



ANALYSIS GROUP

ECONOMIC, FINANCIAL and STRATEGY CONSULTANTS

# IP Damages, Injunctions and Recent Damages Decisions

Wisconsin Intellectual Property Law Association

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# Introduction

- **Lost Profits Damages**
- **Reasonable Royalty Damages**
- **The Law & Economics of Permanent Injunctions -  
Update on *eBay v. MercExchange***



# Sources of Lost Profits

- **Lost profits on “but-for” sales**
  - **Lost sales of competing products**
  - **Lost sales of convoys products**
- **Lost profits on actual sales**
  - **Reduced profit margins**
    - **Lower prices**
    - **Higher costs**



# Lost Profits – Competing Products

- ***Panduit Corp. v. Stahl Bros. Fibre Works, Inc.***
  - **Plaintiff must show proof of the following factors:**
    1. **Demand for the patented product**
    2. **Absence of acceptable non-infringing alternatives\*\***
    3. **Manufacturing and marketing capacity to exploit demand**
    4. **Profits it would have made in absence of infringement**
- \*\* **Modified over time to allow recovery based on market share  
(*State Industries v. Mor-Flo*)**



# Definition of the Market

- What makes an alternative acceptable?
  - Alternative must be “sufficiently similar” \*\*
    1. Price
    2. Technology
    3. Product features
    4. Quality

\*\* See, e.g., *BIC Leisure v. Windsurfing* and *Crystal Semiconductor v. Tritech*



# Definition of the Market

- When is an alternative available?
  - Alternative must be “on the market” or “readily available” to the market \*\*
  - Availability defined in terms of:
    1. Equipment
    2. Know-how
    3. Experience
    4. Material
    5. Time

\*\* See, e.g., *Grain Processing v. American Maize* and *Micro Chemical v. Lextron*



# Lost Profits – Convoyed Products

- ***Rite-Hite Corp. et al. v. Kelley Co., Inc.***
  - **Lost profits on collateral sales are awardable if:**
    - **The collateral products “function together” with the patented product to achieve a desired end product or result**
    - **Are not sold together merely for “convenience or business advantage”**



# Lost Profits – Price Erosion

- ***Crystal Semiconductor v. Tritech***
  - **Plaintiff must show:**
    - **But-for the infringement, “it would have sold its product at higher prices”**
    - **“The effect of that higher price on demand for the product”**



## Lost Profits – Other Key Issues

- 1. Does the patent holder's product have to incorporate the patented technology?**
- 2. Can a Plaintiff's claim of third party infringement negate inclusion of those third parties as non-infringing alternatives?**
- 3. Can a patent holder's corporate structure affect its ability to recover lost profit damages?**



## Reasonable Royalty – Underlying Basis

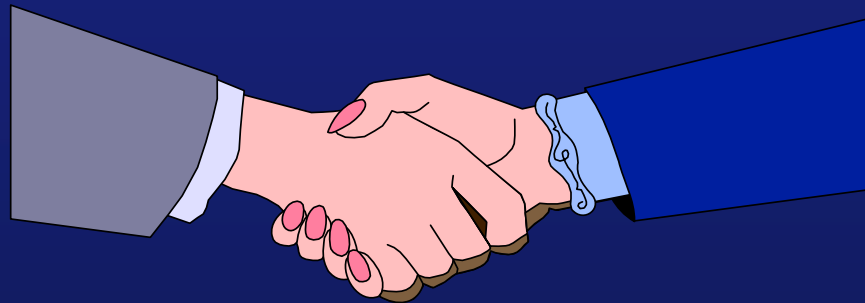
**“Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty...”**

**35 U.S.C. 284**



# Basic Framework

- Hypothetical negotiation construct
- *Georgia-Pacific v. United States Plywood Corp*
  - Arms-length negotiation
  - Willing licensor and willing licensee
  - At the point of first infringement



# Reasonable Royalties – Economist’s Approach

- Evaluate boundaries of bargaining range using quantitative methods
- Analyze qualitative factors to choose appropriate rate within bargaining range



# Reasonable Royalties – Quantitative Methods

- **Market Approaches**
  - Analysis of comparable transactions
  - Analysis of typical industry licensing terms
- **Income Approaches**
  - Incremental benefits/costs of license
  - Rules of thumb
- **Cost Approaches**
  - Cost of avoiding use of intellectual property
  - Alternative must be available and acceptable to marketplace
  - Includes out-of-pocket costs and opportunity costs



