Intellectual Property: Calculating Damages and Lost Profits Overview

Friday, December 12, 2008

- Introductions & IP Damages Overview
- Patent Damages Overview
- Lost Profits – First Three Panduit Factors
- Lost Revenues
- Convoyed Sales
- Price Erosion
- Market Share
- Market Segment
- Incremental Costs
- Patent Case Study
- Sources of Information
- Quiz
Class Format

- Instructor presentation and discussion
- Many class ‘projects’ interspersed
- 2 case studies
- Participation !!!
Class Introductions and Experience

- Your IP experience
  - Current employment
  - Current IP cases
  - Why are we here?
What is Intellectual Property?

- Intellectual Property (IP) is a type of intangible asset:
  - Not identified by PHYSICAL parameters
  - Expressed in a discernable way
- Legal protection:
  - U.S. Constitution, Section 8
  - First U.S. patent awarded in 1790
- United States Patent and Trademark Office (USPTO):
  - Dates back to 1802
  - Grants patents and trademarks
Primary Types of Intellectual Property

- **Patents** – Grant of a property right for an invention
- **Trademarks** – Right for a word, name, symbol, or device to indicate source of goods or service
- **Copyrights** – Protection provided to authors of original works of authorship
- **Trade Secrets** – Information, including a formula, pattern, compilation, program, device, method, technique or process that derives independent economic value and is the subject of efforts to maintain its secrecy
Why is it Important to Understand IP Value?

- Increasing focus on IP rights and Value:
  - U.S.
  - World

- “Half of U.S. exports depend upon some type of intellectual property protection, according to the State Department.”
  
  USA Today, September 13, 2005

- Increasing shift of company value to intangible assets, including IP
  - Market capitalization value far exceeds book value
  ✓ Are balance sheets meaningful?
Why is it Important to Understand IP Value? (continued)

- Recognition of IP for financial reporting
- Financial Accounting Standards Board – FAS 141 and 142
- Value intangibles (including IP) in business acquisitions

- High Stakes IP Litigation
  - Top 10 IP Payouts in 2006 were $100 million to $613 Million (Awards and Settlements)

- Ongoing U.S. Patent Law Reform
Increase in U.S. IP Suits Filed: 1997 – 2006

U.S. Patent Litigation Outcomes

Source: Patent Litigation Remedies, Prof. Paul Janicke, University of Houston Law Center
Note: These %’s are consistent with 2005’s %’s, as well as %’s from 1991 through 2004 (IP Law 360, February 16, 2006)
## Damages Awards Exceeding $100 Million: 2005 - 2007

<table>
<thead>
<tr>
<th>Year</th>
<th>Defendant</th>
<th>Plaintiff</th>
<th>Technology</th>
<th>Award (in MM)</th>
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<tbody>
<tr>
<td>2007</td>
<td>Microsoft</td>
<td>Alcatel-Lucent</td>
<td>MP3 technology</td>
<td>$1,500 *</td>
</tr>
<tr>
<td>2007</td>
<td>Medtronic</td>
<td>DePuy Spine</td>
<td>Spinal implant devices</td>
<td>$226</td>
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<td>2007</td>
<td>Microsoft/Autodesk</td>
<td>Z4 Technologies</td>
<td>Anti-piracy software program</td>
<td>$160</td>
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<tr>
<td>2006</td>
<td>Hynix</td>
<td>Rambus</td>
<td>Memory chips</td>
<td>$133</td>
</tr>
<tr>
<td>2005</td>
<td>AT&amp;T Wireless/Alltel</td>
<td>Freedom Wireless, Inc.</td>
<td>Prepaid wireless service</td>
<td>$128</td>
</tr>
<tr>
<td>2006</td>
<td>Alcon Inc.</td>
<td>Advanced Medical Optics</td>
<td>Fluidics for eye surgery</td>
<td>$121</td>
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<tr>
<td>2007</td>
<td>Vonage</td>
<td>Verizon</td>
<td>Internet telephone technology</td>
<td>$117.5</td>
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<tr>
<td>2006</td>
<td>DirecTV</td>
<td>Finisar Corp.</td>
<td>On-demand television</td>
<td>$115.9</td>
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Source: PricewaterhouseCoopers Patent and Trademark Damages Study 2008 – Pg. 3.

