

Testimony of

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For the
Business Software Alliance (BSA)
“Patent Quality and Improvement”

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Mr. Chairman and members of the Subcommittee, my name is David Simon and I am Chief Patent Counsel for Intel Corporation. I appear today representing the Business Software Alliance (BSA)¹, which welcomes the opportunity to appear before you on this important topic. We commend you for holding these hearings and for your commitment to improving our patent system.

The incentives provided by the patent law are indispensable to the current and future strength of the technology industry. Patents play an essential role in how software and computer companies do research and how they develop products and services. More fundamentally, patents are at the core of our economy’s ability to successfully innovate, and have been since 1789.

¹ BSA members include Adobe, Apple, Autodesk, Avid, Bentley Systems, Borland, Cadence Design Systems, Cisco Systems, CNC Software/Mastercam, Dell, Entrust, HP, IBM, Intel, Internet Security Systems, Macromedia, McAfee, Microsoft, PTC, RSA Security, SAP, SolidWorks, Sybase, Symantec, UGS and VERITAS Software.

Given the importance of patents, we believe that periodic updating of the law is not only a good idea, but also essential to ensuring that patents remain an indispensable contributor to technological progress.

Let me state at the outset that the patent law is not broken. The law is fundamentally sound and works well. Professors Lerner and Jaffe in their recent book characterized the patent system as sand in the gears rather than fuel in the tank of innovation. BSA disagrees with this assessment. I would like to point out that, with one exception, all of the U.S.-based top ten issuers of U.S. patents are members of our organization. The one exception -- Micron Technology -- is also here today as a witness. Thus, as the largest US based customers of the Patent & Trademark Office, we have strong, first-hand knowledge of a system that continues to yield substantial incentives. As with all good things, however, we believe that critical improvements are needed to make the law work better in light of new developments in the marketplace and technological progress, including its application by the courts, and the patent examination process.

We approach patent reform from a pragmatic, problem-solving perspective. While any number of improvements can be made in the law, our attention is focused on those areas of the law and practice that present specific challenges for our companies' day-to-day businesses. In my testimony today, I would like to focus on three matters: 1) why patents are important to technology companies; 2) some of the problems our industry has identified within the current patent regime; and 3) certain areas where we feel improvements are timely.

Patents are Important to Technology and Innovation

The software and computer industry is among the most dynamic forces in the economy today; a creative engine that powers innovation and growth. The industry's products and services give individuals and organizations the tools they need to operate intelligently, efficiently and productively.

As we enter the 21st Century, the principle embraced by our forefathers in Article 1, Section 8 of the Constitution remains sound and perhaps takes on even greater importance than in previous times. Intellectual property is a source of economic value to society, individuals, companies and governments alike.

While copyrights have been and will remain a principal way that technology companies protect their intellectual property, I will limit my comments today to patents.

The increased importance of patents to technology companies has resulted from a mix of legal and marketplace developments. The 1981 Supreme Court decision, *Diamond v. Diehr*, signaled a turning point in the patentability of computer-implemented inventions. In that case, the Supreme Court held that a process that transforms materials physically under the control of a computer program was patentable. The Court's decision clarified earlier rulings that had been interpreted to suggest that software programs would rarely qualify for patentability. Subsequent decisions from lower courts have further clarified the law in this area. As a result, U.S. patent applications from inventors in the software sector have been increasing steadily.

An equally important factor is the impact of marketplace trends. In today's diverse technology marketplace, heterogeneity has become an important element of technology and network effectiveness. Unlike the early days of computing, when consumers tended to purchase their hardware and software from a single firm, consumers now often piece together systems based on products sourced from different suppliers. The ability of these different systems to work together is essential. Patents enable computer and software companies to share technologies, integrate systems and meet consumer's needs, while ensuring a return for these companies' inventions.

Today, patents are a key part of virtually every software and computer company's intellectual property strategy. The reasons are simple.