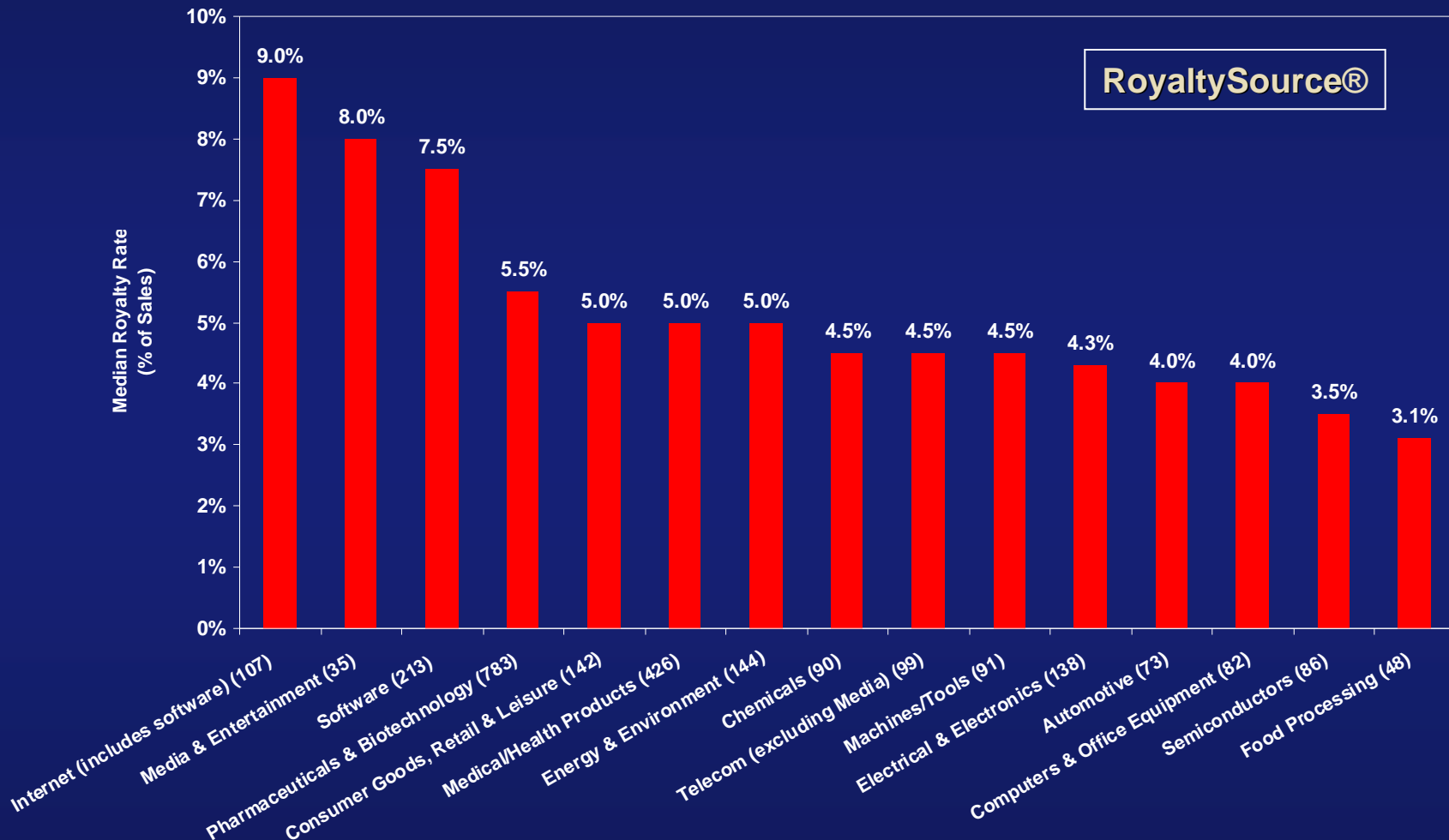
# Reasonable Royalties – Qualitative Factors

## ■ *Georgia-Pacific* Factors

1. Royalties received for licensing patent in suit
2. Rates paid for use of comparable patents
3. Nature and scope of license
4. Licensor's licensing policy
5. Commercial relationship between licensor and licensee
6. Possibility of convoyed sales
7. Duration and term
8. Established profitability
9. Utility and advantage over old modes or devices
10. Nature and character of invention and benefits to users
11. Extent of use
12. