP, Intel effectively ensured that its share of HP's over-all sales would increase and AMD's would decrease. In all cases, however, Intel attempted to erase the most obvious traces of its anticompetitive scheme, by eliminating crucial but flagrantly objectionable provisions (such as the 5% cap) from written agreements (while nevertheless subsequently enforcing them), or altering language so that agreements about market shares were camouflaged as agreements regarding volume targets. The email request of the Intel executive who negotiated a 2006 deal with HP is typical: "Could you also take the mss [market segment share] references off and just leave everything at volume targets. Our counsel is very picky on that stuff ..."

44. Intel sought and frequently reached such agreements despite its awareness of "antitrust risk." In the context of Intel's negotiations with NEC, a Japanese OEM, an Intel executive in December of 2002 asked for new documentation because "[t]he original email minutes from [the] May meeting shows [sic] MSS target, and we can't use it ... where it exposes us to anti-trust risk."

45. The basic quid pro quo which Intel sought was invariably clear: exclusion of competition was rewarded with valuable inducements, which were withheld if the OEMs cooperation was not forthcoming. This conditionality was Intel's basic *modus operandi,* as illustrated by the following exchange in May of 2002 between two Intel executives reacting,

during negotiations with Sony, to the news that Intel was "getting hammered in the value segment" by AMD in the marketplace. The first executive inquired: "Can [another Intel representative] discreetly hint to Sony that the Corp Marketing dollars are at risk if Intel's MSS with Sony in the value segment does not improve?" The second responded: "We should not be shy about our unhappiness with our current MSS. Intimating that the program is in jeopardy if they don't get their act together and work with us on this is clearly ok."

46. A favorite Intel code word for the degree of exclusivity Intel desired from the OEMs was "alignment." If they were not "aligned," OEMs could not expect favorable treatment from Intel with respect to rebates, technological development, pricing concessions, priority in obtaining supplies of scarce parts, or marketing funds. As one Intel executive reported to another in April, 2002 regarding negotiations with Sony: "I also told him that Intel ... would really have to make sure Sony and Intel are well 'Aligned' before we commit to doing this kind of comarketing program.... If we can get [Sony] to agree on better alignment (MSS recovery in US NB [United States notebook computers], No more surprises), then, we can move forward with co-marketing discussion. If not, we may have to think about alternatives."

47. Similarly, a top HP executive reported back from a conversation with Intel's then-COO Paul Otellini concerning Intel's reaction to the news that HP was considering launching an AMD-based PC directed at commercial customers: "I talked to Paul Otellini last night [who asked whether] we have a transactional relationship or a partnership? If we go with AMD on the commercial desktop, Intel equates this to a transactional relationship, and therefore we are foregoing the benefits of price pull-forwards [pricing concessions] to level the direct/indirect playing field."

48. Intel forced OEMs to choose between having a "strategic" or a "transactional" relationship with Intel. In Intel's parlance, a "strategic" relationship was one with a high degree of exclusivity or "alignment." An OEM which opened itself to a relationship with another microprocessor supplier – AMD – was regarded as desiring only a "transactional" relationship with Intel, and Intel made clear in such cases that this would not be in the OEM's own best interest. Thus, in April 2002, one Intel executive wrote to his counterpart at HP during HP's merger with Compaq, reacting to a telephone conference between the CEOs of Intel and HP in which HP indicated that it might develop products based on AMD's new microprocessor product, code-named "Hammer": "[Intel's] Craig [Barrett] came away believing Compaq was leading HPAQ to a transactional vs. a strategic relationship with Intel. Not interested in partner of choice relationship. [Intel was] [v]ery disappointed in the response on Hammer and why this is in Compaq's best strategic interest."

49. Intel often cloaked its exclusionary transactions with OEMs in the language of pricing, using terms such as "CAP" ("Customer Authorized Price") or "ECAP" ("Exception to Customer Authorized Price"). In fact, although Intel often exerted considerable effort to retroactively justify its payments to OEMs in such terms, these "rebates" bore no genuine relationship to pricing based on volume-related cost savings or genuine efforts to meet specific competitive offers. The purpose and effect of these payments – of which Intel executives were always mindful – was to induce OEMs to exclude competition. When it became too difficult to accomplish this using "ECAPs" – purported discounts which were to be calculated on a product by product basis – Intel found other methods, such as lump-sum payments, to reach its goal of "strategic alignment."

50. For example, Intel for years paid Dell lump-sum rebates known initially at Intel and Dell as "MOAP," an acronym for "Mother of all Programs," and later renamed "MCP," short for "Meet Competition Program." In an October 2003 internal Intel email regarding Intel's negotiations with Toshiba, Intel executives considered abandoning the burdensome "ECAP" method of "justifying" rebate payments and adopting a "dell like moap [mother of all programs]" method of payment, which facilitated increasing the size of the payments necessary to purchase Toshiba's cooperation (referred to as "the incremental cost of getting them competitive"): "With [Toshiba] I think we are at the end of the rope wrt [with respect to] product by product ecaps – too painful across the product line; I think we have to take them to a dell like moap program – the incremental cost of getting them competitive could be buried into the overall moap program .... and then we can use the moap program to drive strategic alignment."

51. In short, Intel first determined what payment or other benefit was necessary to enlist an OEM's cooperation in excluding AMD, and then sought to camouflage it with an apparently procompetitive "structure." As Dell's lead negotiator with Intel put it in a December 7, 2004 email to his Intel counterpart, explaining that Michael Dell wanted an additional $400 million rebate payment from Intel: "This is really easy.... MSD [Michael Dell] wants $400M [million] more. I've been trying to figure out the structure...."

52. Intel's objective throughout was not to eliminate AMD entirely, but to crush an unprecedented threat to its monopoly power. As internal Intel emails show, Intel understood that not all market segments were vital to the maintenance of its monopoly power. "[L]ow cost/low value" output by AMD did not threaten the sources of Intel's monopoly profits, which included its – until 2002-03 - unchallenged position in the high value, high-priced corporate segment.

53. As a 1998 email exchange among Intel's top executives show Intel's strategic priority was "to avoid losing any SMB [small business] or corp skus [stock-keeping units]." At that time, Intel was concerned about AMD's success in the retail market because it was "strengthening their position for movement to high end skus and entry into the business segment."

54. Intel knew that if it could exclude AMD from the most lucrative segments of the microprocessor business, AMD could never become a genuine threat. For AMD to make sales was not sufficient; if it were to challenge Intel's monopoly power, it would have to make substantial high-value sales to major corporate customers. Only by raising the average selling price of its products could AMD challenge Intel's leadership. Intel therefore argued to OEMs that Intel would "continue to pigeon hole AMD to the bottom 10% of segment...." Intel's Paul Ottellini believed that AMD units which were sold on "the backstreets of beijing [sic] are wonderful.... [T]here is really no question that in the long run, I would like to see amd [sic] output spread round the world as a low cost/low value, unbranded brand..." Accordingly, in the following years, Intel focused on barring AMD's access to this vital high ground – the corporate market and its gatekeepers, the major OEMs.

2. Intel's Antitrust Compliance Program

55. Intel's illegal conduct occurred despite its much-touted antitrust compliance program. As described in the Harvard Business Review (June, 2001), the program featured mock raids and staged cross-examinations of Intel managers before audiences of other executive staff. One of the "Don'ts" said to be inculcated by the program was "no exclusive contracts where microprocessors were concerned."

56. Whatever the intention, internal Intel emails strongly suggest that the actual effect of the program was to school Intel executives in cover-up, rather than compliance. In some instances, Intel executives were told to use less transparent language to mask their tactics because of "legal" or "antitrust" concerns. Notably absent is any suggestion that the conduct itself – paying for exclusivity – might be objectionable. In a December, 2001 internal email, for example, an Intel executive was warned against drafting documents which ask customers for "a certain MSS [market share] target": "MSS 'Gets' in your list will create a legal concern ... We cannot leave the document .... which asks customers for a certain MSS target. Instead of MSS, we could implicitly build that idea in, e.g., minimum unit requirement..."

57. In a November, 2003 internal email exchange one Intel executive approved another's proposal that Intel take a "hard approach" with Acer to stop it from promoting AMD-based products. As the first executive wrote: "Acer has committed not to do any advertising on this [AMD-based] sku but the fact is that they created a competitor sku without even a heads up to us ... MDF support [Intel-provided 'Market Development Funds'] will be reduced .... Acer ... not happy with the decision but I think we need to take a hard approach in stopping them from doing this again." The second concurred on the proposed course of action, with the following warning: "[V]ery good. [B]ut be careful on antitrust wordings...."

58. Similarly, in an August, 2005 email, an Intel executive was warned that an internal Intel electronic record-keeping tool "is a very sensitive and important document which can come under anti-trust scrutiny. Please avoid using strong language like the ones below: a. 'we need kick [sic] them [AMD] out of the major ... companies.' b. 'maintain the MSS and beat AMD out of the major ... accounts.' In April 2004 an Intel representative in Europe wrote:

"This is a very serious issue in Europe. Pls be careful to (sic) what you send... [P]ls do not use words as marriage [sic] or things like that (see file on Acer winback...) Pls delete after reading."

59. Other emails suggest that internal Intel discussions which might raise antitrust issues were consciously not reduced to writing at all, or carried on in an instant messaging format less likely to be retained. In an April 2006 email one executive concluded an emailed list of "key issues" with the suggestion: "Let's talk more on the phone as it's so difficult for me to write or explain without considering anti-trust issue." In a June 2006 email string regarding Intel's rebate strategy vis-à-vis Toshiba "to compete against AMD" a senior Intel executive ended the email discussion with the directive: "Dude, c'mon. IM [instant messaging] please."

3. OEMS' Reasons For Collaborating With Intel

60. During the relevant period, OEMs understood that they would benefit from increased competition in the microprocessor market. If a competitor such as AMD could establish itself as a genuine alternative to Intel, they (and consumers) would enjoy more choices, lower prices, and better products. Nevertheless, they frequently decided, when faced with the array of incentives and threats which Intel brought to bear, to collaborate with Intel in restricting their purchases from AMD.

61. There were several reasons for this. The most basic was that the payments for exclusivity Intel provided could make the difference between profit or loss for an OEM or a segment of its business. In 2002-2004, for example, HP's business desktop unit depended significantly on Intel rebate payments for its financial success. In September 2004, HP executives considered whether to continue to adhere to a deal they had struck with Intel in 2002 to limit HP's marketing of AMD-based commercial desktop PCs by, among other things,

agreeing to sell AMD-based PCs directly only, rather than through distributors. A senior HP executive vetoed the plan, on the ground that Intel would detect any cheating and that Intel's rebate payments were essential for the HP division involved to "make it financially."

62. Dell's profitability also came to depend on Intel rebate payments. This was dramatically illustrated by internal Intel emails in April, 2004, arising from Dell's need to finalize its earnings forecast for the coming quarter. Essentially, Dell asked Intel for an additional $100 million; without it, as an Intel executive reported, Dell would "readjust their margin guidance downward ..." In other words, Dell would advise investors that it expected lower earnings.

63. As Dell and HP both learned, once an OEM accepted Intel rebate payments as a substitute for marketing AMD-based products, it became very difficult to break the habit. Dell on several occasions assessed whether purchasing from AMD would be likely to improve its profitability. Dell's estimates of Intel's likely reaction, however, loaded the scales against AMD, because Dell assumed – with good reason – that those reactions could well be severe and disproportionate. In a February 27, 2003 internal Dell document, for example, it was assumed that "aggressive" purchases by Dell from AMD could result in "[r]etaliatory [rebate] reductions [by Intel that] could be severe and prolonged with impact to all LOBs [lines of business]." Another Dell document from March 2003 concluded that "[a]nticipated Intel response wipes out all potential opinc [operating income] upside from going with AMD."

64. Moreover, Intel did not hesitate to threaten severe punishment for OEMs which marketed AMD in ways that Intel disapproved. Even large and powerful firms, such as IBM, took those threats very seriously. In 2003, for example, one IBM executive expressed doubts

about the advisability of a proposed deal with AMD which would involve IBM marketing assistance, because Intel retaliation could severely damage IBM's multi-billion dollar business in low-end, industry standard servers, its "x-series" line: "It became clear to me that if we did all that on the marketing side [for AMD], Intel would kill our x-Series business." Later, in 2005, a senior IBM executive faced a similar issue: Key IBM customers wanted IBM to expand its line of AMD products, but a negative Intel reaction would put IBM in a "very difficult spot." The executive wrote: "I understand the point about the accounts wanting a full AMD portfolio. The question is, can we afford to accept the wrath of Intel...? It is a very hard question to deal with."

65. Intel repeatedly used such threats to drastically raise the risks and costs of any OEM engagement with AMD. The choices the OEMs faced were skewed by Intel's willingness to use its monopoly power to retaliate against them, and their ability to use AMD products to lower their own costs and to satisfy consumer demand was held in check by their fear that Intel would strike back if they went too far. In a May 2006 "Strategy Update" document, HP carefully analyzed its relationship with Intel and concluded that the best strategy was to "[m]aintain judicious use of competitive bid situations to lower HP costs ... but not so aggressively as to risk the strategic Itanium relationship," a joint venture with Intel on which HP's future high-end server business depended.

66. The exclusionary agreements which the OEMs entered into with Intel were sometimes for terms of a year, or less. But given the stable, long-term nature of Intel's monopoly power, this did not mean that opportunities for AMD were only temporarily deferred, or that OEMs could effectively reserve freedom of action for themselves at a later date. Nor did it mean that, when new supply opportunities arose at a particular OEM, such "design

competitions" could be decided by the OEMs on the merits, without taking account of Intel's monopoly power and its willingness to use it as a weapon. Rather, while each quarter might have appeared to bring new opportunities for AMD, Intel continually refreshed the range of threats and rewards with which it confronted the OEMs, so that their incentives remained largely constant.

67. Given these realities, OEMs' frequent choices to collaborate with Intel to restrict opportunities for AMD and consumers were to be expected. Their circumstances were essentially those which economic theorists have described as the "prisoner's dilemma." If *all* of the OEMs had been willing to deal with AMD without Intel-imposed restrictions, the resulting strengthened competition would have benefited them all, as well as consumers, by lowering their microprocessor costs. Nevertheless, there were strong –often overwhelming – incentives for any *individual* OEM to accept the pay-offs – and avoid the punishments – which Intel dealt out. On the one hand, each individual OEM's collaboration with Intel resulted in less competition and higher prices for themselves and for consumers. On the other, however, Intel used the monopoly profits thus preserved to favor complicit OEMs, and punish recalcitrant ones. By complying with Intel's anticompetitive wishes, an OEM could gain substantial rewards, while its competitors, and consumers, suffered most of the consequences.

4. Harm To Consumers, Competition, And Innovation

68. Intel itself believed that the limited market access which AMD-based products obtained cost Intel monopoly profits. After HP surprised Intel with its plan to launch AMD Opteron-based server products, an HP executive reported back in a June, 2004 email: "Intel has told us that HP's announcement on Opteron has cost them several $B [Billions] and that they

plan to 'punish' HP for doing this."

69. Absent Intel's anticompetitive acts, prices to consumers would have been lower. Intel executives have themselves, in unguarded moments, acknowledged its interest in maintaining high prices. Top Intel executives told their HP counterparts in an August 2007 meeting that "Intel doesn't initiate aggressive price actions but merely respond[s]." OEM executives understood that offering lower-cost and therefore lower-priced AMD-based products could provoke a "price war" with Intel, a term used in a May 2002 internal HP email, when HP was considering offering AMD-based business desktop PCs ("[Top HP executive] believes that pricing below Intel will instantly create a price war and doesn't want to go there.") Similarly, in February 2004, Dell executives projected that if Dell were to extensively engage with AMD, the result would be "lower industry prices." Intel, of course, wanted to avoid this and it was precisely for that reason that OEM executives who considered engaging with AMD feared that Intel would retaliate against them.

70. Innovation in this critical market has also suffered as a result of Intel's illegal acts. An example of an innovation which would not have occurred – had Intel's success in distorting the market's response to consumer demand been even more complete than it was – is AMD's successful 64 bit enhancement of x86 microprocessors in its Opteron product. Intel had taken a completely different approach to the same problem – increasing the amount of data from memory which computers could access – by developing (with HP) an entirely new and proprietary chip, its Itanium product. The market tested the different approaches and the result was that AMD's path – which Intel was subsequently compelled to adopt – became the industry standard. But Intel's conduct has doubtless ensured that similar choices between competing

technologies never became available to businesses and consumers.

71. Because of the importance of the microprocessor market for the nation's entire economy, Intel's illegal conduct has far-ranging economic consequences. The microprocessor's importance derives from its status as an engine of productivity growth throughout wide segments of the economy. Technical progress and the accompanying price declines in these products have been largely responsible for the widespread affordability and availability of modern information technology. Economists agree that these developments have spurred wealth-creating productivity growth.[2]

72. But only competition can ensure that these benefits are fully passed to consumers, and that innovations are not suppressed because they do not conform to a monopolist's business plan. Intel has gravely injured competition, consumers, and innovation, with consequences which extend throughout the economy as a whole.

73. Intel's campaign of anticompetitive conduct was worldwide. Intel was most active in the United States, Europe, and Asia, the centers of microprocessor production, marketing and consumption. Set forth below are summaries of some of Intel's exclusionary acts involving three particularly important U.S.-based OEMs – Dell, HP, and IBM. But there is abundant evidence

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[2] Harvard Economist Dale Jorgensen summed up economic learning in a 2001 presidential address to the American Economic Association:

> A consensus has emerged that the development and deployment of information technology is the foundation of the American growth resurgence ...[This is linked to] the speed of technological change and product improvement in semiconductors and the precipitous and continuing fall in semiconductor prices. The price decline has been transmitted to the prices of products that rely heavily on semiconductor technology, like computers and telecommunications equipment. This technology has helped to reduce the cost of aircraft, automobiles, scientific instruments, and host of other products ....

that Intel's anticompetitive acts involved many other firms, and other distribution channels for microprocessors.

C. INTEL'S EXCLUSIONARY ACTS – DELL

74. As AMD was beginning to threaten Intel's dominance, Dell and Intel formed a partnership in which, in exchange for exclusively, Intel paid Dell billions of dollars, assured it of a preferred supply of chips over its competitors, and collaborated with Dell to submit below-cost bids in strategic contests against AMD's products.

75. Intel's motivation for this arrangement was apparent: A decision by Dell to sell AMD-based computers would likely not only have boosted AMD's credibility, but would have led to increased competition, lower prices throughout the industry, and the loss of substantial profits and market share by Intel.

76. This arrangement lasted for at least five years, from 2001 to 2006. During that time, as demonstrated by Dell's internal documents, Dell recognized AMD's superiority in chip design and suffered market share losses due to its decision to remain Intel-exclusive. Each time Dell considered altering the arrangement and introducing an AMD line, however, Intel responded with both carrot and stick – increased payments accompanied by threats of retaliation – which kept the relationship in place. Moreover, as Intel's payments increased, Dell became more and more dependent on Intel for its reported profits, further locking in their agreement. Finally, in 2006, the loss of market share became too great and Dell broke from Intel. As expected, Intel's retaliation was severe.

1. Intel And Dell's Unique Relationship

77. In pure dollar terms, Dell was far and away the leader in receiving Intel's largess. For example, over the four year period from February 2002 to January 2007, it received approximately $6 billion in "rebates." Most of this money was furnished to Dell under programs initially titled "MOAP" and then "MCP." "MOAP" was an acronym standing for "Mother of all Programs." The term MOAP was later replaced in the lexicon by another acronym "MCP," which purportedly (and misleadingly) stood for "Meet Competition Payments." Both generally referred both to Dell's global percentage based rebates and to lump-sum payments made by Intel to Dell during the relevant period.

78. Intel attempted to maintain the fiction that such payments were, as the latter phrase was meant to convey, legitimate price cuts in response to particular AMD competitive offers. In fact, the payments were decoupled from particular products. Intel would determine the total MCP percentage or amount for Dell for a given period, and only then create paper work at both Intel and Dell which purported to allocate portions of the total to individual CPU products in order to retroactively "back into" a superficial justification for its anticompetitive conduct.

79. Intel also assured Dell of "preferred" supply compared with other OEMs. Access to adequate and timely supply of products from Intel was a major concern for all OEMs, whose business was extremely time-sensitive. Internal Intel emails show that satisfying 100% of Dell's demand was a top priority for Intel, even when demand from other OEMs went unmet. In an October 2005 email, a senior Intel executive acknowledged: "[W]e know supporting Dell <100% [less than 100%] of whatever they ask for is not our working model..."

80. In return for exclusivity, Dell sought terms from Intel that were more favorable than those Intel extended to its other largest and most favored customers, the "Tier 1 OEMs," which included IBM and HP, as well as Dell. This goal was sometimes referred to within Dell as "Tier 0" status. As a result, Intel understood that money alone would not be enough to maintain Dell's CPU exclusivity. Rather, Intel led Dell to believe that Dell was getting a better deal than its competitors. As Intel's lead negotiator wrote in a 2002 internal email, one of "Intel's Objectives" at Dell was that "[Dell's then-COO] Kevin [Rollins] must believe DELL is getting advantaged pricing."

81. Intel did in fact grant Dell significant financial advantages over other OEMs. A key feature of their dealings was Intel's agreement to calculate the rebate payments to Dell as a percentage of Dell's total CPU purchases from Intel – an arrangement not enjoyed by any other comparable OEM. The percentages varied, rising to more than 16%, as the AMD threat intensified. This linkage concerned Dell executives, who wanted to ensure that the Intel payments would not be withdrawn, as in this April 2004 Dell internal email: "The key talking point [for Intel] is: 'Gee, if you're going to reduce our bottom line [rebate] % as AMD gets weaker, what incentive do we have to help AMD get weaker'?" As such statements show, Dell was being paid for holding AMD at bay, not for any pro-competitive act.

82. As described in greater detail below, Intel also used its relationship with Dell to "help AMD get weaker" by means of a specially designed "bid bucket" program. Under this program, Intel encouraged Dell to make below-cost bids, with Intel subsidies, when competing against AMD-based server products. Intel's objective was to deprive AMD of toe-holds with important corporate customers, which in turn would have led to deeper market penetration by

Intel's competitor.

83. In two crucial respects, however, Dell was no different from IBM, HP, or other OEMs: First, particularly in the years between 2003 and 2006, Dell was increasingly squeezed between its dependency on Intel and fear of losing monetary support on the one hand, and its customers' demand for AMD-based products on the other. Second, Dell had reason to fear disproportionate retaliation by Intel if it did business with AMD. Intel executives hammered home the message that if Dell opened any opportunity for AMD, Intel would reconsider *all* of the support it provided. Dell heard this message loud and clear.

2. Intel Funds Were Secret And Directed Against AMD

84. Dell understood that the primary purpose of the various "Intel Funds" was to keep AMD CPUs out of Dell computers and servers. For example, a 2002 Dell document titled "Intel Funding Overview" states that the "original basis for [the Intel MCP] fund" is "Dell loyalty to Intel." Lest there be any doubt, the same document explains that loyalty in this context means "no AMD processors."

85. A 2003 internal Dell document explains the program rationale, funding methodology, and negotiated documentation, including the following highlights:

- "The intent of the MCP program is to provide funding to Dell to combat the AMD threat in the marketplace *since Dell is an Intel-only OEM for CPU's*"
- "*MCP has been referred to as a 'monogamy tax' for Intel.*"
- "The MCP is negotiated on a quarterly basis."
- "*There is not a formal 'contract'* per se that documents all the terms and conditions of the MCP program for a quarter. *Rather, the MCP terms and conditions are agreed upon via email and telephone communications*, which are finalized in a spreadsheet that is agreed to by Dell and Intel for a particular quarter." (Emphasis added).

86. As mentioned in the memo, throughout this period, top executives at both companies took care that the dealings between them were kept secret. Although billions of dollars in rebate payments flowed from Intel to Dell during the period 2002-2006, there was no formal documentation of the secret agreements which led to them.

3. Intel Conveyed Threats To Dell

87. Intel repeatedly made it clear to Dell that, if Dell wanted Intel's support, Dell would have to direct its efforts against AMD. For example, in preparation for upcoming funding negotiations with Intel in 2002, a Dell executive, who regularly acted as an informal liaison between Dell and Intel, explained that Intel would not tolerate a Dell shift to AMD CPUs. Specifically, this Dell executive wrote to Michael Dell and others: "If [Dell starts to use] AMD [CPUs], [Intel] would just give a [competitor] MOAP type dollars to match whatever we're getting – they won't sit around and let us transfer share to AMD..."

88. In emails and in testimony, the same Dell executive referred to this scenario – in which Intel cuts off some or all funding to Dell and shifts it to a Dell competitor – as a "double whammy." In one instance, this executive wrote that Intel intended to use an upcoming Dell-Intel meeting to force Dell to discuss how Dell "plan[s] to drive" total market shift to Intel from AMD, and had a "perception that we're [competing] against competitors seeking Intel CPUs, instead of marketing against AMD."

4. Intel Repeatedly Renegotiates Its Payments To Dell To Ensure "Monogamy"

89. Over the coming years, Intel and Dell fell into a pattern of negotiating the amount of Intel's subsidies to Dell on a nearly continuous basis. These negotiations were tied to Intel's

aggressive efforts to prevent AMD from getting a toe-hold at Dell. In each successive round of negotiations, the groundwork was usually laid by mid-level executives at both companies tasked with conveying messages and "positioning" to and from the other so that top executives at both firms would know what to expect when they met.