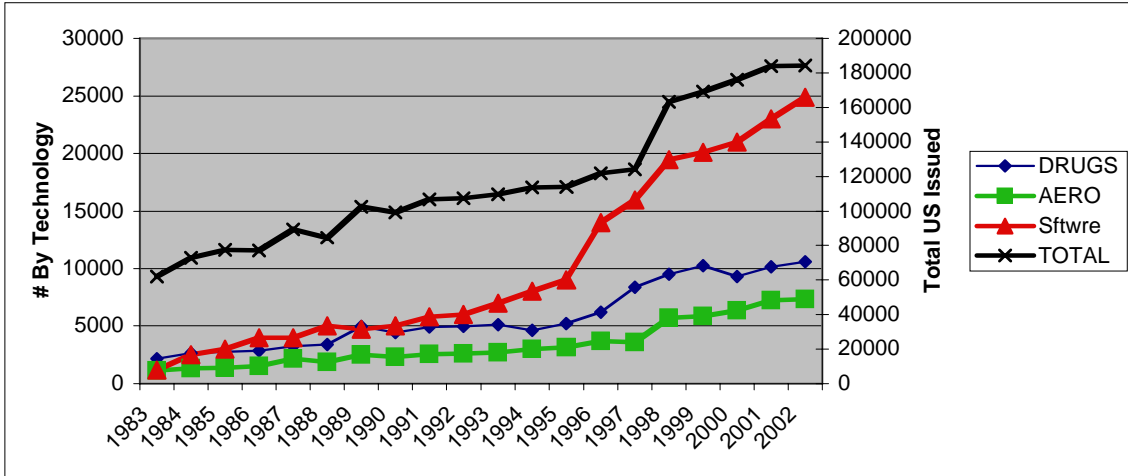
- Patents ensure that software and computer companies have the opportunity to be compensated for their contributions to advances in their field of technology.

- At the same time, and reflecting the way in which our industry operates, patent protection enables software developers to license or otherwise share key technologies with customers, partners and even competitors, while still allowing those developers to prevent third parties from “free-riding” on their innovation.
- Patent portfolios can also serve other important business-related objectives, such as encouraging dissemination of technology through cross-licensing, with a proper balance restored to issues such as willfulness.

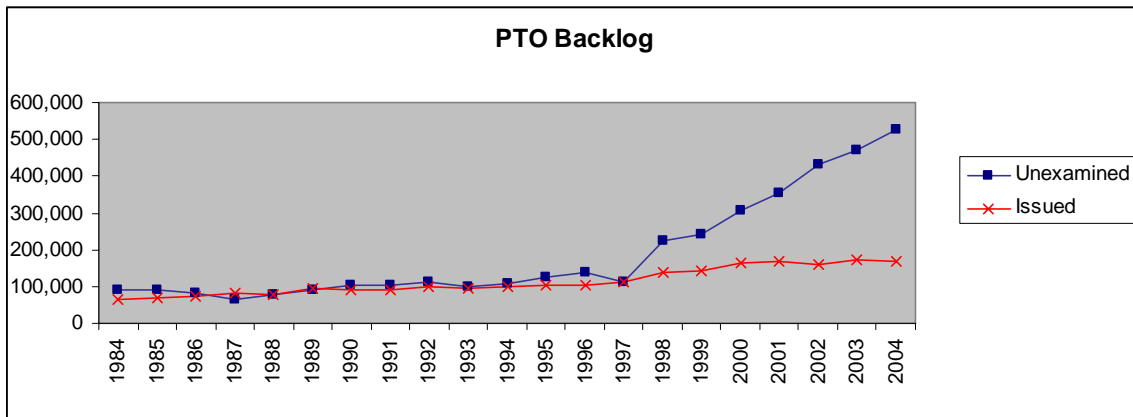
Improvements Are Timely

There are certain aspects of the patent law that present challenges for the software and computer industry. Prior art (the database of previously issued patents and previously known technologies against which a new invention is measured to ensure it merits a patent) is not as well developed for software as it is in some other areas. In part this is because for many years, patents were not readily available for software, and the database is thus still evolving. This makes the task of the examiner difficult, and the result can be poor quality patents. Computers and computer programs are complex technologies, consisting of hundreds of parts and often millions of lines of code. Thus, it is not always easy to determine whether a specific patent application meets the standards of patentability. Because potentially hundreds of patents may be relevant to a particular computer or software technology, it is often very hard to determine whether infringement may be an issue. Finally, because computers and software are composed of many elements which all have to work together, it has been the practice of the industry to cross-license patents, as is the case with other similarly situated industries (for example, the automotive industry).

