

PATENT INFRINGEMENT LITIGATION
THE U.S. EXPERIENCE.
(Expanded Outline)

I. **Introduction**

The "Golden Age" for patents in which we have been living the past two decades recently turned into a patent "revolution", "explosion," "frenzy". In 1998 the U.S. Patent and Trademark Office granted a record 163,209 patents, an increase of 31.5% over the 124,126 patents issued in 1997. The number of patent infringement law suits filed in 1998 and 1997 were 2120 and 2085, respectively. And "(j)uries in patent and technology cases have recently been awarding the highest judgements in our Federal Court system. The recent *Litton v. Honeywell* verdict of 2 billion dollars is representative of this trend." (Insight Press, February 1999). According to the New York Times (December 27, 1998), the "combination of more patents and more companies built around patented technology has driven up the number of lawsuits....The richer the prize, the bloodier the warfare and the greater the likelihood that the case will be tried rather than settled. The median cost to each party in a patent trial is \$1.2 million ... complex trials run to \$6 million or more."

II. **Patent Infringement Law**

A patentee has the right to exclude others from making, using, or selling the patented invention for 20 years from the date of filing (Section 154 of the U.S. patent code). To enforce this right to exclude others, a patentee may bring a lawsuit in a federal district court for patent infringement.

A. **Types of Infringement**

Section 271 sets out several types of infringement.

1. **Direct Infringement**

The first type of infringement occurs when someone makes, uses, or sells a patented invention during the term of the patent without the authorization of the patent owner (Section 217(a)).

a. **Literal Infringement**

The most basic case of direct infringement occurs when the infringement exactly meets the language of the claims. If an accused product or process falls clearly within a claim, infringement is made out.

b. **Doctrine of Equivalents**

Even if an accused product or process is outside of a claim and there

is no literal infringement, infringement may still be found under the judicially developed “doctrine of equivalents”, if it performs substantially the same function in substantially the same way to obtain the same result (function/way/result test) as the claimed product or process. In other words, there are only insubstantial differences.

c. **Prosecution History Estoppel**

This doctrine, also known as file wrapper estoppel, prevents a patentee from enforcing its claims against an otherwise equivalent feature in an accused product or process if that feature was excluded by claim limitations added by the patentee in order to avoid prior art and receive the patent.

d. **Reverse Doctrine of Equivalents**

Under this doctrine an accused product or process, even if literally within a claim, may not infringe, if it is so far changed in principle from a claimed product or process that it performs the same or a similar function in a substantially different way.

2. **Contributory Infringement**

This type of infringement involves a sale of a component of a patented machine, manufacture, or composition, or a material or apparatus for use in practicing a patented process. (Section 271(c)). The component sold must not be a staple article or commodity of commerce suitable for any non-infringing use and it must be especially adapted for use in the infringing product or process. The accused contributory infringer must have knowledge that the component is especially adapted for the infringing use. The knowledge must be of the patent and the infringement, not just of the nature of the use. The component must constitute a material part of the patented invention.

3. **Inducement of Infringement**

Section 271(b) provides that one who actively induces another to infringe may be liable for infringement even though not infringing himself. Inducement of infringement requires knowledge by the inducer that a direct infringement will result or an intent to cause an infringing results. In comparison to contributory infringement, the sale of a staple item accompanied by advertisements or other action encouraging the infringement may constitute inducement of infringement.

4. **Other Types of Infringement**

Infringement may also occur when:

(1) a patented device is reconstructed rather than permissibly repaired;

- (2) a U.S. patented process is practiced abroad and the resulting product is imported into the U.S. (Section 271(g));
- (3) uncombined components are supplied from the U.S. for final assembly abroad when such assembly carried out in the U.S. would constitute infringement (Section 271(f)); and
- (4) a petition is filed at the Food and Drug Administration (FDA) for an Abbreviated New Drug Application (ANDA) with respect to a drug patented by another, accompanied by allegations of patent invalidity and/or non-infringement (Section 271(e)).

5. Defenses

- a. The alleged infringer has the following non-infringement defenses:
 - The properly interpreted claims do not read on the accused product or process.
 - The alleged infringer is acting within the scope of a license.
 - The alleged infringer has an implied license.
 - The alleged infringer's use is experimental and completely noncommercial.
 - The alleged infringer is entitled to the reverse doctrine of equivalents.
 - The patent owner is not entitled to apply the doctrine of equivalents because of prosecution history estoppel.
- b. And a number of invalidity defenses can be relied upon, e.g. that the inventor(s) did not satisfy one or more of the conditions or requirements of patentability (Sections 101-103). However, a duly issued patent is presumed valid and only clear and convincing evidence will invalidate it.
- c. Also non-enforceability can be pled, based on patent misuse, inequitable conduct before the PTO, laches or estoppel.

III. Actions Prior to or in Lieu of Litigation

A. Opportunity Letters or Cease and Desist Letters

So-called opportunity letters or cease and desist letters are written by a patentee to another party that is infringing his patent. The primary purpose is to encourage the infringer to stop the infringing activity and/or take a license under the patent. An opportunity letter should be subtle and non-threatening. A strong cease and desist letter could precipitate a Declaratory Judgement (DJ) action against the patentee. If the patentee is seriously considering filing an infringement suit, it may be preferable to do so without first sending out an opportunity or cease and desist letter.

B. Arbitration or Other ADR

As an alternative to litigation, parties to a patent dispute may attempt a resolution to

the dispute through an arbitration proceeding. Section 294 provides that arbitration clauses in patent related contracts shall be enforceable and the parties may agree to submit their patent related disputes to arbitration, which may result in a resolution to the dispute with a reduction in the cost and time of reaching resolution.

Other ADR measures are: mediation, mini-trial, private judge, fact-finding expert, etc. Resort to the "Rocket docket court, the U.S. District Court for the Eastern District of Virginia, is also an alternative to litigation in other district court. Proceedings there are very compact and speedy and only take months rather than years as elsewhere.

Yet another very new expedited alternative is to go to the National Patent Board, a private patent court, conceived by corporate practitioners, and spearheaded by Procter & Gamble's Patent Department. — Of course, the parties can always negotiate a settlement any time but often do so only at the "courthouse doorsteps."

C. **Reexamination**

An alternative to a lawsuit in a federal district court is the reexamination proceeding within the U.S. PTO (Sections 301-307). Any party can request a reexamination, but once the request is granted by the PTO, the requester's input, if the requester is not the patentee, is limited. However, in reexamination, a patent is not presumed valid and the PTO need only meet the lower standard of showing by a preponderance of the evidence that the invention is not novel or nonobvious.

IV. **Infringement Trial**

A. **Parties and Venue**

If litigation is unavoidable, the first issue is deciding what parties should be named in the action. Usually, the plaintiff will be the patent owner and/or an exclusive licensee. Since anyone who makes, uses, or sells a patented invention may be an infringer, the defendants can be selected from anyone in the distribution chains, e.g., the manufacturer, importer, distributors, retailers, or ultimate customers.

The next issue, choosing the place of suit, is not as easy as in other types of business litigation since the general federal venue provision relating to corporations does not apply to a patent infringement case. A more limited patent venue statute offers two venue choices. One is where the infringer resides, which for a corporate infringer is the state where it is incorporated. The other is any venue where the defendant has a regular and established place of business and has committed an act of infringement.

B. **Jury Trials**

Whether to demand a jury is another important decision. Jurors are perceived as being more reluctant than federal district judges to find patents invalid. Thus jury trials have become quite popular. This may not be true, of course, if the judge has

a record of upholding patents or if the district has an overcrowded caseload.

C. Motion Practice

After Plaintiff files the Complaint and the Defendant, the Answer (with or without Counterclaims), various motions may be filed, to wit:

- Dismiss the action for improper venue because of the restrictive venue statute for patent cases;
- Bifurcate liability and damages;
- Sever dispositive issues for separate trial, such as inequitable conduct, on-sale or prior public use, laches, license, or noninfringement.

Most importantly, the defendant may successfully move for summary judgement on such dispositive issues as noninfringement, license, on-sale or prior public use, and laches. Summary judgement motions are unsuitable for issues such as obviousness under Section 103 or intent involving assessment of the demeanor and credibility of witnesses.

D. Discovery Practice

In American trials there are no surprises. All the facts pertaining to any and all issues involved in a trial can be ferreted out in the pre-trial discovery stage by way of such discovery devices as requests for document production, written interrogatories, and depositions by oral examinations. The hope is to find a "smoking gun." Patent litigation is particularly expensive and time-consuming because of abuses in discovery. A former President of the American Intellectual Property Association said that there were three causes for this, namely, "too much discovery, too much discovery, too much discovery." Other countries should resist American pressure to adopt an American-style discovery system.

E. Trial

Opening statements start the trial except for jury selection in jury cases. The plaintiff's statement will cover the PTO's grant of a U.S. patent after thorough examination by an expert patent examiner; the inventor's struggle to make the invention work, overcoming problems that others had been unable to solve despite years of unsuccessful work; commercial success won by the inventor's efforts; and the infringement of the invention. The defendant's statement may suggest that the patent should never have been granted because it was for an invention already known or obvious, that the owner deceived the examiner to get it, that by independent effort the defendant created a product different from what the patent covers, and that the ill-gotten patent is being used to suppress competition.

The inventor, the designer of the defendant's product, and the expert witnesses have leading roles in a patent suit. The inventor's account of difficulties he had to overcome to achieve success with the invention, only to see it copied by the infringer, can provide a prime aspect of the patentee's case. The story of the designer of the defendant's product can be equally critical since the questions of

whether defendant's product was the result of copying or independent design can make or break a jury case.

It is the technical experts, however, who often determine the outcome of a patent case. On validity issues, technical experts provide a comparison of the differences and similarities between the patented invention and prior art and may give their opinions on the ultimate issues of anticipation or obviousness of the claimed invention. This may influence the decision of the trier of fact on these issues. On infringement, the technical experts' conflicting comparisons of the application of the language of patent claims to the accused product and on technical issues of equivalency may strongly influence the decision on infringement.

Another common expert witness in these lawsuits is a patent law expert, often a prominent patent lawyer with past experience in the PTO. His role is to explain the mechanics of obtaining a patent, PTO procedures, the prosecution history of the patents at issue, and the relationship between the claim terminology and the accused product. His role can be much expanded, particularly in a bench trial, where opinions on ultimate questions of patent law are often permitted. Some trial judges regard patent law experts highly; others will not permit their testimony or will restrict it severely.

At the trial's end, it is better for the court to require jurors to decide the case on special interrogatories rather than deliver a general verdict. If the case is tried to the bench, it is more common not to proceed immediately to final argument at the trial closing but to have post-trial submission of findings and conclusions, briefing, and final argument.

F. Appeals

Appeal is exclusively to the Court of Appeals for the Federal Circuit (CAFC) in Washington, D.C. Because the U.S. Supreme Court rarely grants certiorari from the CAFC, the outcome of that appeal will effectively end the case.

V. Patent Infringement Remedies

A. Monetary Relief

Section 284 of the U.S. Patent Code provides for recovery by the patentee of damages not less than a reasonable royalty, together with interest and costs, and for damages that may be increased by the court up to three times the amount found. This is interpreted to provide alternate measures of damages in patent infringement cases: Lost profits to the infringing sales, a reasonable royalty on the infringing sales, or a combination of both. A reasonable royalty sets the floor below which damage awards may not fall. Recovery of lost profits is preferable as it is likely to be greater than a reasonable royalty.

1. **Lost Profits**

Lost profits are those profits the patentee would have made “but for” the infringement — to be proven with a reasonable probability.

Test for determining lost profits:

- demand for the patented device;
- absence of acceptable non-infringing alternatives;
- patentee’s capacity to exploit the demand; and
- amount of profit the patentee would have made.

a. **Demand for Patented Device**

Normally demand for the patented product sold by the infringer is inferred from the fact that those sales were made. Evidence of a long-felt need and commercial success of the patented product helps.

b. **Absence of Acceptable Non-Infringing Substitutes**

Absence of acceptable non-infringing substitutes is necessary to show that, but for the infringement, the infringer’s sales would have gone to the patentee rather than to third parties. Continued infringement after an infringement suit is filed is evidence of the absence of an acceptable non-infringing substitute.

c. **Capacity to Meet Demand**

The patent owner must also show that he had the capacity to meet the total sales of both the patentee and the infringer, i.e. he had sufficient facilities to manufacture the product or the patentee could have expanded his facilities, or the work could have been subcontracted.

d. **Measure of Lost Profits**

The amount of damages cannot be speculative, but need not be proved with unerring precision. Doubts are resolved against the infringer. Fixed costs such as management salaries, property tax and insurance are not included in the damage calculation. The amount of damages to be awarded for infringement is a question of fact, with the patent owner bearing the burden of proof.

2. **Reasonable Royalty**

When damages are not measured by lost profits, the patentee is entitled to a reasonable royalty.

There are three accepted methods for determining the royalty rate: (1) constructing a hypothetical negotiation; (2) using the established royalty rate; and (3) using an analytical method.

a. **Hypothetical License**

Using a hypothetical licensing negotiation between the patentee and

a willing licensee at the time infringement began to determine the reasonable royalty, is based upon the premise that a reasonable royalty is the amount the infringer would have been willing to pay, prior to the infringement, in an arm's length negotiation. Fifteen factors — the so-called Georgia-Pacific factors — are considered to help determine a reasonable royalty, to wit.

- 1) The royalties received by the patentee for the licensing of the patent in suit, proving or tending to prove an established royalty.
- 2) The rates paid by the licensee for the use of other patents comparable to the patent in suit.
- 3) The nature and scope of the license, as exclusive or non-exclusive; or as restricted or non-restricted in terms of territory or with respect to whom the manufactured product may be sold.
- 4) The licensor's established policy and marketing program to maintain his patent monopoly (*sic*) by not licensing others to use the invention or by granting licenses under special conditions designed to preserve that monopoly. (*sic*)
- 5) The commercial relationship between the licensor and licensee, such as, whether they are competitors in the same territory in the same line of business, or whether they are inventor and promoter.
- 6) The effect of selling the patented speciality in promoting sales of other products of the licenses; the existing value of the invention to the licensor as a generator of sales of his non-patented items; and the extent of such derivative or conyoyed sales.
- 7) The duration of the patent and the term of the license.
- 8) The established profitability of the product made under the patent; its commercial success; and its current popularity.
- 9) The utility and advantages of the patent property over the old modes or devises, if any, that had been used for working out similar results.
- 10) The nature of the patented invention; the character of the commercial embodiment of it as owned and produced by the licensor; and the benefits to those who have used the invention.
- 11) The extent to which the infringer has made use of the

invention; and any evidence probative of the value of that use.

- 12) The portion of the profit or of the selling price that may be customary in the particular business or in comparable businesses to allow for the use of the invention or analogous invention.
- 13) The portion of the reliable profit that should be credited to the invention as distinguished from non-patented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer.
- 14) The opinion testimony of qualified experts.
- 15) The amount that a licensor (such as the patentee) and a licensee (such as the infringer) would have agreed upon (at the time the infringement began) if both had been reasonably and voluntarily trying to reach an agreement; that is, the amount which a product licensee—who desired, as a business proposition, to obtain a license to manufacture and sell a particular article embodying the patented invention — would have been willing to pay as a royalty and yet be able to make a reasonable profit and which amount would have been acceptable by a prudent patentee who was willing to grant a license.

b. **Established Royalty Rate**

A royalty rate is established when (1) it was widely applied in numerous licensing agreements with similar terms and (2) those terms are what the infringer would have basically needed to avoid infringement.

c. **Analytical Method**

A typical analytical approach begins with subtracting the infringer's overhead expenses from the anticipated gross profit of the infringer. An acceptable net profit is given to the infringer and the remaining profit is awarded to the patentee.

3. **Mixed Awards — Lost Profits Plus Reasonable Royalty**

If the patentee is able to prove he would have made some of the infringer's sales, the patentee may be entitled to a combination of the lost profits on the sales he is able to prove he would have made and a reasonable royalty on the remaining infringing sales.