90. In advance of such a meeting, on June 24, 2002, Dell's informal liaison reported back from conversations with Intel's lead negotiator on what Dell's then-COO Kevin Rollins, who was scheduled to meet with a top Intel executive, should expect at the meeting. Rollins was told by his subordinate that, "[w]ithout being blatant, [the Intel representative] will make it clear that Dell won't get more MOAP if we do AMD. We'll get less, and someone else will get ours."

91. After the meeting, on July 9, 2002, Kevin Rollins reported to Michael Dell that the result of the meeting was that Intel was willing to increase payments to Dell and seemed willing to do "whatever it takes" to keep Dell from purchasing from AMD." Rollins wrote: "They got the message that we were very serious this time with our AMD assessment, and seem to want to do whatever it takes to persuade us not to go with [an AMD CPU] .... Initial word is that our MOAP should increase from the $70M this qtr to $100mm."

5. The "Boomerang" Episode

92. Dell periodically considered launching AMD-based products, notwithstanding Intel's fierce opposition. But its fear of Intel's reaction, based on Intel's explicit and implicit threats, counseled strongly against any action. For example, in 2002, a Dell team explored a potential switch to AMD for some of Dell's CPU needs, in a project code-named "Boomerang". The study concluded, first, that "AMD offers a significant margin opportunity for [Dell's] Dimension and Inspiron" platforms, on account of price, cost and customer demand factors.

93. But the Boomerang study also identified Intel's reaction as a "key question" in the analysis and discussed the potential "opportunity cost" given Dell's "[e]xclusive relationship with Intel." The study asked whether "MOAP [payments to Dell would] increase or decrease? And over what time period – short term vs. long term?" The Boomerang study attempted to quantify the projected margin benefit from adopting AMD, concluding that "[up] to 32% of MOAP program could be risked" before Intel's retaliation, in the form of reduced MOAP, would outweigh the benefits of switching certain platforms to AMD CPUs.

94. The key Dell executive acting as informal liaison between the two companies commented on the results of the "Boomerang" study. He warned that the "worst-case downside" scenario is that Intel would "eliminate ~$250M of Dell meet-comp MOAP for some period," and moreover, that "Intel [would] give[] this MOAP to competitors to ensure that Intel does not lose [market share] to a Dell AMD [system]." The "net effect" would be that Dell would "not only lose ~$250 [million], we probably have to do incremental [discounting] on our Intel platforms against competitors who [would] now [be] subsidized with an extra $250M from Intel."

95. A confirming contemporaneous internal Intel email from Intel's Dell account representative to top Intel executives states that Dell must be made to understand two things: First, that Intel's payments to Dell would decrease "if they have AMD in their arsenal." Second, that Dell should be warned of the "possibility that [MCP] dollars that we're (sic) applied to DELL could go somewhere else" if Dell starts to offer AMD-based products.

96. The message was apparently conveyed in fact. A Dell executive testified that, at the time of the Boomerang analysis, Intel had conveyed "the concept of their statement back that ... as long as [Dell is] Intel only, our discount structure is what it is." He added that he

understood from Intel that, "[i]f there was a change in our Intel only [status], then our discount program would have to be revisited."

97. Under these circumstances, Dell decided not to launch AMD-based products at that time. A Dell executive who was responsible for the "analytics" and "cost assumptions" of the Boomerang study testified to the Attorney General that concern about Intel's reaction was a substantial part of that decision.

6. The "MAID" Episode And The "New Partnership Arrangement" Between Intel And Dell

98. In the fall of 2003, Intel learned that Dell had been involved in discussions with Microsoft, AMD, and IBM regarding a proposal named "MAID" – an acronym formed from the first initials of the four companies involved. The MAID proposal contemplated agreements between Microsoft, IBM, Dell and AMD which would have greatly strengthened AMD's position as a competitive alternative to Intel. Under the proposal, Dell and IBM would have become major AMD customers, with each of the four companies providing necessary aspects of the program. An internal Dell email later stated that, under MAID, Dell would have shifted "approx[imately] 25% of [Dell's] total volume" of CPUs to AMD, from Intel.

99. The MAID proposal came into play in the rebate negotiations between Intel and Dell. Intel, as it had done before when faced with a threat by AMD, decided to bribe and threaten Dell to induce it to remain exclusive.

100. In September 2003, Intel's then Chairman and CEO Craig Barrett met with Michael Dell to address the basic relationship between the companies. He reported back to his Intel colleagues that he and Michael Dell "shook hands on the deal. MD [Michael Dell] agreed to quarterly mtgs ... to make sure we are aligned in our strategic issues and coordinated in

spending the monies. He had no issue with the win/win nature of the agreement. *I clearly committed our long range support regardless of competition* ... Nice work you guys!" (Emphasis added).

101. An internal Dell email reported that under the new arrangement, Intel was making a $40 million lump sum payment in order to maintain Dell's status as a an Intel-only CPU buyer. Specifically, one Dell executive wrote that "[a]s part of our latest negotiation with Intel they have agreed to provide an additional $40m of MCP in Q3." The message added that those funds are not to be used, but, rather, stated they are to be kept in reserve at "a high level for EOQ [end of quarter earnings] support." Another Dell executive responded, asking: *"I assume this is predicated on our AMD decision?"* The reply confirmed that *"[i]t is and this is exactly the right way to handle these."* (Emphasis added).

102. The MAID proposal never came to fruition, at least in part because of Dell's new "arrangement" with Intel.

7. Intel Pays Dell Not To Launch AMD-Based Servers

103. HP's decision to launch servers based on AMD's Opteron processor, as discussed below, in early 2004 provoked strong reactions at Intel. HP's announcement was made on February 24, 2004, but internal Dell and Intel documents show that Intel was already reacting to advance word of the announcement. Both also anticipated that IBM would announce AMD-based server products, and that Dell would be "bracketed" by HP and IBM. A Dell executive wrote on January 19, 2004: "This is very scary. HP (and IBM) can bracket our server business by using AMD to beat us on price, and their Itanium/RISC/enterprise stuff to beat us on performance. We chase their AMD boxes with our Intel boxes and drain our profit pool."

Another Dell executive agreed, writing that Intel had "better be down here sucking up with a bag-o-money."

104. An internal Intel review recognized that this development could cost Intel dearly in terms of revenue, noting that, as a result of the introduction of AMD competition in the server market by HP as well, $250 million in Intel revenue was at risk in 2004.

105. Dell understood that Intel's reaction would likely be severe if "Dell joins the AMD exodus." Specifically, the Dell executive who served as Intel's informal liaison to Dell management wrote the following analysis:

> If we play this right, we walk away with a 3-year contract that drives structural Dell advantage in cost, supply, and influence....
> *PSO/CRB [Paul Ottelini, Intel's CEO, and Craig Barrett, Intel's Chairman] are prepared for jihad if Dell joins the AMD exodus. We [will] get ZERO MCP for at least one quarter while Intel 'investigates the details' – there's no legal/moral/threatening means for us to apply and avoid this.* We'll also have to bite and scratch to even hold 50% [of MCP] including a commitment to NOT ship [AMD-based products] in [the] Corporate [sector].
>
> If we go [with AMD CPUs] in [the] Opti[plex product line], [Intel] cut[s] [MCP] to <20% and use[s] the added MCP to compete against us. [Intel has] gamed this out and can clearly withstand a 2-3 year industry price war to ensure that they lose no market share if Dell ships AMD. (Emphasis added).

106. Top Dell and Intel executives met and Intel again agreed on substantial increases in rebate levels; Dell would now receive a "base" rebate of 11% of its processor purchases from Intel, up from 7%, for not switching to AMD. In addition, they also agreed on another 3% in "incremental" or "variable" rebates, for a total of up to 14%. Dell's lead negotiator estimated that the "new MCP" would be worth $400 million to Dell over the twelve month period from April 1, 2004 to March 31, 2005. Indeed, around that time, Intel's payments to Dell started to

reach figures of $100 million per quarter or more.

8. Dell's Quarterly Profit Margins Depended On Intel's Payments

107. One of the reasons that Dell remained unwilling to offer AMD-based products was that Dell's quarterly profit margins had become dependent on Intel's payments. A comparison of Dell's reported net income with the rebates it received from Intel for some quarterly periods show that, by 2004, the rebate payments amounted to more than a third of Dell's earnings. For the 3 month period between August and October of 2004, Dell received approximately $304 million in rebates from Intel and reported income of $846 million, so that the rebates amounted to 36% of net income. Thereafter, the proportion of rebates to net income rose steeply. In 2006, Dell received approximately $1.9 billion in rebates from Dell, and in two quarterly periods of that year, rebate payments exceeded reported net income. From February to April of 2006, rebates ($805 million) amounted to 104% of net income ($776 million). The following 3 months, between May and July of 2006, the proportion was even higher, 116% ($554 million of rebates and $480 million in net income).

108. In one instance, Dell asked Intel to retroactively increase the size of its payment to stabilize Dell's forecasted earnings. In several early Sunday morning emails in April 2004, Intel's Austin-based Dell lead negotiator alerted top Intel executives to an urgent Dell request regarding "our meet comp response for Dell considering new data from msd [Michael Dell] on Friday." Dell needed to finalize its margin forecast for the coming quarter, but needed "direction" from Intel: "dell is finalizing their call the qtr today. They need direction from us. They are asking for $100 upside to old MC deal ... Anything below 90 likely to force them to lower numbers."

109. Later the same day, another Intel executive clarified Dell's request in an email directed to Paul Otellini, who was Intel's chief operating officer at the time. He informed Otellini that Dell had assumed that its new agreement with Intel for increased subsidies would be retroactive to the beginning of its current fiscal year in February. Now, without an additional $100 million payable in Dell's current quarter, Dell would be forced to revise its margin guidance downward:

> What they [Dell] really want: an additional 100M$ payable in their fiscal quarter which ends in April. This is incremental to our old deal and would mean a total April payout of 167M$ ($155M). They will readjust their margin guidance downward without this additional meet comp request. They had made the assumption we would do the deal retro to the beginning of their fiscal in February.

110. In an April 8 email to Michael Dell and Kevin Rollins, Dell's lead negotiator with Intel described the outcome of Dell's request to Intel as follows: "The only disappointment is that we didn't get $93M in our Q1. We got what we needed to meet expectations ($60M) in the form of increased MCP and programs. We didn't get enough to exceed our earnings expectations. I think we got all we could in one 30 day period."

111. As this episode shows, Intel's payments to Dell did not benefit consumers through better products, more efficient collaboration between the two companies, or lower prices. Instead, Intel was simply paying Dell to unfairly exclude AMD, and thereby maintain Intel's monopoly profits.

9. Intel Again Increases Payments To Stop Dell From Launching AMD-Based Products

112. By mid-2004, however, top Dell executives were gravely concerned that Intel's loss of server performance leadership to AMD was leaving them competitively exposed.

113. Dell's lead negotiator with Intel expressed his concern to Intel's Otellini that AMD's success in servers would lead to a "price war" in the lucrative enterprise segment: "I'm really concerned on the server roadmap .... If AMD achieves a consistent performance advantage in servers that lasts a full product generation, more and more OEMs and customers will be forced to use them. I'm certain this is a potential trojan horse -- once they're in the back office, it's an easy move into the client. The last thing we need is an enterprise client price war." Otellini acknowledged the problem: "We underestimated Opteron and got cross wise in our own product roadmap ... We are fully focused on this, but it's a tough nut..."

114. By September, 2004, Dell's tone was becoming strident. In one email, for example, Dell's lead negotiator with Intel addressed the issue of multi-processor servers. He wrote [to Intel] that the server issue "is really a big problem." He continued that, given AMD's relative superiority for CPU servers, Dell had to make one of three choices. Specifically, he wrote that either: (1) Dell "[s]hips[] the slowest 4P [*i.e.*, quad processor server] system on the planet with Intel CPU+Chipset;" or (2) Dell "buy[s] a chipset from [Dell's] competitor;" or (3) Dell "buy[s] a CPU from Intel's competitor [*i.e.*, AMD]." Moreover, he stated that "[t]his is very serious for Dell and we need to have some frank, direct discussion very soon.... We view the 4P [quad-processor server] market as the ultimate Trojan Horse for Dell," adding that Dell did "not believe we can hold these customers by underbidding" HP's AMD-based system. Intel's Otellini replied: "Nothing is cast in stone, and we are still very much open to working further to address Dell's needs."

115. Internally, Rollins wrote in a "confidential rant" to Dell's lead negotiator with Intel that Intel's "missteps ... have cost us ... margin," that Intel needed "to bring dollar based

proposals that will benefit us differentially," and noted the consequences if, as rumored, Intel "increase[s] earnings but leave[s] us hanging."