This problem is greatly exacerbated by the very large number of patents in the software and computer industry. Software and semiconductor patents have been issued in recent years at a rate between three and five times as fast as patents issued in other industries, for example pharmaceuticals and biotechnology. At the same time, the backlog of unexamined patents by the PTO has increased substantially.



Source: Patent and Trademark Office data.



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We approach patent reform from this context -- very rapidly expanding universe of relevant patents and the continuing explosion of patent applications -- and we believe that patent reform legislation should have two primary objectives:

1. To improve the quality of issued patents.
2. To minimize disruptions caused by litigation, specifically, cases brought by persons in search of a quick buck through settlement negotiations, rather than by a party legitimately asserting a right.

Patent Quality

Poor quality patents, as detailed in recent studies by the National Academy of Sciences and the Federal Trade Commission, hamper competition and harm innovation. A questionable patent may lead competitors to forego research and development in a particular area, fearful of the risks that may be involved. Poor quality patents may also require innovators to unnecessarily license thousands of patents.

To ensure patent quality, policymakers should focus on three key areas:

Adequate Training and Funding.

A key concern expressed by many users of the patent system is the lack of patent office resources. We share this concern. When patent offices are adequately staffed and funded, patents are more likely to be awarded promptly and the overall quality of awarded patents is likely to be high—though, to be clear, we believe that quality is far more important than speed. By contrast, when patent offices suffer from inadequate staffing or other resource constraints, patents are both more likely to be delayed or even denied to deserving inventions, and more likely to be granted to inventions that do not, in fact, qualify for protection. Questionable patents, in turn, create uncertainty for software companies and computer companies who must work around the possibility that the patent may be asserted.

BSA encourages Congress to ensure that the U.S. Patent and Trademark Office has the resources it needs to conduct patent examinations that are efficient, expedient and of the highest quality. Enactment by the 108th Congress of legislation to provide modest and necessary increases in PTO fees has enabled the agency to begin to provide additional staff and training in certain software-related technology disciplines. These efforts would be greatly complemented by permanently ending the practice of diverting patent application fees to the general treasury. Allowing the Patent and Trademark Office to retain the fees that it generates would help ensure that the Office is able to provide high-quality examinations and to fund further improvements. We also applaud the PTO's strategic plan, which will also lead to improvements.

Post-Grant Opposition

The primary way to challenge a patent under current law is through litigation, a costly and difficult approach. In order to avoid litigation in those cases where it is not truly necessary, Congress should create a meaningful and balanced post- grant opposition procedure enabling third parties to challenge issued patents. Establishing an administrative procedure for post-grant review and opposition would permit important challenges to patent validity, short of litigation. Under such a system, the person opposing the patent should be required to make a suitable threshold showing. An administrative patent judge should preside over the proceedings, permitting cross-examination and carefully circumscribed discovery, and have appropriate sanction authority. Limitations must be included to protect against abuses of this provision, such as undue delay and harassment. The timeframe for initiating an opposition is critical and should be sufficiently long to provide for meaningful assessment of the granted patent; we recommend two years from grant or one year from receiving notice of patent infringement, to enable a person considering filing an opposition to assess the impact and merit of the patent at issue. Furthermore, given the unique circumstance that hundreds or thousands of patents may apply to each of our products, having a second window to address patents of poor quality that may be asserted is necessary in order to make the post-grant review process meaningful.

By way of example, our industry frequently adopts standards that have to pick between various different techniques to permit interoperability or exchange of information. At that point, a patent that previously was unimportant can become critical to an entire industry when a patentee tries to take advantage of the uncertainties on claim interpretation and interprets its patent for the first time to cover that standard. This could be years after such an obscure patent has issued. Thus, it is important that the period for oppositions in our industry last much longer than the 9 months many others have suggested.

Prior Art

Steps should be taken to enhance patent examiners' access to relevant prior art in the examination process. Under current law, a listing of references in the patent file history creates a presumption that the references were considered by the examiner, even in cases where it is apparent that such references were not fully considered. Furthermore, in existing law, an issued patent is presumed valid and any party challenging validity must overcome its burden by "clear and convincing evidence." As a consequence, although current law does not bar a party from bringing prior art to the attention of the examiner, the presumption that referenced prior art was considered by the examiner, coupled with the high burden necessary to overcome the presumption, severely discourages parties from doing so.