Note: This verdict was overturned by the district court judge on a post-verdict motion.

Source: Annual Reports of the Director, administrative Office of the U.S. Courts, 2006 – 1997
http://www.uscourts.gov/judbususc/judbus.html
## Comparison of IP Damages

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Proper Methodology Rests in Conventional Valuation Theory

- CPA ethical constraints require practitioner to “Do only the work for which they are qualified”
- Daubert challenges
Under 35 U.S.C. Section 284, patent law provides that, once a patentee has established an infringement, it is entitled to:

“… damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer.”
Overview of the Process of Calculating Damages

- “But for” the infringement, what would the patent owner have earned?
- Determine if lost profits or reasonable royalty are appropriate
- If lost profits are appropriate:
  - Determine the lost revenue
  - Determine the incremental costs
District Court Cases with Lost Profits and/or Reasonable Royalty Awards

- Lost Profits Only (57 cases)
- Reasonable Royalty Only (110 cases)
- Lost Profits and Reasonable Royalty (38 cases)

Distribution of Patent Damages Awards

Source: PricewaterhouseCoopers Patent and Trademark Damages Study 2008 - Chart 4
How does IP Drive Value?

Save costs?
Create sales?
or
Both?
Class Project #1

“Guidance on potential damages issues?”
Lost Profits or Reasonable Royalty?

- The first question: What is the proper measure of patent damages?
  - Initially look to Panduit Factors for guidance
  - Frequently overlooked by damage experts
- Two supplier market?
Review of *Panduit*

- In order to recover lost profits, the plaintiff generally must meet the following four *Panduit* Factors:
  1. There is demand for the patented product
  2. There are no acceptable non-infringing alternatives
  3. It has the capability / capacity to make the sales
  4. Lost profit damages can be quantified
Is there Demand for the Patent?

- Consider whether the patent IS the product or a PART of the product
- Determine if there is a market for the product at issue
- Understand that a market doesn’t automatically exist:
  - What if the technology isn’t new?
  - What if there is a large price difference?
  - Do customers recognize the distinction (TP Ortho v. Prof Positioners)?
  - Do companies sell to different market segments (BIC v. Windsurfing)?
Is there Demand for the Patented Technology?

- Does the patent create a new product or segment?

- Does inclusion of the patented technology increase demand for the product?
Is there a Non-Infringing Substitute? Is it Available?

- Does the substitute need to be available on the market?
  - Not necessarily – Consider what the infringer would have done
  - Consideration – If a design around would have been required to have a substitute, this weighs against the finding of availability
  - Is the substitute the subject of an infringement claim?
Non-infringing Substitutes

- Methods available are identified through:
  - Discussions with sales and marketing management and/or technology/R&D
  - Industry research
Class Project #2

“Acceptable non-infringing alternatives?”
Costs of Designing Around Patent

- Consider possible ways around the patent
- Identify the documents needed to complete the analysis
- Describe the way the calculation would be performed
Cost to Develop or Reproduce

- Often a focus of the Defendant

- Generally, the value of the patent to the licensee / defendant is worth no more than the amount it would have cost to develop or obtain a non-infringing alternative of similar utility

- However, see Mars, Inc. v. Coin Acceptors, Inc.
Capacity / Capability

- The patent owner must have the capacity to make the sales
- Capacity / Capability items to consider:
  - Manufacturing
  - Procurement
  - Sales / Distribution
  - Financial
Class Project #3

“Can we establish capacity?”
Determination of Lost Revenues

- The lost sales portion of lost revenues represents sales customers would have purchased from the patent owner “but for” the infringement.
Determination of Lost Revenues

- To determine the lost sales portion of lost revenues:
  - Infringing sales
  - Price elasticity consideration
  - Analyze the financials of the owner
  - Consider trend analysis
  - Consider industry/market trends
  - Consider sales of related products
Convoyed Sales

- In certain circumstances, convoyed sales must be considered
  - *Rite - Hite* case
  - Functional unit?
Convoyed Sales or Not?