116. On December 6, 2004, Intel's Otellini emailed Intel's Dell account representative about his concern that Dell would defect to AMD: "I had the analysts dinner tonight. One of the analysts ... said he talked with Kevin [Rollins] today and Kevin told him it was 'inevitable' that Dell would use Opteron..." The next day, the Intel executive promptly forwarded this email on to Dell's lead negotiator with a plea for help in securing "incremental support" for Dell. Hours later, Dell's lead negotiator emailed back that Michael Dell was on board: "Sitting in the car right next to msd [Michael Dell] as I type. He's aligned. I'll get with kbr [Kevin Rollins] when I return. I'm positive that incremental mcp will get kbr aligned...."

117. Later in the day, Intel's negotiator wrote that "we've made a lot of progress in the last couple of months – you guys had a ton to do w/it!! ... I'm struggling finding the incremental meet comp exposure .... I need some help here ...". Dell's lead negotiator emailed back: "This is really easy. MSD [Michael Dell] wants $400M more. I've been trying to figure out the structure..."

118. Three days later, on Dec. 10, 2004, Intel's Dell account representative submitted the "list of meet comp terms" for internal approvals at Intel which "assumes we can negotiate [Dell] down to $300M." In exchange, the first item on the term list expressed Dell's commitment to "Maintain CPU and Chipset MSS [market segment share] --- Commitment to '05 roadmap." In other words, what the payments bought was Dell's commitment to "maintain" exclusivity. Intel's Dell account representative emphasized that "there is no middle ground ... we either keep them emotionally or pull back the majority of our support...." Or, as he worded

his own thoughts in the alternative, there can be "no half pregnant."

119. In fact, Intel's payments to Dell shot upward, roughly doubling in less than one year. Under these circumstances, Dell did not launch AMD-based products at that time. According to a wire service report dated from Phoenix Feb. 23, 2005: "Dell Inc. has renewed confidence in Intel Corp. as its sole supplier of microprocessor chips and is no longer seriously considering rival Advanced Micro Devices Inc. as an alternative supplier, Dell's chief executive said ... 'That's looking like "No",' Rollins said of Dell's decision not to use AMD. 'For a while it was looking like "Yes".'"

10. Illegal Bid Buckets

120. As the AMD threat to Intel's dominance increased in the server sphere, Intel set up a "bid bucket" program at Dell, through which Intel subsidized below-cost bids by Dell when it was bidding against competitors selling AMD-based computers and servers to large businesses or other "enterprise" customers. The purpose of the program was to stop AMD from successfully placing its products in trend-setting enterprise accounts.

121. Intel closely supervised and tightly controlled Dell's use of the bid bucket funds. Intel demanded and received detailed quarterly tracking reports from Dell on how the bid buckets were used, including follow-up on wins and losses.

122. Initially, under policies approved by Intel, all uses of the bid buckets were to be approved by a high-level Dell executive at Dell's headquarters in Texas, but successive modifications allowed approvals at ever-lower staff levels. Those restrictions initially included specific caps on the amount of bid bucket money that could be allocated against specific Intel CPUs, apparently in order to prevent below-cost transactions. However, as one Dell executive

wrote, in February 2005: "it should [not] be surprising that ... a lot of $$$ ... is what it takes to overcome a slower processor with a higher cost."

123. As Dell found itself losing more and more of these bids – even with bid bucket subsidies – in January 2005, Intel gave Dell "a verbal OK to remove any discounting restrictions" on bids against Opteron servers. In other words, Intel was now actively encouraging below-cost transactions in order to keep AMD out of the key enterprise market. In accordance with Intel's instruction, Dell sent new guidelines to Dell's "Centers of Competence" or "COCs" (*i.e.*, regional offices), dispensing with the limits, but also instructing the COCs that they "MUST ... [w]ork proactively with Intel to respond to and win those deals." (Emphasis in original).

124. As Intel recognized in internal emails, the removal of discounting restrictions meant that "effectively, the processor could be at $0 ... could even be negative."

125. Dell's detailed quarterly bid bucket reports to Intel show that many transactions were indeed below cost, sometimes listing "negative margin" as the "justification for support." Some reports explicitly indicate that the bid bucket "relief per processor" exceeded 100% of the nominal cost (before rebates). For example, one bid bucket report that Dell sent to Intel contains the following information about a below cost transaction involving 352 server systems, in competition against an IBM Opteron-based system:

Custo-mer	$ Support Approved	Competition	Justification For Support	# Systems	Processors per System	Total CPUs	Dell Product	Processor Brand	Relief Per [CPU]	[undiscounted CPU price for Tier1 OEMs]	% Discount	Won, Lost, Pending, Invoiced
CGG	[~$225k]	IBM	Competing against Opteron IBM (IBM e325\Power 5). Loyal Dell HPCC account that is seeing significant gains in the Opteron chipsets vs. current procs and NOC chips. Intel BDMs are heavily involved with the account and support using relief in this fashion	352	2	704	PE 1750	Xeon PRE	$320	$295	108%	Won Q4

126. In this example, Dell won the bid – but only after allocating $320 per processor for CPUs that have an *undiscounted* price for top level "tier 1" OEMs of $295. The report itself states [second column from the right-hand margin] that the discount was ***108%*** of the "Tier 1" price. In fact, the transaction was likely more than 8% below cost since the "Tier 1" column does not take into consideration the rebates Intel provided Dell.

127. The report also confirms Intel's *direct* involvement, since the "justification for support" in this example notes that "Intel BDMs [Business Development Managers] are heavily involved with the account and support using relief in this fashion."

128. The below-cost transaction cited above is merely one of dozens in that report alone. In some examples, the bid bucket system excluded AMD from winning bids by allocating *several times* the entire value of the CPU, at rates of 389% or even 500% of the cost of the item. In one instance, the Intel subsidies offered for a bid exceeded 700% of the CPU's cost.

129. This bid bucket report was typical. Over a period of approximately two years, from approximately mid-2004 to mid-2006, the reports show tens of thousands of bids involving

bid bucket subsidies.

11. The Pressure Builds, Leading To Even Greater Intel Payments To Dell

130. In the summer of 2005, Intel and Dell held another round of rebate negotiations. This came as no surprise to Intel, which was well aware that Dell blamed Intel's inferior server products for its own lost sales and profits.

131. In one internal Intel email, an Intel executive imagined the following response by Dell's lead negotiator to Intel's attempts to sell Dell more high-end server CPUs: "[I]f I was [him], here is how I would respond: 'I am losing [expletive deleted] mss [market segment share] cause your CPU sucks and your chipset sucks ... I am losing [be]cause HP is using [AMD's] opteron and IBM has [IBM's own chipset product] which is killing [Intel's chipset product] ... it's your crap Intel that is causing me to lose!'" He further imagined Dell arguing: "'And you want me to spend more money on a stale 5yr old platform ... and others will have superior technology? I know I'm a dumb old Texan, but that even sounds stupid to me!'"

132. In early August, 2005, Intel's Dell account representative emailed Intel's CEO Otellini: "Drums are starting to beat again. We'll need to discuss next steps. I'm in the camp of 'no more' unless they dramatically change their behavior .... They've realized they're in [a] hole this qtr and are initiating negotiations."

133. Shortly thereafter, Otellini reported back on a telephone conversation with Dell's CEO Kevin Rollins:

> I had my call with Kevin yesterday. It went well. He did NOT ask for money ... he called to ... tell me that Dell is still committed to selling up and moving to the high end... He did say that [Dell's lead negotiator] would work with [Intel's Dell account representative] to 'find out if there was a win/win deal in selling up' ... I have no idea what that means...

134. Intel's Dell account representative responded: "[T]he 10,000 lb gorilla is what he didn't say, he wants to renegotiate their MCP deal ... starting in their Fq3 [Dell's 3rd fiscal quarter] – that's their idea of a 'win-win sell-up deal.' They want to maintain their historical meet-comp consumption. I don't, unless they change – even then I'm cautious. I've told [Dell's lead negotiator] and the rest at Dell that we don't want another opportunistic hollow commitment ... I'm told they want to evolve into a much more collaborative relationship – we'll see."

135. In the following months, Otellini also had increasingly emotional and frank exchanges with Michael Dell himself. On November 4, 2005 Otellini reported internally in a "Confidential – DO NOT FORWARD" email about "one of the most emotional calls I have ever, ever had with [Michael Dell]." In this email, Otellini wrote:

- [Michael Dell] opened by saying "I am tired of losing business" ... he repeated it 3-4 times. I said nothing and waited.
- He has been traveling around the USA. He feels they are losing all the high margin business to AMD-based sku's ...
- He is tired of being behind for 4 years (when I protested that it was 2, he said, no the last 2 years, this year, and next year).
- As a result, "Dell is no longer seen as a thought leader"

136. On November 10, 2005, Michael Dell followed up with an email to Otellini: "We have lost the performance leadership and it's seriously impacting our business in several areas." Otellini's reply: "There is nothing new here. Our product roadmap is what it is. It is improving rapidly daily. It will deliver increasingly leadership products ... *Additionally, we are transferring over $1B per year to Dell* for meet comp efforts. This was judged by your team to be more than sufficient to compensate for the competitive issues." (Emphasis added).

137. Michael Dell, however, continued to press home to Intel its performance deficit and its effects on Dell. On November 24, 2005 he capped an email exchange with Otellini by writing: "None of the current benchmarks and reviews say that Intel based systems are better than AMD. We are losing the hearts, minds and wallets of our best customers."

138. Meanwhile, Intel increased its payment to Dell to an unprecedented level. According to figures provided by Dell, Intel's payments ($471 million) amounted to 78% of Dell's reported net income ($606 million) for the period August to October of 2005.

139. On February 16, 2006, Intel took note of a service report in which Dell's CEO Kevin Rollins had said that Dell had "made no plans to begin using" AMD chips. "Finally something positive" commented one Intel executive. *Otellini commented: "The best friend money can buy."* (Emphasis added).

12. Dell Finally Launches AMD-Based Products

140. By April 2006, Dell's relationship with Intel reached a breaking point. As Michael Dell wrote: "Intel – we overestimated both their ability to execute and our true competitive position with them and we underestimated AMD. And we relied too much on rebates from Intel ..."

141. Dell was finally ready to act, despite the pressure and incentives from Intel. In an April 29 email to other top Dell executives, Michael Dell wrote: "We have been looking at the situation for a long time, and have decided to introduce a broad range of AMD based systems into our product line to provide the choice our customers are asking for."

142. The reaction of Craig Barrett, Intel's Board Chairman, was unequivocal: Dell should immediately be deprived of the payments it had long enjoyed in return for its willingness not to offer AMD products, and should start paying "list prices." Barrett told Ottelini: "[T]hey have just signaled they are only interested in being a transaction based customer. I think you should reply in kind. Not a time for weakness on our part. *Stop writing checks immediately and put them back on list prices asap.*" (Emphasis added).

143. The direction Otellini gave his subordinates the next day was consistent with Barrett's advice. Intel should make clear to Dell that if Dell offered any AMD products all of the "mcp" payments Dell received from Intel would be at risk – just as Dell had always feared: "*[W]e should be [pre]pared to remove all mcp and related programs. Post haste... then we ought to enter negotiations* ..." (Emphasis added).

144. But at Dell, Intel's anticompetitive strategy of paying Dell not to deal with AMD had at long last become too destructive for the company and its client base, which was increasingly demanding AMD products. As one Dell executive wrote on May 12, 2006 to Dell's CEO Kevin Rollins: "We are getting slammed with missing our numbers and not announcing anything with AMD. Conversely, Intel is not giving us enough money to make Q2 EPS [2nd quarter earnings per share] and our current plan of record for Q2 is to beg them for more money to make our targets... My vote is [to] announce AMD now if they do not cooperate this week."

145. As Intel had done with other OEMs who were determined to introduce AMD products, it attempted to severely limit the range of the AMD products that would be offered. In May, Intel sought a deal with Dell in which Dell would make an AMD announcement – but limited to multi-processor servers and "remain all intel (sic) for all other lines through this year,"

as Otellini informed Intel's Board of Directors. Under that deal, Intel was to make further payments to Dell in return for continued exclusivity outside the multi-processor server segment. Dell's Rollins wrote in a June 1, 2006 email that he was trying to get $250 million still from Intel, "but they [Intel] are asking for a commitment to exclusivity for the rest of the year to get the money."

146. Despite this agreement, by September of 2006, Dell realized that it could no longer limit its introduction of AMD to this segment if it wanted to retain its market share, accordingly, in September, it announced further AMD products.

147. Intel's retaliation was massive. For February, March and April of 2006, Intel had paid Dell approximately $800 million in rebates; in the three month period from November 2006 through January 2007 – after it had first offered an AMD-based product – Dell received less than $200 million in rebates.