To address this imbalance, we recommend changes to the effect that information and references deemed to be considered during examination shall be only those where the Director explicitly indicates the scope and relevance to the examination of such information and references. Moreover, we believe that the evidentiary rule should be "preponderance of the evidence" for challenging the validity of a patent based in whole or in part on information or references **not** considered during examination.

Submissions By Public Of Prior Art With Commentary

Under current law, members of the public with relevant prior art information are not free to submit that information to the examiner. The result is that patents are often granted on the basis of incomplete prior art information. To address this issue, we believe Congress should establish a mechanism for the public to submit prior art and other information relevant to patentability. We believe this would increase the likelihood that examiners become aware of most relevant prior art. To prevent the PTO from being buried in a barrage of irrelevant prior art references, persons making such submissions should be required to (1) include an indication of the teaching and applicability of each reference submitted to the patent application at issue, and (2) include a sworn declaration attesting to the relevance and accuracy of the submissions.

Patent Harmonization

BSA member companies derive a substantial portion of their revenues overseas and hold numerous patents in all major jurisdictions. We support efforts to harmonize U.S. laws with those of other major countries.

While we favor harmonization, we are concerned about dramatic changes suggested by some other organizations. First, the U.S. Government is involved in negotiations on patent harmonization and we believe that it would be ill advised for premature action to handcuff the government's negotiating flexibility. Second, the proposals that we have seen go far beyond harmonization and, instead, eliminate longstanding statutory bars, such as the on sale bar and public use bar in current section 102(b). Third, the proposed amendment would limit the public knowledge to a new test where the knowledge is "reasonably effectively accessible," while interjecting into prior art analysis the written description requirements. Given that much of the public knowledge in our industry is often demonstrated by reference to parts of software with millions of components, this would lead to a dramatic scaling back of the scope of prior art in the software and computing industries.

Abuses of Continuation Practice

Currently, a patent applicant may continue to amend its claims after publication of its patent application. Through these mechanisms, some applicants keep their applications pending for extended periods, while monitoring the developments in the relevant market, and then modifying their claims to cover competitors' products after those competitors have invested significant funds in their products, often in a good faith attempt to avoid infringement. To address this problem, patents should not be issued on any claim that is broader than the broadest claim previously published or issued.

Disincentives to Domestic R&D

In 1984, the Congress added Section 271 (f) to the patent law to prevent companies from manufacturing parts for an infringing product in the U.S, and exporting those parts for assembly abroad to avoid the claim of infringement. Today, that provision has been

interpreted by the courts in ways that deter domestic development of software. Under recent court holdings, copies of a computer program made outside the United States are nonetheless calculated as part of assessing damages if the copies are made from a master disk developed and exported from the U.S. If the software had been developed outside the U.S., this rule would not apply. We believe this provision creates an unintended incentive to move software development outside the U.S., and should be deleted.

Inter Partes Reexamination

Under current law, the reexamination process is so restricted as to severely limit its applicability. We believe that a change in the law is needed to the *inter partes* reexamination procedure to allow a third party a limited, but more effective opportunity to request that an issued patent be reexamined. Such a change should increase the utility of the reexamination process by relaxing its estoppel provisions and expanding its scope.

Reduce the Disruptions Caused by Litigation

Today, approximately 300 patent infringement cases are pending against hardware and software companies, and these companies pay about \$500 million each year defending themselves in these cases. Too many of these cases are filed in search of a quick buck through settlement negotiations, rather than by a party legitimately asserting a right because the infringer is interfering with commercial objectives. This is not to say that all of these cases are without merit, but too many are.

Three aspects of current law and jurisprudence require Congressional attention.