- Scanner for a store and related services
- Scanner for a store and peripheral devices
- Canoe paddles and canoe
- What are the documents that you would analyze?
Class Project #4

“What’s the lost revenue?”
Price Erosion

- It may also be appropriate to consider the effects of price erosion
  - Identify possible sources of price erosion
  - Price elasticity?
  - Historical and future?
  - Identify the documents necessary to determine the validity of price erosion
  - Consider benchmark if available
  - Describe the method of calculating the impact of price erosion
Class Project #5

“Can you determine price erosion?”
Market Share Analysis

- Lost Profits on a portion of infringing sales
  - Non-infringing substitute available
  - Based on market share
- Remaining sales subject to reasonable royalty
  - Does this make sense?
Market Segment Consideration

- Market segmentation may be relevant
  - Different price segments
  - Different capabilities
  - Different applications
  - Different features
Calculation of Incremental Costs

- When analyzing lost profits, the lost revenues must be reduced by the costs required to achieve the sales
- These are incremental costs
Calculation of Incremental Costs

- Generally (but not always the same as) “variable costs”
- Make sure calculation is consistent with your understanding of the “But For” world
- Types of analysis to perform?
Lost Profits Review

- Lost Sales “But For” the infringement
  - Panduit test – a start
  - Convoyed sales
  - Price erosion
  - Market share
- Incremental costs
Class Project #6

“What is the invention?”
Reasonable Royalty Damages

Under U.S.C. 35 Section 284: “Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use of the invention by the infringer…”

- When a plaintiff is not entitled to lost profits, they may still be entitled to a reasonable royalty

- In certain instances, a plaintiff may be entitled to both a reasonable royalty and lost profits (i.e., market share analysis)
Hypothetical Negotiation

- Courts method of compensating owners that do not meet the lost profits criteria.
- Exercise is completed using a “hypothetical negotiation.”
- Hypothetical negotiation at the time of infringement
- When is the time of infringement / hypothetical negotiation?
  - Patent issue?
  - Patent marking?
  - Notification of infringement?
Class Project #7

“When is the license negotiation?”
15 Georgia-Pacific Factors

1. Royalties received by the Licensor for the patent
2. Royalties paid by the Licensee for other patents
3. Nature and scope of license – exclusive / non-exclusive or restricted / non-restricted
4. Licensor’s established licensing policy
5. Commercial relationship between licensor and licensee
6. Effect of selling the patented product in promoting the sales of other products
7. Duration of patent / term of the license
8. Established profitability of product, its commercial success and its current popularity
9. Utility and advantage of the patent over previous devices
10. Nature of the patented invention
11. Extent to which infringer has used the invention
12. Portion of profit or selling price that is customary in the business
13. Portion of profit that should be credited to the invention
14. Opinions and testimony of experts
15. Amount that the licensor and licensee would have agreed upon at the time the infringement began if both had been reasonably and voluntarily trying to reach an agreement
What is the value of the technology?

- What is the value to the hypothetical licensee and licensor?
- Are they competitors?
- What are the alternatives?
  - Available?
  - Acceptable?
- Is the technology the product?
- Does the technology drive the sale of the product?
- How profitable?
Approaches Used Are the Same As Any Valuation

- Income-based methods
- Market comparables and rules of thumb
- Cost to replace
25% Rule

- 25% of the infringer’s **operating profit** goes to the patent owner
- Is this reasonable?
  - Historical basis
  - Industry study
- **Operating profit** as opposed to gross profit or incremental profit? Which makes the most sense?
- Limitations
Class Project #8

“Which Georgia Pacific factor(s) drive the analysis?”
Recent Cases

- *Ebay v. MercExchange*
  - Injunctive relief is not automatically available to a patent owner, even when an infringement has been found

- *Mars Inc. v. Coin Acceptors, Inc.*
  - Cost of implementing an acceptable alternative is *not* a cap on a reasonable royalty damage
  - Royalty rate of intra-company license agreement can be different from royalty rate for a competitor license
  - Reasonable royalty may result in an infringer operating at a loss
Recent Cases

- **Paice v. Toyota**
  - Companies weren’t competitors
  - No injunction was ever issued
  - Toyota continues to pay $25 for every Toyota hybrid car made

- **Amado v. Microsoft**
  - Injunction was issued, but stayed during appeal
  - There is a fundamental difference between a reasonable royalty for pre-verdict infringement and damages for a post-verdict infringement
Patent Infringement Case Study
Expert Report Analysis