148. In Intel's view, the end of the exclusive relationship it had had with Dell opened opportunities elsewhere, specifically with another OEM, Lenovo. In a "read and destroy" email to a top Lenovo executive ("I am asking you as a matter of trust to read and delete it") Intel's Otellini suggested that Lenovo could benefit from the same kind of relationship: "Any meet comp program we may have had with Dell will get nullified as they introduce competition – this opens vistas of opportunity for LeNovo/Intel that I have only hinted at in the past. This represents an inflection point for LeNovo."[3]

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[3] Notwithstanding the fact that Dell finally launched AMD-based products in 2006, and continues to sell them today, there is evidence that Intel continues to apply pressure to Dell to minimize AMD's ability to compete effectively.

D. INTEL'S EXCLUSIONARY ACTS – HEWLETT-PACKARD

149. Unlike Dell, Hewlett-Packard ("HP") marketed some AMD-based products on a limited basis continuously throughout the period from 2000 to the present. Nonetheless, HP's relationship with Intel shared many of the same carrot and stick characteristics as Dell. HP would announce that it was thinking of expanding its relationship with AMD, Intel would then threaten HP with reducing its payments or canceling key joint ventures, and Intel would then increase its payments in exchange for (in this case) near exclusivity.

150. The result was that HP was careful to calibrate – and when necessary restrict – its marketing of AMD-based products so as not to cross Intel-drawn red lines and to obtain benefits which only Intel could offer. Most notably, as detailed below, in 2002, HP agreed to impose a 5% cap on its marketing of AMD-based commercial desktop PCs, guaranteeing Intel 95% of its requirements, in exchange for $130 million in rebate payments. And in 2006, HP agreed to enter into a company-wide agreement with Intel which limited AMD's share of HP's CPU purchases for Intel's benefit.

1. HP Plans To Purchase CPUs For Commercial Desktops From AMD

151. In 2002, HP's commercial desktop unit, responsible for sales of PCs to business users, was in a state of crisis. It was losing market share and enormous amounts of money – close to a billion dollars a year.

152. At the time, the unit had an exclusive relationship with Intel. As set forth in internal analyses, purchasing 100% of its microprocessors from Intel put HP in a no-win situation vis-à-vis Dell. Among their conclusions:

- 100% Intel traps HP business desktops into a shrinking arena suited to Dell's strengths
- 100% Intel dilutes differentiation among large OEMs, advantaging the low cost OEM [Dell]
- 100% Intel forces HP to pay a premium for processors, depressing margins.
- 100% Intel locks HP out from AMD's 20% (and growing) share of the
- commercial DT [desk-top PC] market, trapping HP in zero-sum cage with Dell.
- 100% Intel forces ~$120M/annum higher than necessary material costs upon HP.

153. Purchasing from AMD, the unit's executives believed, would allow HP to "change the rules of the game" and cut costs by taking advantage of AMD's lower prices, at the same time tapping into the share of the commercial market which was increasingly interested in AMD-based products.

154. HP managers were also hearing from commercial customers that there was demand for AMD-based products; they took note of recent purchases of AMD-based products by commercial customers in Europe, and the fact that "343 US IT managers have petitioned for AMD desktop from top-tier OEM."

155. These factors led HP to consider a deal with AMD which would yield HP's first commercial AMD desktop PC, to be branded as the "Evo D315." It was targeted at the small business segment of the market, but might also be suitable for HP's largest "enterprise" or Fortune 500 customers, and would be ready to launch worldwide in Summer 2002.

156. The benefits for HP seemed substantial. Internal HP projections showed selling AMD might materially improve HP's market share position vis-à-vis Dell and could result in bottom-line gains of hundreds of millions of dollars per annum, with AMD's share of HP's business desktop PC sales rising to as much as 30%.

2. HP's Fear Of Intel's Retaliation

157. Despite the upside to the change, in contemplating the decision, senior HP executives weighed what they feared would be Intel's retaliatory countermeasures. They understood that an AMD deal would be considered a "watershed event" by Intel because it would legitimize AMD in the lucrative enterprise space. As a senior HP executive noted in April 2002: "No other major supplier is offering a business SKU with AMD in it." Another HP executive noted in May 2002: "Intel's worst fear will be a sufficient ramp of commercial Athlon [an AMD microprocessor product] such that it becomes legitimized for commercial markets. Once AMD is out of the box, Intel cannot put it back in. To that end, we expect swift price pressure so that we never fully get out of the chute. Intel can't afford to lower industry prices so they will pick their largest 'partner,' Dell as their instrument."

158. An internal HP memorandum concurred that Intel feared HP would "validate" AMD in the business market: "Another motivation for Intel to keep AMD out of the business market is the fear that if AMD penetrates successfully with HP, it would help to validate AMD as good enough for enterprise deployments – today 'nobody gets fired for specifying Intel.'"

159. Accordingly, in order to protect itself, HP suggested that AMD should establish a fund of $75 million which HP could use to hold itself harmless if Intel retaliated against it. Specifically, HP proposed that:

> AMD will establish a fund of $25M per quarter for the first three quarters of the agreement which HP can draw from as compensation for potential 'retaliatory' acts from Intel. Such acts may include unusual discounts that Intel may provide to an HP competitor targeted at impacting HPQ's PC business or the unusual loss of discounts or other market development funds from Intel as a result of execution of this agreement.

160. AMD reacted to this unusual demand with an even greater offer, underlying the lengths to which it felt compelled to go to obtain distribution for its products. If, as proposed, HP would agree to a three-year deal, AMD would provide HP with one million Athlon XP processors at a net price of zero during the first year of the program.

3. Intel's Reaction

161. Once Intel found out about HP's plans, it reacted by directly threatening HP in an area where HP felt extremely vulnerable: a joint HP/Intel development project named Itanium or "IPF" (Itanium Processor Family). Itanium was a proprietary, i.e. non-x86, server microprocessor technology which, HP expected, would provide the backbone for its future high-end server business and affect other segments of its business.

162. Without Intel's cooperation, the Itanium project would founder, a devastating prospect for HP. HP knew that Intel, unlike HP, had other choices besides the Itanium project which it could pursue. As a November 2003 internal HP analysis recognized: "Itanium is more important to HP's future server and workstation business success than it is to Intel ... Far ahead of the other major competitors, HP has already 'burned the lifeboats' with respect to its own proprietary server chip development, and is fully committed to Itanium across its high-end server product line."

163. Top Intel executives now made clear to HP that they were tying Intel's support for the Itanium project to HP's willingness not to market AMD-based business PCs in the commercial and enterprise segments of the market. An internal HP document entitled "HP-Intel IPF Situation Summary," dated July 17, 2002, reported that "Intel is attempting to link support for IPF to HP's Hammer/Sledgehammer [code names for AMD's Athlon and Opteron

microprocessor products] usage."

164. A direct threat was delivered by Intel's then COO Paul Otellini, as recorded in an internal HP email: "If [HP] do[es] Hammer [an AMD microprocessor] . . . he [Otellini] will redirect development effort from IPF to 64-bit extensions [an alternative Intel technology], significantly hindering our IPF migration."

165. For HP executives, avoiding the consequences to the Itanium project threatened by Intel was a top priority. Any prospect of dealings with AMD would have to be subordinated to HP's overriding interest in preserving Intel's cooperation on Itanium. A senior HP executive made the point in an internal April 2002 email: "HP and Intel have worked very closely on IPF. We can not mess that up as it is the engine for our future systems business.... [I]t will be very important that we consider any potential AMD change with our eyes wide open."

4. HP Agrees To Cap Its Sales Of AMD Products

166. Confronted with Intel's threats to the Itanium project, and eager to obtain rebate payments from Intel, HP believed it had no choice but to bend to Intel's demands. Accordingly, it negotiated a deal with Intel which drastically limited its marketing of AMD-based business desktop PCs and added a tremendous "rebate" payment to its bottom line.

167. First, HP agreed to limit its global sales of AMD-based business desktop PCs to no more than 5% of its total business desktop sales. Second, to meet Intel's concern about enhancing AMD's reputation among enterprise customers, it agreed to limit its marketing of AMD-based products to the small and medium sized business segment. Third, HP agreed not to use its distributor network to fulfill orders for AMD-based products, but to sell only as many AMD-based products as it could ship directly – something HP was ill-prepared to do at that time.

In return, Intel provided $130 million in rebate payments over a one-year period. Given the serious financial condition of HP's business desktop unit, the Intel payments were critical to HP.

168. This last restriction effectively insured that HP's sales of AMD-based business PCs would never reach even the 5% cap which Intel had required HP to impose. The "direct" sales method proved to be unsuited to the customer segment – small and medium businesses – at which it was directed, and HP itself did not at that time have the capability to efficiently sell directly to this customer segment.

169. As part of the deal, HP also agreed to additional, important restrictions. First, HP agreed to delay launching AMD-based products in certain non-U.S. markets. Specifically, HP agreed to delay the planned launch of its AMD commercial desktop for two to three months in Latin America and Asia Pacific regions and for six months in the EMEA region (Europe, Middle East and Africa). Second, HP agreed not to market the AMD product under its "Evo" brand name. Third, when dealing with enterprise customers, HP agreed not to bid its AMD product unless a customer specifically requested it.

170. In July, 2002, the deal terms were initially memorialized in a draft of what would later become the signed agreement between HP and Intel known as "HPA-1." The draft states various conditions, including the following:

> "HP will purchase at least 95% of its IA-32 processors for commercial desktop and laptop PC products from Intel. If HP sales [sic] commercial desktop or laptop PC products using a non-Intel 'IA-32' processor then:
>
> - these products will be sold under a separate brand - i.e. not using the EVO brand ....
> - these products will be sold only direct or in response to a specific RFP [Request for Proposal]

- these products will be targeted at the SMB [Small Medium Business] market

171. Internal HP emails – some of which were also sent to Intel itself – confirm that the 95% of its microprocessor requirements for commercial desktop products which HP agreed to purchase from Intel was a binding commitment on which HP believed its receipt of the Intel rebate payments depended. For example, in a July 9, 2002 email from HP to Intel, HP communicated projected unit sales which it characterized as "Intel's volume opportunity based on a *minimum* 95% share of HP commercial desktops." (Emphasis added).

172. HP took care to preserve the secrecy of the agreement. Specific instructions were given that the "5% constraint" was not to be disclosed within HP or to AMD: "PLEASE DO NOT .... Communicate to the regions, your team members or AMD that we are constrainted [sic] to 5% AMD by pursuing Intel agreement [emphasis in original]."

173. Signing of the deal was delayed when Intel, angry over what it apparently considered a breach of the agreement, broke off talks between the companies. The occasion for Intel's anger was remarks made by an HP executive in connection with HP's launch of its (now greatly restricted) AMD-based commercial desktop product. The Wall Street Journal ("WSJ"), in an article dated August 19, 2002, reported on HP's press release, which announced that HP was introducing a low-priced computer for business customers using an AMD microprocessor called "Athlon." The article quoted an HP executive as suggesting that HP might market AMD-based machines to the enterprise segment in the future – precisely the segment in which Intel was most determined to prevent AMD from gaining a foothold. A top Intel executive called HP's then CEO Michael Cappellas to demand that the HP executive in question be dismissed.

174. In late 2002 negotiations resumed. At Intel's request the deal terms were reduced to a one-page agreement which eliminated or cloaked any mention of the specific restrictions on the sale of AMD-based products to which HP had agreed. On December 2, 2002, HP and Intel executed a written agreement, known as "HPA-1."

175. To ensure compliance with the marketing restrictions HP had agreed to, and in particular with the 5% cap, Intel made such compliance an agenda item in subsequent regular senior management meetings between the two companies. And Intel, through its extensive field sales force, was itself policing AMD's conduct and frequently and forcefully complained about what it perceived as HP's insufficient adherence to some of the marketing restrictions. But the 5% cap – as HP regularly ascertained and reported to Intel – was never exceeded.

176. In 2004, HP and Intel negotiated a successor agreement to HPA-1 known as HPA-2. This extended the restrictions on HP's sales and marketing of AMD-based commercial desktop computers agreed to in HPA-1 in exchange for increased rebate payments from Intel. Thus, HP's commercial desktop division could list as an "accomplishment" in an internal review document that it had "successfully negotiated richer HPA agreement with Intel in 2004." By one HP calculation, HPA-2 was worth a total of $182 million to HP, as opposed to $144 million for HPA-1.

5. HP's Desire To Use AMD Products Is Limited By Additional Intel Threats

177. HP's experience with the agreements confirmed what some HP executives had feared from the beginning: Abiding by the Intel-imposed restrictions was choking off potentially profitable sales of AMD-based products. An internal 2004 HP document noted: "Current HPA agreement artificially limits the potential volume of the AMD platform" and concluded

specifically that HP's largest opportunity to gain "incremental margin and share" was to eliminate the restrictions on selling indirectly and "open indirect channels."