First, the way the courts have assessed damages poses serious disruptions. Under today's law, punitive triple damages are imposed if the party infringed willfully. Mere knowledge that the infringed patent exists can support a finding of "willfulness," and liability for triple damages. Contrary to what would appear to be controlling Supreme Court precedent, no requirement of bad faith or egregious conduct is required for the imposition of what are properly viewed as punitive rather than compensatory damages. This creates two serious problems. Because mere knowledge of a patent can create this

liability, some have indicated that they do not read their competitors patents out of concern for such potential treble damage liability. The FTC concluded that, among other things, failure to read competitors' patents can jeopardize plans for a non-infringing business or research and encourage wasteful duplication of effort. Second, once a party is put on notice that it may be infringing, the usual practice is to seek an opinion letter from counsel. This has turned into a cottage industry for lawyers, at the expense of patent holders and accused infringers, which in fact does little to advance justice. Third, the threat of damages, based on a very low threshold, creates an enormous point of leverage for companies to settle cases, even when the underlying patent does not merit settlement. We believe that Congress should change these provisions to make it clear that punitive triple damages should be imposed only when there is evidence of, as the Supreme Court recently stated, egregious conduct. All other proposals that we have seen will just result in letters that provide somewhat more specific notice to the accused party, with no reduction in the litigation over this issue.

A second element of damages is also in need of attention by Congress. Today, when a small component of a large and successful product is found infringing, the damages that are assessed may be based not on the value of the infringing component, but on the value of the product as a whole. This has led to a number of situations of gross unfairness. We believe reform is needed to make sure courts calculate damages on the value of the component (the spell checker and not the spreadsheet, the cup holder and not the car) rather than on the value of the larger product.

Third, the way in which the courts have interpreted the law in granting injunctions has also led to disruptions for computer and software companies -- notwithstanding clear statutory language that injunctions are to be granted based on a weighing of the equities. The patent law specifically requires a balancing of "equities" before granting injunctions as a remedy, but the courts are interpreting this requirement very narrowly. The jurisprudence in this area over the past 50 years, clearly different from the way the patent law was interpreted for the first 150 years, has evolved in ways that no longer fully balances those equities. Most recently, in the eBay opinion issued just weeks ago, the

CAFC ruled that the sole reason for not granting an injunction is a national health emergency. That interpretation of the “public interest” ignores a great breath and body of law, and turns the concept of equity into a pinhole that no case involving computers and software can possibly thread.

The net result is substantial disruption in the marketplace. In part, this is a consequence of the fact that injunctions are granted with respect to an entire product incorporating the infringing invention, not just the element. We have had three major cases in just the past several weeks. The Sony PlayStation console was enjoined because a joy stick was infringing; Rim’s Blackberry was enjoined because a synchronizing component was infringing (this case has now been settled.); and finally, eBay’s business is now at risk because it may incorporate an infringing element. As our colleague from General Motors noted, we now have a case of someone wanting to enjoin the sale of pick-up trucks because they contain a built in beer cooler that is claimed to be infringing.

Today, too many plaintiffs are gaming the system to force very large settlements by filing suits in plaintiff-friendly jurisdictions like the Eastern District of Texas. Their leverage is the threat of obtaining monetary damages that are disproportionately large, or of obtaining triple damages where there has been no evidence of conduct warranting a punitive measure of damages, or of obtaining injunctions that could shut down major production enterprises. This presents a U.S. based company with a Hobson’s choice of deciding whether to settle the matter at a hold-up price or run the risk of having its products shut down. These practices have to be addressed by creating disincentives to filing these types of “gaming the system” suits.

We recognize that not all industries that rely on patents face these threats. We are mindful of the concerns of some groups that these solutions to litigation issues not disrupt monetary and injunctive relief for appropriate cases. We agree with this concern. Any solution must address the problem narrowly, without creating unintended disruptions in other areas. And, of course, any solution must also be consistent with international norms and obligations.

Interlocutory Appeals

Under current law, a party may appeal all or part of a court's ruling on claim interpretation only after a final determination in the case, and usually after incurring substantial additional litigation costs. To address this problem, we recommend that Congress create a right for an interlocutory appeal for either party to patent litigation, regarding all or part of a court's ruling on claim interpretation. Thus, for example, either party may immediately appeal a decision on claim interpretation to the Court of Appeals for the Federal Circuit (CAFC), while having the proceedings in the lower court stayed until a decision on the appealed issues is made by the CAFC.

Conclusion

We thank you for the opportunity to appear before you today, Mr. Chairman, and we look forward to working with this Committee to find ways to make our patent system even better.