4. **Additional Damage Measures**

A patentee may be entitled to additional compensation if evidence shows that

“but for” the infringement he would have made more sales, would have sold at higher prices, or would have sold other non-patented products along with the sales of the patented product sold by the infringer.

a. **Price Erosion**

A patentee is entitled to recover his losses if he was prevented from raising prices, or forced to lower prices or give discounts as a result of the infringement.

b. **Diminution of Value of Product/Market Spoilage**

When an infringer offers a product which is of lesser quality than that of the patentee, the reputation and sales of the product may be adversely affected.

c. **Convoying/“Entire Market” Rule**

A patentee is entitled to lost profits on unpatented components which accompany the sale of patented components where, in reasonable probability, the patentee would have made the convoyed sales which the infringer made. One key factor in applying the “entire market value” rule is determining whether the patentee could reasonably have anticipated the convoyed sales. Other factors include the way products are marketed, the price lists, the industry custom of selling the unpatented product with the patented one, the marketability of the unpatented product by itself, and the physical dependence of the unpatented product on the patented product. The unpatented components must function together with the patented component in some manner so as to produce a desired end product or result.

d. **Unpatented Goods**

Recovery of lost sales can include sales of items not expressly covered by the patent. In order to fully compensate the patentee, profits related to sales of an unpatented item that the infringer “anticipated taking away” should be included in the damage award.

e. **Accelerated Market Re-Entry**

This theory entitles a patentee to an award of the profits or the profits expected to be lost to the infringer after the patent expired as a result of the infringer’s pre-expiration market penetration. Infringement may have allowed the infringer to get a ‘head start’ in the market for the formerly patented product. Therefore, the patentee is damaged even after patent expires.

5. **Prejudgement and Post Judgment Interest**

Both prejudgement and post judgment interest are elements of damages under Section 284. Interest is not to be included in any punitive portion of

the damage award.

6. **Enhanced Damages**

a. **Willful Infringement**

Under Section 284 a patentee whose patents have been willfully infringed may be awarded damages “up to three times the amount found or assessed.” The purpose of this provision is to punish the willful infringer, to deter like conduct in the future, and to protect the integrity of the patent system.

To willfully infringe, the infringer must have acted in disregard of the patent without a good faith belief that the patent was not infringed, invalid, or unenforceable. Willfulness is determined by looking at the “totality of the circumstances”, e.g. deliberate copying, failure to exercise due care after notice of a patent, concealment of infringing activities, and the continuation of litigation in bad faith.

The advice of counsel is apparently the most important factor to be considered whether the infringement was willful. For the advice of counsel to be effective it should be as soon as possible after notice or knowledge of the patent and before the infringement starts, competent and well-founded, authored by a patent attorney rather than a general attorney or technical/management personnel, and adhered to by the infringer.

b. **Attorneys’ Fees and Costs**

Under Section 285, if the court finds that the case is “exceptional” by clear and convincing evidence, attorney fees may also be awarded. The purpose of Section 285 is to compensate the prevailing party for the prosecution or defense of the suit, to discourage infringement by penalizing the infringer and to prevent gross injustice when the accused litigated in bad faith.

7. **Limitations on Damages**

a. **Patent Marking**

Generally, damages cannot be awarded unless constructive notice was given by marking the patented product or unless the infringer had actual notice of the alleged infringement.

b. **Laches**

A laches defense bars relief only for damages accrued prior to suit where the patentee delayed filing suit and the delay was unreasonable, inexcusable and prejudicial to the alleged infringer.

c. **Equitable Estoppel**

Equitable estoppel, which may bar all damages, requires proof of (1) affirmative conduct by the patentee which led the alleged infringer to believe that he would not sue on his patent; (2) alleged infringer's detrimental reliance on the patentee's conduct; and (3) material prejudice to the infringer due to the reliance, if the patentee is allowed to proceed with its suit.