- Review the plaintiff’s expert’s report
- Plaintiff’s team and defendant’s team(s)
  - Plaintiff’s team:
    - Anticipate what the defendants will focus on
    - Identify the strengths of the claim
    - Identify potential weaknesses
    - Calculate what you believe the defendant’s damage claim will be
  - Defendant’s team:
    - Identify weaknesses of the plaintiff’s analysis
    - Identify additional information you would like to obtain
    - Calculate a damages analysis on behalf of the defendants
Sources of Information - Books

- Valuation Exploitation and Infringement Damages – Parr, Smith
- Valuation of Intellectual Property and Intangible Assets – Parr
- Valuing IP (Reilly) - source of “peer reviewed” methods
- Many others
Sources of Information - Industry

- AICPA – litigation consulting guidelines and IP technical bulletins
- IP Law 360 – daily publication
- IPO (Intellectual Property Owners Association)
- National Law Journal – Identifies CPE and recent decisions
- Royaltysource.com – database of royalty rates / license agreements
Sources of Information – Other

- PricewaterhouseCoopers – IP exchange
- Monthly updates of recently filed IP cases – www.lawworks-iptoday.com
- Hoover’s Online – identifies cases filed against subject
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Class Project #9

“What will it cost?”
Trademark Damages – the Lanham Act

“the plaintiff shall be entitled...subject to the principles of equity, to recover

(1) defendant’s profits,
(2) any damages sustained by the plaintiff, and
(3) the costs of the action...”

“the plaintiff shall be required to prove defendant’s sales only; defendant must prove all elements of cost or deduction claimed”
Primary Difference in Trademark Cases versus Patent Cases

- Plaintiff frequently seeks only termination of use – i.e., does not claim damages
- Burden for damages is largely on defendant
- Claim may be “unjust enrichment”
- Claim may be “corrective advertising”
- Often involves a survey expert – “confusion”
- Not always in Federal Court
  - Report requirements may differ
Primary Categories of Trademark Damages

- **Defendant’s profits** — different than patent (except design patent or patent damages in other countries such as China and Canada)

- **Damages sustained by the plaintiff:**
  - Lost profits
  - Reasonable royalty – not addressed in Lanham Act but has been accepted by Courts
  - Corrective advertising
    - Has been based on plaintiff’s actual advertising costs
    - Has been based on FTC ‘rule of thumb’ – 25% of plaintiff’s costs
    - Has been based on advertising expert’s opinion
Trademark – Lanham Act Damages

- The purpose of trademark damages is to “protect the public” as a deterrent
  - The Lanham Act also covers unfair competition and false advertising claims
  - Future damages – loss of goodwill
  - Deductible costs (incremental profit) linked to willfulness
Class Project #10

“What do I tell the client?”
Key Trademark Damages Cases

- *Big O Tire Dealers v. Goodyear*
- *U-Haul v. Jartran*
- *Sands, Taylor & Wood v. Quaker Oats*
- Numerous others
Class Project #11

“What is the Approach?”
Trademark Damages Case Study
Copyright

- Copyright protection subsists in original works of authorship fixed in any tangible medium of expression from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device. Works of authorship include the following categories:
  - (1) literary works;
  - (2) musical works, including any accompanying words;
  - (3) dramatic works, including any accompanying music;
  - (4) pantomimes and choreographic works;
  - (5) pictorial, graphic, and sculptural works;
  - (6) motion pictures and other audiovisual works;
  - (7) sound recordings; and
  - (8) architectural works.
Copyright

- Exclusive right to copy, sell, perform, distribute or display copies of an original creation or work

- Does not extend to ideas, procedure, process, system, method of operation, concept, principle or discovery

- In other words, a copyright does not give ownership to ideas
Copyright

- Does not require registration with the copyright office
- A work enjoys copyright status upon its creation
- Copyright protection is an exclusive matter of Federal law
- *Fair Use Doctrine* permits limited copying
Copyright

- Duration of copyrights
  - Ask the attorney!!!!
  - Generally, life of the author plus X number of years
  - Works for hire – shorter of: 95 years from date of publication or 120 years from date of creation
Copyright

- Differences from patents
  - Right to derivative works (cartoon version of characters)
  - Adaptations to new media (movie to a musical)
  - Foreign language versions of work
Copyright