178. The prohibition on indirect sales proved so effective that by one 2004 HP calculation HP's "volume mix" in its business desktop business was 98% Intel and only 2% AMD. In other words, although HP had agreed with Intel that it was to be permitted to sell AMD-based products totaling up to 5% of its sales volume, HP was unable to reach even that threshold.

179. Because sales of lower-cost AMD-based products were more profitable for HP, it struggled in 2004-05 to find ways to increase them. As a March 10, 2005 "Situation Review" document concluded, Intel's increasing prices were squeezing HP's margins in its business desktop business: "Intel costs continue to rise as ASP's [average selling prices of HP's products] continue to fall, eroding margins." HP executives were torn. Some believed "we are in a no-man's land right now. Long term we need a strong AMD" but they also feared that Intel would retaliate if displeased by restricting supplies on which HP depended: "Concern with supply if HP at odds w/Intel."

180. But HP dared not overstep the limits Intel had forced on it, because it depended on continuing payments from Intel to ensure the profitability of its business desktop division. In the Fall of 2004, for example, an HP marketing executive suggested "using the commercial AMD line up inside the channel" in some foreign countries. In other words, the proposal was to distribute AMD-based products indirectly, through distributors, an effective means of distribution but one HP had agreed with Intel to forego for AMD products.

181. In a September 2004 reply email, a senior HP executive emphatically vetoed the plan, because without the "Intel moneys ... we do not make it financially": "You can NOT use the commercial AMD line in the channel in any country, it must be done direct. If you do and we get caught (and we will) the Intel moneys (each month) is gone (they would terminate the deal). The risk is too high. Without the money we do not make it financially..." (Capitalizations in original).

6. Intel Punishes And Threatens HP For Launching AMD-Based Servers

182. In the period between 2004 and 2006 the relationship between Intel and HP continued to be a difficult one. HP sometimes made limited use of AMD-based products. For example, in February, 2004, HP surprised both Intel and its chief competitors – Dell and IBM – by announcing a range of Opteron-based server products. This was a major competitive blow to Intel, which estimated that it put at risk $250 million in prospective Intel revenue in 2004 alone.

183. The threat Intel now faced directly was multi-faceted. Intel understood that servers were the basic building blocks of corporate information systems. If AMD could place competitive products in that key position, the rest of the corporate market – which valued compatibility – would be open to them as well. Moreover, in the absence of competition, Intel's policy had been to "monopoly-price" its server products. Those profits were now threatened.

184. The root of the problem for Intel was that the price/performance gap between Intel's server offerings and AMD's was now striking. For some applications, Opteron's technical superiority was so marked that despite everything Intel could do, OEMs were reluctant to completely ignore strong customer demand.

185. Accordingly, HP's actions drew an explicit threat of punishment from Intel. In a meeting with HP, an Intel representative told HP executives that HP's Opteron launch cost Intel billions of dollars and that Intel planned to punish HP for shipping servers with AMD Opteron chips. This threat was relayed in an email dated June 14, 2004, by an HP executive present at the meeting to other HP employees stating, "Intel has told us that HP's announcement on Opteron has cost them several $B [billions] and that they plan to 'punish' HP for doing this[.]"

186. Intel then deployed its usual tactics vis-à-vis HP: offer hundreds of millions of dollars of rebate payments in return for exclusivity, accompanied by threats that it would no longer support the Itanium technology on which HP depended.

187. Confronted with the fait accompli of the HP announcement, Intel first sought to neutralize its market impact by proposing to HP, in a "clearing of the air meeting" in late February 2004, after the announcement, that HP and Intel jointly instruct HP's sales force that the AMD-based products were to be offered only as a "last resort." HP declined. An HP executive reported in an internal email that Intel "wanted us to position AMD as a choice of last resort to the field and put that in a joint field communication ... Told [Intel] that was unlikely, if not illegal."

188. As a result, Intel apparently attempted to circumvent HP's management and influence HP's field sales force directly to disfavor AMD. By October of 2004, one HP server executive wrote another that "[w]e already have strong evidence of Intel going directly to our field [HP's sales force] to offer pools of meet comp dollars in exchange for Intel 'allegiance'."

189. HP was, of course, still marketing Intel-based servers as well, using Intel's Xeon microprocessor product. This provided Intel with leverage which it could and did use. Intel

punished HP for selling AMD-based servers by withholding financial support for HP even on those occasions when it was willing to give priority to Intel products. In November, 2004, an Intel executive made clear to another Intel sales representative: "Let me be clearer since you are still struggling with this. We have NO meet comp plans to help HP with any Xeon deals ... period ... So even if they said they were leading with hp [sic] because they felt like it that day, they are still gouging us in a lot of other places by leading with AMD..." (Capitalizations in original).

190. Intel and HP both understood that as a result, HP would be disadvantaged in the server marketplace vis-à-vis both Dell and IBM. With respect to Dell and IBM, Intel acknowledged to HP in October of 2004 "that they had provided Dell and IBM fighting funds based on their 'alignment' and that they did not constrained [sic] either in how they used them."

191. Intel repeatedly complained to HP that HP had not given Intel an opportunity to pay HP to prevent it from making the decision to add AMD-based servers to its product line. An HP executive reported in February 2004 that an Intel executive had told him he was "frustrated we never 'told them a $ to hit' to solve this issue. I reminded him that it was also about performance ..." The same Intel executive referred to the agreement which Intel and HP had reached in 2002 to cap at 5% HP's sales of AMD-based business PCs as a model which Intel would have been willing to pursue with respect to HP's server sales as well: "[Intel executive] mentioned a few times since we notified them in January ... that Intel would have been willing to pay HP some significant $$$ similar in deal structure to ... HPA-1 deal ($130 million per year) but that we never gave them a chance to do so."

192. A great deal of money was at stake for both companies. As HP told Intel in October of 2004: "1) Intel's current business terms are unattractive from an ongoing business model and profitability perspective to [HP's server division] and 2) Intel's current offering is price performance uncompetitive and increasingly unattractive to our customers. We focused on the MP [multi-processor] space. This is Intel's most profitable, but least competitive segment, and conversely our strongest area for doing non-Intel based products based on real market results... If we couldn't be profitable offering Intel MP systems, it didn't matter what their product deficiencies were. Having said that, if they didn't also address the performance ... issues, customers would continue to vote with their wallet toward other alternatives."

193. Intel also deployed the Itanium threat against HP where, as one HP executive acknowledged "they have us totally over the barrel." By June 2005 HP had a new CEO and HP executives believed that "[w]hat we must do is keep Intel's fear and doom from [him]. They are going to test his resolve, by whining that the field situation is deteriorating and that they can't afford Itanium if they have to spend on Xeon to fight AMD." As a preventive measure, another HP executive sent an email to the new CEO briefing him on the situation: "[I]n case Intel gets to you before we can review the [HP server business], we need to explain to you why we introduced AMD into our server line last year ... It is now materially helping our GM% [gross profit margin percentage] ... and they are better products as well. Intel has been trying to muddy the IPF [Itanium] issue [where they have us totally over the barrel...] with our AMD move, and all the HP executives have been getting lots of noise from them about how they can no longer support HP's IPF needs...." This persistent pressure from Intel formed the background for another, broader agreement between HP and Intel in 2006.

7. HP's 2006 Company-Wide Agreement with Intel

194. Prior to 2006, the agreements which HP and Intel reached to limit HP's sales and promotion of AMD-based products were generally limited to specific segments of HP's business. In 2006, however, the two companies reached a new, more comprehensive understanding, at AMD's expense. In a "Memorandum of Understanding" dated September 29, 2006, HP agreed to increase Intel's share of its business company-wide in exchange for rebate payments and other valuable benefits to its business.

195. Since 2002, HP had persisted in maintaining a limited relationship with AMD, which brought it repeated criticism from Intel. In a March, 2006 email, a senior Intel executive complained that HP was "celebrating a 10 yr anniversary with our direct competitor" and characterized such conduct as a "poke in the eye" directed at Intel. A senior HP executive emailed back: "This is not a poke in the eye! It really reflects the market situation over the past few years. You and I both know you have been at a price/performance disadvantage. In many cases you have been trying to close the gap using $ in the field ...." In the Spring of 2006, however, HP and Intel began discussion of a new agreement.

196. In August, 2006, Intel's Otellini told senior Intel executives in an email that "we need to have a much deeper relationship with HP... We will have the choice in the next week to sign up to an 07 deal with hp or not ... I believe it is in our interest to make this happen regardless of the near term issues." On August 25, 2006 Otellini met with a top HP executive. A "Deal Status" Summary circulated between the companies in early September outlined what would become the basic structure of the deal: Intel promised hefty cash payments and other benefits to HP in exchange for market share gains. In other words, it was understood that HP

would decrease the proportion of x86 microprocessor product it purchased from AMD to Intel's benefit.

197. Intel did what it could to sanitize written versions of the deal terms, by asking that references to "mss" or "market segment share" be replaced by "volume targets." A September 10, 2006 email from the principal Intel negotiator of the deal to his HP counterpart made this explicit: "Could you take the mss references off and just leave everything at volume targets. Our counsel is very picky on that stuff and I don't want to infer that we have had conversations about anything other than volume targets or relative volume targets ... thx."

198. HP obliged. Nevertheless, the substance of the agreement was clear. The "Deal Status" memo contemplated that Intel would pay $925 million to HP during HP's 2007 fiscal year. In exchange, HP promised specific Intel market share gains. In its desktop and mobile product lines, HP was willing to provide a 5% Intel market share gain; in some segments of its server business, HP agreed to a 2% Intel increase. In return, HP received, in addition to the rebate payments, other valuable concessions, including favorable changes in supply chain conditions and an Intel promise of "profound change" in Intel's "white box strategy." This referred to the terms on which Intel sold and promoted its products to non-brand name computer manufacturers which competed with HP.

199. On September 14, 2006, Intel and HP entered into a "Letter of Intent" which cast HP's obligation to shift its purchases to Intel in terms of "unit volumes," but also provided that those volumes would adjust proportionately in accordance with HP's actual growth: "In FY'07 [HP's fiscal year 2007] HP agrees to direct additional CPU unit volumes to Intel beyond our current vector ... In the event that HP TAM [total available market] growth is higher or lower

than currently forecast, HP agrees to provide Intel with a proportionate share of the change."

200. Despite Intel's efforts to conceal the substance of its agreement with HP, it is clear that "volume targets" which adjust proportionately to increases or decreases in total sales are, as a mathematical matter, indistinguishable from market share allocations. And a market share allocation – which guaranteed that Intel's share of HP's CPU purchases would increase and AMD's would decrease – was what HP and Intel had agreed to.

201. That the agreement had the intended effect was confirmed approximately a year later, by top HP officials themselves, in a meeting with Otellini and other Intel executives. HP then told Intel that "judged in total, the Agreement is a success for Intel as measured by revenue achievement ... market share gain, and knocking AMD back several steps."

E. INTEL'S EXCLUSIONARY ACTS – IBM

202. Intel's dealings with IBM exhibited the same patterns as with Dell and HP. When IBM indicated that it was considering expanding its AMD offerings, Intel's reaction was to threaten to cut subsidies and end important joint projects. This was often followed by offers of increases in payments in exchange for either not launching the AMD product or severely limiting it.

1. IBM Considers Launching AMD Servers

203. IBM, recognized that AMD's Opteron's superiority over Intel offerings had given rise to strong customer demand, including but not limited to the market segment known as "High Performance Computing" or "HPC" – computers built to support computationally intensive modeling and simulation programs.

204. Accordingly, in the period 2003-05, IBM was unwilling to forego the launch of Opteron-based products entirely, particularly after HP's announcement. But Intel was largely successful in restricting IBM's marketing of those products so that they did not become broad-scale threats to Intel's enterprise business.

205. Intel used two joint ventures between the two companies as pressure points. Intel repeatedly threatened to disrupt these collaborations if IBM marketed its AMD-based products too vigorously. These threats were effective in forcing IBM to limit its promotion of two Opteron-based products launched in 2004 and 2005. In a third instance, in April of 2004, Intel agreed to pay IBM $130 million not to launch an Opteron-based 4-way server product, even though Intel – and consequently IBM – had no genuine competitive alternative to offer.

206. The events concerning all three products – a two-way server dubbed the e325, the 4-way server which IBM agreed not to launch (the planned e350), and a server in a then-novel configuration called a "blade" server – overlapped during 2003-04 (and in the case of the blade server, stretched into 2005). For purposes of exposition, they are described separately below.

2. <u>IBM's e325</u>

207. IBM had begun developing Opteron-based products in 2002, before the Opteron chip had officially been launched. After evaluating advance product samples, a director of product marketing for IBM's eServer xSeries Server Group recommended that IBM develop Opteron servers.

208. In April of 2003, an IBM vice president took the stage with AMD executives at the Opteron launch and announced IBM's intention to launch server products based on AMD's Opteron. As InfoWorld noted at the time: "The company [IBM] is the first top-tier server vendor

to commit to developing around Opteron."

