IP Enforcement

November 2011
Enforcement: Some Basic Facts 10/27/05
Lanjouw and Schankerman study

• The overall rate of litigation is about 19 filed suits per 1000 filed patents.
• Corporate owners of patents are less likely to be involved in patent suits than individual owners.
• 95% of filed patent suits are settled before trial
• Firms with the largest portfolios of patents also have the most highly cited (interpreted as most valuable) patents, but nevertheless, the lowest litigation rates.
• Broader patents (those with more PTO\technology classifications) are litigated less than narrower patents
• Some Terms:
  Injunction (stop doing it)
  Liable (you are guilty as charged)
 Damages (what you have to pay)
  Treble Damages (patents, willful infringement)
  Criminal penalties (go to jail)

• What is the cost of litigation? (Hall et al NAS study 2004)
  Can be $0.5m per claim (many patents have many claims).

• What can we make of litigation statistics? About one percent of patents get litigated. How do we interpret that number -- is it high? Low? Does it mean that there is a lot of infringement going on?
Patent Settlements: What are the dangers?

• Examples
  Selden patent
  Chiron hepatitis C vaccine
  Intel and AMD (2009)

• What if the accused device would ultimately be held non-infringing?

• What if the patentholder’s patent would have been judged invalid?
How should monetary damages be established?

• Two objectives: (are they ever in conflict?)
  Deterrence.
  Compensation.

• Two main theories of damages:
  Lost profit (make the infringed party whole)
  Unjust enrichment (take away the illegal gains)

• What if Rowling had been judged an infringer.
  What should damages be? Should she go to jail?
  Does either rule deter infringement? Is this fair to the previous author?
Example: Oracle v. SAP (2010)
Two dominant firms providing enterprise software (how to run inventories, do accounting, serve customers, etc.)
• SAP was dominant
• Oracle became threatening when it bought PeopleSoft for $11.1 billion
• SAP bought Tomorrow Now, which had been founded by former PeopleSoft employees
• Support for enterprise software is often provided by third-party providers. (But how do they get the information?)
• SAP fought back through its subsidiary Tomorrow Now, to provide support to PeopleSoft (Oracle) customers, using Oracle software! The intent was allegedly to lure those customers to SAP software. Oracle Claim: SAP through TN stole the copyrighted support materials.
SAP (TN) admitted liability; issue was damages

• Why would they admit liability?
  Probably: the evidence was overpowering, and they wanted to keep it out of court at the damages phase.

• There were documents from SAP saying (a) that they intended to convert 50% of PeopleSoft (Oracle) customers to SAP (b) that downloaded support software without license. SAP allegedly used Oracle software from one customer to fix problems for another customer.

• How did SAP(TN) get access? By using the credentials of a single Oracle customer.
How should damages be calculated?

• Three theories
  – lost profits
  – unjust enrichment
  – reasonable royalty

• Both used reasonable royalty. Why?

• They came to vastly different numbers.

SAP: $40m ( = $.04 billion)
Calculated as royalties that would have been paid on the software.
Recognizes that they did not succeed in luring customers.

Oracle: $6 billion
Value of the customers that SAP wanted to lure, hence a measure of SAP’s willingness to pay
Product Innovations:
How does the innovator’s profit depend on the damage rule?
Is there deterrence with unjust enrichment?
Is there deterrence with lost profits?
What if the court calculates lost profits using “lost sales”?
What if the court calculates lost profits using “price erosion?”
What does the court have to know in order to evaluate lost profit?
The “lost royalty” rule may lead to an indeterminacy in royalties.

In the following diagram, can the patentholder raise the license fee if demand shifts?
Threat of piracy has a moderating influence on price.

Let $e$ be the level of protection. Higher protection (higher $e$) leads to higher cost. The monopolist can sustain the monopoly price with a very high $e$, but only by paying a lot of money for security. It is more profitable to cut back a little on security and lose a little revenue. The resulting price will be lower than with perfect enforcement.

Security is expensive, but an offsetting benefit of the threat of piracy is lower price.

Recall our ratio test!
Welfare Implications of the threat of piracy

- As compared to perfect enforcement for a limited time, using costly security measures might increase profit \textit{and} consumer welfare.

- Three effects: Protection may last longer, security is costly, less DWL per dollar raised

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