- Differences from trademarks
  - Derivative works
  - Established royalties in the entertainment industry
  - Statutory damages
Copyright Damages – Title 17, Section 504 of the U.S. Code

- The infringer is liable for either:
  - (1) the copyright owner’s actual damages,
  - (2) any additional profits of the infringer,
  - (3) or, statutory damages

- The copyright owner is entitled to recover the actual damages suffered by him or her as a result of the infringement, and any profits of the infringer that are attributable to the infringement and are not taken into account in computing actual damages.
Class Project #12

How much does a copyright damages analysis cost?
Copyright Damages

- The purpose of copyright damages is to
  - promote the useful arts
  - to deter future wrongful acts
- Who has the burden of proof?
  - Plaintiff has the burden to prove actual damages (compensation)
  - Defendant has most of the burden to prove unjust enrichment (deterrent)
    - Plaintiff has the burden of proving defendant’s gross revenues
    - Defendant has the burden of proving apportionment and deductible costs
Copyright Damages

• Deductible costs
  • Generally, deduct costs saved but-for the infringement (variable costs)
  • Overhead costs may be deducted
    • Infringer not engaged in other non-infringing activities
    • Was the overhead incurred because of the infringement?
    • “Overhead which does not assist in the production of the infringement should not be credited to the infringer; that which does, should be; it is a question of fact in all cases.”

*Litigation Services Handbook, Page 22.5*
Class Project #13

What about an apportionment?
Copyright Damages

- Apportionment
  - The infringer can apportion profit to those factors that created it
    - some revenues may be attributable to elements other than the copyrighted work
  - For example, one page of infringing text in a 300 page book
Indirect Damages

- Indirect damages arise from using a copyrighted work to sell other products rather than selling the copyrighted work itself.

- For example, using a cutout of Jack Nicklaus to sell golf balls
Indirect Damages

- “The plaintiff has the burden to demonstrate a nexus between the infringement and the indirect profits before apportionment can occur.” Mackie
- “When an infringer’s profits are only remotely and speculatively attributable to the infringement, courts will deny recovery to the copyright owner.” Nimmer
- “The burden of establishing that profits are attributable to the infringed work often gets confused with the burden of apportioning profits between various factors contributing to the profits.” Andreas v. Volkswagen of America
Indirect Damages – Case Studies

- **Polar Bear Productions v. Timex Corp.**
  - Polar Bear failed to show that the unauthorized use of its film footage in Timex’s advertising caused an increase in sales or profits. The court declined to award Polar Bear any of Timex’s profits.

- **Andreas v. Volkswagen of America, Inc.**
  - Volkswagen used Andreas’ copyrighted phrase in advertising. Andreas was able to show the nexus between the advertising and defendant’s profits – the advertising centered on the infringed phrase and Volkswagen paid a large bonus to its advertising agency for the commercial success of the advertisement.
Class Project #14

What profit margin do you use for actual damages -- unjust enrichment damages?
Statutory Damages

- Even when the owner fails to prove lost profits or unjust enrichment, monetary damages may still be awarded.
- Statutory damages are awarded in lieu of actual damages.
- The owner may elect statutory damages at any time before final judgment is rendered.
- To receive statutory damages, the owner must register the work.
Statutory Damages

- The amount of damages is determined by the court within a range of $750 to $30,000 per infringement.
- The upper limit may be raised to $150,000 for willful infringement.
- The lower limit may fall to $200 if the infringer established that they were not aware of the infringement.
- Courts can award zero damages if the infringer is a nonprofit educational institution, library, archive, or public broadcasting entity.
Class Project #15

How to calculate and present statutory damages?
Copyright Damages Cases

- *Sheldon v. Metro Goldwyn Pictures* (1940)
  - Apportionment of copyrighted work
  - Deductible costs
  - Value of use to infringer – Imputed license fee
  - Infringer’s gross revenue
  - Indirect damages and prejudgment interest
Copyright Case Study

- Case study introduction
- Determine the key facts and issues
- Determine damages
Copyright Case Study

- Actual damages
  - Are there lost sales?
    - How did you estimate lost sales?
    - What are your bases for lost sales?
  - What costs did you deduct?
- Unjust enrichment
  - Who has the burden of proof
  - Apportionment
  - What costs did you deduct?
- Reasonable royalty?
- Future damages?
- Statutory damages?