209. However, IBM had been well aware since 2002 that such a step might provoke retaliation from Intel. Accordingly, executives at IBM had grave concerns about drawing Intel's wrath. In particular, they were concerned that if IBM were first to market with Opteron-based server products, IBM would be particularly exposed to Intel.

210. IBM's concerns proved well-founded. Intel saw clearly the threat which broad-based IBM sponsorship of Opteron would represent. AMD products would be "validated," first in the HPC server segment, and then in the "enterprise" segment more broadly. As one Intel executive advised Intel's Ottelini in August 2003: "AMD is being validated in HPC today by IBM and WILL BE validated in the Enterprise... by the end of the year by both Msoft [Microsoft] and IBM with Dell threatening to join the fun. Sightings are starting to turn into losses at customers. This is going to increase rapidly if we let IBM run on the current path ... Coupled with Microsoft, IBM is marching down the path of driving Opteron aggressively into the Enterprise." (Capitalizations in original).

211. Consequently, in April 2003, just days after the e325 launch, an Intel executive met with IBM in order to attempt to reverse or severely limit its distribution. During the meeting Intel extracted a commitment that IBM would substantially limit marketing of the e325. IBM agreed that it would prioritize Intel offerings and bring its Opteron-based product into play only "reactively": "IBM committed to drive it from [their] side stating that [their] priority is 1) win every HPC oppty [opportunity]; 2) win with Intel first, and 3) win with whatever it takes inferring that IBM will lead with Intel and only reactively play Opteron."

212. One key IBM executive, who had reviewed a proposed memorandum of understanding between AMD and IBM, feared Intel would "kill" IBM's x-series business. IBM's "x-series" server line comprised relatively low-end servers, sold in large quantities; it earned IBM billions of dollars of revenue annually. In an internal IBM email sent in April 2003 he wrote: "Reading the MOU [proposed memorandum of understanding between IBM and AMD] it became clear to me that if we did all that on the marketing side, Intel would kill our x-Series business."

213. In the same email, he went on to outline ways in which IBM's server business depended on Intel, and which Intel could use to damage that business: "I am too dependent on technical information about processors, we are simulating our high end stuff with them. Deep [another IBM server division] works with them on high-end marketing, our sales reps work with them in the geos [geographic sales regions throughout the world], etc. etc."

214. He went on to make clear that the threat of Intel reaction would effectively limit the steps IBM could take to promote AMD-based products: "After all, we will have to live with the impact of what Intel will do – and I for one don't want to hurt a business that all of us have worked so hard to build momentum on."

215. Internal Intel emails confirm that IBM was "taking notice of this reality" of Intel disfavor if it vigorously promoted Opteron-based products. An August 2003 report on IBM to top Intel executives recorded that "[w]e have made great strides with IBM on the sales engagement and sales sector fronts as evidenced by a very positive meeting ... There is no doubt that they see the real benefits of us working with them to close IA [Intel 'architecture'] opportunities around the world. *We are now starting to intimate to them that this process does*

get jeopardized with continued momentum on the AMD front and I believe they are taking notice of this reality. [A top IBM server executive] confirmed it and absolutely expressed concern here." (Emphasis added).

216. As a result, IBM declined requests by AMD for support on Opteron promotional activities at an important industry event and in advertising. When AMD's CEO complained, a top IBM executive responded:

> From our side, the biggest thing we are worried about is retaliation. I believe as strongly as anyone in what AMD has in Opteron and the opportunity that it presents for a breakthrough in the industry. On the other hand, we have a strong fear that Dell is merely using this to extract better terms from Intel and we will end up in a very deep hole . . . I can envision a scenario of Intel having made preferential deals with HPQ and Dell and us getting 'punished' for trying to work with AMD. *We believe in you and we are a big company but we are not immune from single supplier pressure.* (Emphasis added).

217. A later (September 2004) internal Intel email confirms both the existence of an agreement between Intel and IBM restricting IBM's Opteron marketing and its effectiveness. The occasion for the email was IBM's launch in September 2004 of an upgrade to the e325, labeled the e326. Responding to CEO Paul Otellini's inquiry as to whether the e326 launch was "inconsistent with our agreement" an Intel executive responsible for IBM responded:

> Probably looks like I'm splitting hairs, but IBM never committed to stop selling the e325 ... They did commit their mainstream servers and blades for both DP [dual processor servers] and MP [multi-processor servers]. They have been true to their word in positioning to their field, to their business partners and to customers that they are strategically lined up with Intel on x86 servers and as expected the [small] volumes [of Opteron-based products sold] have supported their commitment ... most of the volume comes from a couple of big clusters that were won over a year ago.

3. IBM's Agreement Not to Launch a 4-way Opteron Server in 2004

218. Despite its fears of Intel, HP's Opteron launch, along with powerful demand for a 4-way [*i.e.*, four-processor] Opteron server, particularly in the HPC segment of the market, led IBM to consider launching its own 4-way Opteron server, identified internally as the e350.

219. HP's decision to launch Opteron-based servers ratcheted up the pressure on Intel as well. An IBM executive reported internally: "I've spent a lot of time with Intel over the last 15 years and this is the first time I've seen this level of concern on their faces. In my view, they clearly see the market dynamics changing without their ability to dramatically impact them short term." Intel's difficulty arose from the fact that it had no comparable 64-bit product of its own to offer, and would have none for some time. IBM, should it opt for Intel exclusivity, would therefore be in the same position.

220. Beyond the absence of a competitive Intel product, IBM was concerned that Intel had not publicly confirmed that it was developing a 64-bit extension product which would compete directly with AMD's Opteron. From Intel's perspective, the reluctance was understandable: This would amount to a concession by Intel that AMD had chosen a development path which Intel was now compelled to follow.

221. In negotiations with IBM in April of 2004, Intel made clear that it was prepared to pay Intel not to launch the e350. This included funds which could be used to bid against the HP Opteron-based server products. An IBM executive negotiating with Intel emphasized the conditionality of the offer: "[I]f we were willing ot [sic] make a bold statemetn [sic] about NOT going with AMD product in they would be willing to offer more [emphasis in original]." Given Intel's inability to supply a competitive product, however, IBM knew that it would need at least

three quarters of payments. A senior executive replied: "[T]he more I think about it, we really need a 3qtr commitment not just a full qtr. Maybe for that we would make a statement."

222. Ultimately, Intel offered and IBM accepted $130 million over three quarters. The size and importance of the payment to both companies is shown by the fact that Intel's total annual server revenue from IBM was at the time approximately $500 million. In return, IBM agreed to publicly align itself with Intel, and not to announce a 4way AMD-based server product in the upcoming quarters.

223. In April 2004, an Intel executive reported back on a joint webcast in which senior IBM and Intel executives announced the new direction to an audience of IBM salespeople: "The purpose was to announce to the collective sales teams that IBM has renewed their commitment to Intel Architecture for their x-Series server brand. The session ... was intended to give IBM's sales team clear direction that IBM is 100% committed to using Intel processors for MP [multi-processor] and Blade servers."

224. The same executive was satisfied that, while IBM retained one AMD-based server product, its significance would be marginal: "[T]he e325 remains in the IBM product line, but clearly IBM has made a strategic commitment to partner with Intel and my expectation is that the e325 will become a tactical/point product ..."

225. There was no procompetitive purpose to Intel's payment of $130 million to IBM, just as there was no directly competitive Intel product for IBM to weigh against AMD's Opteron. Intel simply paid IBM not to launch an AMD-based product IBM's customers were demanding. As was its practice, Intel attempted to characterize the payment as a volume-based discount from a previously approved price level (the Intel term was "ECAP" or "exception from customer

approved price") motivated by the need to meet specific AMD competitive offers.

226. But as a January 2005 internal Intel email reveals, the "ECAPs" were not the rationale for the payment, they were simply a convenient fiction adopted by Intel after the fact, "a vehicle to get them [IBM] the money." What mattered were the actual amounts which Intel committed to IBM, and IBM was to be paid the full amount irrespective of actual volumes: "As you know, IBM left money on the table for ... Server ECAPs as they did not hit the [volume] cap on a number of different products ... We committed to them ... and the ECAPs were a vehicle to get them the money. We backed into the volumes based off the rebate amounts, which we did not want to change."

227. Intel's decision to make the $130 million payment reflects the size of the monopoly profits Intel stood to lose if IBM launched an Opteron-based multi-processor server. IBM itself understood that Intel had been monopoly-pricing its multi-processor server products, and that these monopoly profits would be threatened if IBM were to sell Opteron. In short, Intel's payment of $130 million was the exclusionary act of a monopolist determined to preserve its pricing power from being eroded by a competitive threat.

4. IBM's Launch of Opteron Blade LS20

228. Strong customer demand drove IBM's decision to launch an Opteron-based server product in a then-new form factor, the blade server. However, the launch occurred only in the face of strong Intel resistance and the unbranded product which finally emerged was the result of Intel's efforts to ensure that it would attract as few customers as possible.

229. Unlike "standalone" rack servers, blade servers are designed to fit into a chassis which provides the power connections and other connecting infrastructure for each of the "blades." In comparison to rack servers, blade servers economize on space and energy required, and generate significantly less heat, while their combined computing power enables "high-performance" processing power. These are all important attributes in certain corporate computing environments.

230. In 2002, one of IBM's objectives was to establish its blade technology as an industry standard offered by other vendors, and for this purpose it entered into a joint venture with Intel entitled the "Blade Server Collaboration" ("BSC"). Each party contributed resources and intellectual property to the development effort. IBM was at liberty to offer a non-Intel blade server, but only after obtaining Intel's prior written consent, which was not to be unreasonably withheld. Such consent was to be granted, under the terms of the collaboration agreement, when, "in the reasonable opinion of the requesting party," a "competitive threat" or "customer opportunity" arose from a third-party blade product and Intel "is unable to respond to the competitive threat or significant customer opportunity with a product, offering, or solution that adequately addresses the competitive disadvantage..." Blade Collaboration Master Agreement, Para 5.5.

231. In October 2004, IBM informed Intel that various clients were requesting an Opteron blade server and asked whether Intel had a product which would satisfy them. It was clear to IBM that Intel had no genuinely competitive product.

232. Intel executives themselves recognized their predicament. An Intel IBM account manager reported in October of 2004 that:

> holding back the customer interest in Opteron blades is getting tougher every day . . What is our plan to convince Wall St. that we can give them competitive performance across the entire suite of application workload, both now and after dual-core arrives? I don't think we have one...[E]ither we come up with some better Blade-optimized CPUs (speed/power sorts, etc) ... or get resigned to IBM doing a Blade. . . .

233. Nevertheless, when, in December 2004, IBM submitted an exception request pursuant to the BladeCenter Collaboration Agreement, Intel denied it and threatened drastic reprisals. Intel did so even though it knew it had no competitive product. As one Intel executive acknowledged contemporaneously (January 2005) in an internal mail:

> We (Intel) currently do not have a good product for server blades that meets the High Performance Computing (HPC) segment for the Financial Services Industry (FSI). For this reason IBM has informed us of their intention to do a DP Opteron based server blade. What is driving IBM to do this is a few key FSI customers. We really don't have a good alternative processor for them ....

234. Intel executives spelled out the threats to their IBM counterparts in some detail. As one Intel executive dealing directly with IBM reported in December of 2004: "I never say IBM can't do an Opteron blade, but I did say that if they do, Intel will have to reconsider some of the unique opportunities they currently enjoy ... Our actions on many fronts where we have done unique things with IBM and plan to do more unique things with IBM are based on the understanding that we are ... 'committed partners'...."

235. Specifically, Intel threatened to pull funding for another collaboration between Intel and IBM code-named "Hurricane." "Hurricane" involved the development by IBM of a chipset (a key link between the microprocessor and other parts of the computer) intended to work with Intel's Xeon microprocessors. For IBM, "Hurricane" was a way of differentiating its own servers using Intel microprocessors from those offered by its principal competitors. Dell and HP also used Intel chips but would not have the customized IBM "Hurricane" chipset to

improve their performance. Intel's threat to the Hurricane funding was therefore, as IBM understood it, a threat to eliminate a competitive advantage that IBM hoped to have vis-à-vis its chief competitors in the server market.

236. Intel now explicitly tied its agreement to the continued funding of "Hurricane" to demands that IBM not launch an Opteron-based blade. In addition, Intel threatened repercussions for other aspects of the Intel-IBM relationship, in such areas as rebate payments and provision of advance technical information about future products ("roadmap support").