C. **Equitable Relief**

1. **Preliminary Injunctions**

The determination of whether a preliminary injunction is appropriate involves an analysis and balance of four factors: (1) the plaintiff's likelihood of success on the merits; (2) the likelihood of irreparable harm to the plaintiff without injunctive relief; (3) the balance of hardships between the plaintiff and defendant; and (4) the public interest.

2. **Permanent Injunctions**

Courts will rarely deny a permanent injunction against an infringer, once infringement of the valid patent is established. Where such injunction would cause "irreparable hardship" on the infringer without any concomitant benefit to the patentee it may be denied.

VI. **Patent Infringement Remedies are Out of Control**

Before the establishment in 1982 of the pro-patent court of Appeals for the Federal Circuit (CAFC), courts invalidated patents more often than not, hardly ever granted preliminary injunctions, normally assessed only low "reasonable royalty" damages, rarely awarded enhanced damages or punitive damages and attorney fees. Normally, increased damages and/or attorney fees used to be assessed only in cases of truly flagrant copying often coupled with other egregious conduct and absence of a competent legal opinion.

Then the climate changed drastically. More patents were being upheld, courts began "to read the riot act" to infringers, infringement penalties became severe, preliminary injunctions were issued more liberally, and stays of injunctions pending appeals were being denied, and the value of patents increased dramatically. This change is continuing today.

A **Business Week** article asserted a few years ago that the "newly created appeals court, which is upholding patents 80% of the time, got the revolution going" and that the "defense of intellectual property rights has gotten so aggressive, in fact, that some experts fear the pendulum may swing too far."

According to this **Business Week** article, Representative Kastenmeier, Congress' leading IP booster, also saw signs that IP protection was going too far and criticized the CAFC: "It's regrettable that the court leans as far as it does. We didn't intend it to be that way." Chief Judge James Oakes of the Second Judicial Circuit referred, on the one hand, to the present time as "truly

a golden age for intellectual property," but on the other hand, as a period of "patent blackmail" being available to "patent chasers." And **Forbes** magazine railed again "The Great Patent Plague."

Damage infringement awards, in particular, have indeed gone through the roof. They can be astronomical and can reach or even exceed a billion dollars. These outrageous damages are due to numerous factors. The primary causative factor is the possible additive effect of the several components comprising damage awards, namely, lost profits, reasonable royalties, punitive enhancement, interest assessments, attorney fees.

Another factor escalating damage awards is the increased use of juries in patent infringement and validity trials, found in the majority of such trials nowadays. This sharp increase coincides with the unprecedented phenomenon that more and more patent trials are conducted by litigation specialists of large general law firms who are skilled in trying cases before juries. These patent litigators engage jury consultants and economists/expert witnesses so regularly that cottage industries have grown up around these jury consultants and damage experts.

With the increased use of juries and complexity of cases, concerns about jury competence have arisen. The debate about jury performance in complex cases started in the 1960's in connection with IBM antitrust litigation. Recently, the focus of the debate has shifted to high-tech patent infringement trials. The technical, legal and economic concepts involved in many cases are beyond the experience or understanding of the average juror.

Possibly yet another factor driving patent infringement litigation is the birth and growth of a veritable cottage industry of new firms which finance patent litigation and even sell shares, although "making profits from suits perverts the judicial process, which is intended to compensate injured parties, not make investors rich."

Furthermore, it is well known that juries tend to be pro-patent and hence are more easily swayed to hold in favor of the patentee. Moreover, jury awards are not easily overturned or modified on appeal.

VII. Conclusion

As is the case with the "first-to-invent" system, the United States is the "odd-man out" also when it comes to patent litigation costs and patent infringement remedies. In no other country are patent infringement costs and awards as high, if not excessive, and injunctions granted as liberally, as in the United States. Based on CAFC jurisprudence of recent years, patent infringement remedies are vastly more stringent and harsher than they ever were before or now need to be. The law on remedies, damages and injunctions itself has not changed significantly, only its administration and implementation by the courts. In other words, from a historical perspective, the law and practice regarding patent infringement remedies have been, until fairly recently, quite similar to the law and practice in other countries. But now it is easy to conclude that the pendulum has swung too far in the United States and should and will swing back again.

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