237. In late December 2004, a top IBM executive took the Blade exception request directly to Intel's CEO Paul Otellini. In requesting that Intel not oppose an Opteron blade product, the IBM executive emphasized the extent to which IBM was already limiting its marketing of Opteron-based products in order to be "sensitive to this partnership":

> We deeply value the partnership that we have developed with Intel over the last several years.... We honestly have been trying to accommodate the demands of our customers in a way that is sensitive to this partnership. *While we offer Opteron based servers, we have limited them to a single model aimed at the HPC space.* We specifically target our marketing and sales activities to this segment. The vast majority of our sales are clusters into the HPC space. In fact, a high percentage of these are situation where the client requested Opteron for performance reasons. *We do not offer a 'family' of Opteron offerings and we have not entered the 4-way Opteron space in spite of significant field and market pressure.* (Emphasis added).

238. Nevertheless, Otellini's response was negative, and included the threat to pull funding for the BladeCenter Collaboration itself if IBM persisted in its request: "I must say that I now have serious doubts that it is in Intel's continuing interest to drive BC [the "Blade Center" Collaboration] with you assuming you go in the direction you have outlined below." The threat was repeated by other Intel executives at a meeting in January 2005: "We reiterated our position that if they {IBM} decide to deliver an Opteron blade, we will disengage from future

Collaboration efforts...."

239. On January 26, 2005 Intel formally rejected IBM's second exception request. IBM executives were incredulous. "I do find it incredible that a virtual monopoly would think this is a good idea but who knows," one wrote in a contemporaneous internal IBM email.

240. At the same time, Intel executives continued to pressure IBM. Intel told IBM that any IBM launch of the AMD-based blade server would be a "tipping point" in the market which might force even Dell to begin selling AMD-based servers. To prevent this, "Intel suggests IBM should be willing to risk market share as a result of our strategic relationship (i.e. be 'exclusive' with Intel)...."

241. By early 2005, Intel had apparently concluded that it could no longer completely block the Opteron blade product. Intel therefore developed a plan to deprive it of marketplace impact. Intel now proposed to IBM that it could offer the blade server on an unbranded basis. Internally, Intel calculated that the absence of the IBM brand would raise questions with corporate purchasers about whether there would be adequate support for the product; and where responsibility would lie in case of technical difficulties ("finger-pointing risk"). These questions, in turn, would discourage sales. "I don't think many firms would buy a 3rd party compatible card. Too much finger pointing risk," as one internal Intel email put it.

242. Intel proposed a bundle of conditions to IBM in order to straightjacket any marketing of the disputed blade server product: (1) the Opteron blade would not be generally offered, but rather limited to customers in the HPC segment; (2) Even there, marketing was to be "reactive," that is, triggered only by specific customer request; (3) the Opteron blade would not be branded as an IBM product, but rather sold on IBM's website as a non-IBM product and

distributed by a third party; and (4) IBM sales staff would not receive commission for Opteron blade sales.

243. Ultimately, IBM acquiesced. A top IBM server executive discussed IBM's options in an internal email in January of 2005:

> I understand the point about the accounts wanting a full AMD portfolio. *The question is can we afford to accept the wrath of Intel if we do the AMD full portfolio?* It is a very hard question to deal with. On the one hand, having Intel help us has been one element of why we are doing better in the market. If they start to sell against us again I am afraid that we would be in a very difficult spot. On the other hand, if we leave Sun and HP an opening with AMD we will [be] very exposed on that side of things. (Emphasis added).

V. ASSIGNMENT OF DIRECT CLAIMS TO THE STATE OF NEW YORK

244. During the relevant period, both the New York State and non-State governmental entities (such as towns and counties) made substantial purchases of products that contain x86 CPUs, principally PCs and servers. These governmental entities generally dealt directly with the OEMs and other producers of products that contain x86 CPUs, rather than directly with the CPU manufacturers.

245. The New York governmental entities generally made their purchases from OEMs pursuant to contracts entered into by New York State's procurement agency, the Office of General Services ("OGS"), with the OEMs (the "Centralized Contracts"). As set forth below, all purchases of x86 CPU-containing products made pursuant to the Centralized Contracts (whether made by New York State itself or by non-State governmental entities) give rise to direct claims for damages owned by the State (assuming that the OEMs themselves had such direct claims), because the Centralized Contracts effect an assignment of such claims from the OEMs to the State.

246. The Centralized Contracts contain generally applicable terms and conditions, which were incorporated by reference into individual contract awards that OGS made with the OEMs. The Centralized Contracts were in effect for the entire period relevant to this action.

247. Part of the Centralized Contract (the "Assignment Clause") provides as follows:

> ASSIGNMENT OF CLAIM. Contractor hereby assigns to the State any and all of its claims for overcharges associated with this contract which may arise under the antitrust laws of the United States, 15 U.S.C. Section 1, et seq. and the antitrust laws of the State of New York, G.B.L. Section 340, et seq.

248. Following issuance of the Centralized Contract, individual contracts subject to its terms were made between OGS and numerous OEMs. Generally, these contracts remained in effect during the entire period relevant to this action. Dell, IBM, and HP are among the OEMs who entered into the Centralized Contract with OGS.

249. The Centralized Contract terms were available not only to the State but also to non-State Public Entities, which were authorized to make purchases pursuant to the Centralized Contracts in their dealings with OEMs, and which did so. These non-State Public Entities include political subdivisions, such as counties, cities, towns, and villages, and public school districts, as well as public authorities and public benefit corporations.

250. With the Centralized Contract as a framework, procurement procedures during the relevant period allowed the purchasing entity to deal directly with the OEM contractors. Generally, the OEM "hosted" its individual contract on a website accessible to the State and to non-State Public Entities, and there quoted the contractually agreed-upon prices for its products. The State or non-State Public Entity, as the case might be, desiring a particular product, transmitted purchase orders to the OEM, or its authorized resellers.

251. By virtue of the Assignment Clause, the State stands in the shoes of the OEMs and other direct purchasers of x86 microprocessors for purposes of alleging federal and New York state antitrust claims against defendant Intel. As the language of the Assignment Clause provides, it is the "Contractor" (generally an OEM that has purchased an x86 microprocessor and made it a component of a computer) that assigns to "the State" the Contractor's antitrust claims "for overcharges associated with" the contract (the "Assigned Claims"). The State, accordingly, owns the Assigned Claims and is entitled to assert them. The scope of the claims that the OEM assigned is determined by the extent of the purchases of x86 microprocessor-containing products made under the Centralized Contract by both the State and the non-State Public Entities.

VI. CONCLUSION

252. Intel's illegal conduct has corroded competitive conditions in an economically vital market. It has also deprived New York consumers, businesses, and governmental entities of innovative technology and compelled them to pay prices above competitive levels.

253. Businesses and public entities (including universities) in New York and elsewhere were compelled to purchase Intel-based products, particularly multi-processor servers used for complex computing tasks, often paid hefty monopoly overcharges. Dell, for example, observed with alarm in September of 2004 that its use of Intel products subjected it to "cost disadvantage of $300 to $10,000 in the 4P [four-processor server] space ... and $50 to $300 in the 2P [dual processor server] space...."

254. More difficult to quantify but equally pernicious was the effect of Intel's conduct on incentives to innovate. In well-functioning high technology markets, firms prize the

opportunity to be first to market with innovative products. Fear of Intel retaliation reversed these healthy incentives; OEM executives were hesitant, if not completely unwilling to be the first to launch products which competed with Intel.

255. Hundreds of emails from numerous experienced and knowledgeable executives at multiple OEMs give evidence of the climate of fear which Intel has spread throughout the industry. Intel's core message – that OEMs which promote competition in industry segments it considers vital will face retaliation – has distorted the competitive process. Appropriate relief should issue which stops Intel's illegal acts, prevents their recurrence, and restores to the marketplace the competition Intel has destroyed.

VII. CLAIMS FOR RELIEF

CLAIM ONE
(Violation of § 2 of the Sherman Act, 15 U.S.C. § 2)

256. Plaintiff incorporates the allegations of paragraphs 1 through 255 above.

257. Intel possesses monopoly power in the market for x86 CPUs. In the period from approximately 2001 through the present, through the anticompetitive conduct described herein, Intel has willfully maintained, and unless restrained by the Court may continue to willfully maintain, that power by anticompetitive and unreasonably exclusionary conduct in violation of Section 2 of the Sherman Act, 15 U.S.C. § 2.

258. As a result of Intel's unlawful acts, the State of New York, and the public entities it represents in this action, have been injured in their business and property, and New York, on its own behalf and as owner of the Assigned Claims, is entitled to recover direct damages on their behalf, trebled as provided by law.

CLAIM TWO
(Violation of the Donnelly Act, N.Y. Gen. Bus. Law § 340 et seq.)

259. Plaintiff incorporates the allegations of paragraphs 1 through 258 above.

260. Intel possesses monopoly power in the market for x86 CPUs. From approximately 2001 to the present, by means of contracts, agreements, arrangements, and combinations Intel has maintained a monopoly in that market and, for the purpose of maintaining its monopoly, has unlawfully interfered with competition and the free exercise of the conduct of business, trade or commerce in that market in New York State, in violation of the Donnelly Act, N.Y. Gen. Bus. Law § 340 *et seq.*

261. Under §340(1), (5) and (6) of the New York General Business Law, Plaintiff State of New York, as owner of direct and/or indirect claims that were assigned by various OEMs, is entitled to recover treble damages, based on the injury suffered directly or indirectly by the assignor OEMs, as a result of Intel's illegal conduct.

262. Under §340(1), (5) and (6) of the New York General Business Law, Plaintiff State of New York, is entitled to recover treble damages, based on the injury suffered directly or indirectly by the State of New York, its agencies, departments and local entities, independent of the Assigned Claims, as a result of Intel's illegal conduct.

263. Under §340(1), (5) and (6) of the New York General Business Law, Plaintiff State of New York is entitled to recover treble damages on behalf of all New York consumers who suffered directly or indirectly as a result of Intel's illegal conduct. Plaintiff State of New York is also entitled to attorneys' fees and costs.

264. Plaintiff State of New York is also entitled to recover civil penalties under N.Y. Gen. Bus. Law § 342-a.

CLAIM THREE
(Violation of § 63(12) of the New York Executive Law)

265. Plaintiff incorporates the allegations of paragraphs 1 through 264 above.

266. From approximately 2001 through the present, Intel has engaged in repeated and persistent illegal and/or fraudulent acts, in the conduct, carrying on and transaction of its business, by illegally maintaining its monopoly power through anticompetitive and/or exclusionary acts in the x86 CPU market. Intel's acts have caused injury in New York.

267. Intel's conduct violates the Sherman Act, 15 U.S.C. § 2, and as a consequence, constitutes a violation of N.Y. Exec. Law § 63(12).

268. On behalf of all natural persons in New York who purchased products containing x86 CPUs indirectly or directly, Plaintiff State of New York is entitled to recover damages sustained as a result of those injuries caused by Intel's violations of N.Y. Exec. Law § 63(12).

CLAIM FOUR
(Violation of § 63(12) of the New York Executive Law)

269. Plaintiff incorporates the allegations of paragraphs 1 through 268 above.

270. From approximately 2001 through the present, Intel has engaged in repeated and persistent illegal and/or fraudulent acts, in the conduct, carrying on and transaction of its business, by illegally maintaining its monopoly power through anticompetitive and/or exclusionary acts in the x86 CPU market. Intel's acts have caused injury in New York.

271. Intel's conduct violates the Donnelly Act, N.Y. Gen. Bus. Law § 340 *et seq.*, as well as state antitrust laws throughout the United States, and as a consequence, constitutes a violation of N.Y. Exec. Law § 63(12).

272. On behalf of all natural persons in New York who purchased products containing

x86 CPUs indirectly or directly, Plaintiff State of New York is entitled to recover damages sustained as a result of those injuries caused by Intel's violations of N.Y. Exec. Law § 63(12).

VIII. DEMAND FOR TRIAL BY JURY

273. Pursuant to Fed. R. Civ. P. 38(b), New York demands trial by jury of all issues so triable under law.

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IX. PRAYER FOR RELIEF

WHEREFORE, the State of New York prays the Court for judgment as follows:

A. Declaring that Intel's conduct is anticompetitive and in violation of federal and state antitrust laws, as well as New York's Executive Law;

B. Enjoining Intel's anticompetitive conduct, so as to prevent its recurrence in the future, restore competition in the x86 CPU market and replace the competition that was lost;

C. Awarding damages, in an amount to be proven at trial, sustained by the State of New York and those on whose behalf it sues, trebled as provided by law, against Intel;

D. Awarding restitution, disgorgement or such other equitable relief as may be appropriate, in an amount to be proven at trial, against Intel;

E. Awarding the State of New York civil penalties of $1 million for each violation of the Donnelly Act in the x86 CPU market, against Intel;

F. Awarding the State of New York the costs of this action, including reasonable attorneys' fees and expert fees; and

G. Directing such other, further and different relief as may be just, necessary and/or appropriate.

Dated: November 3, 2009
New York, New York

Respectfully submitted,
ANDREW M. CUOMO
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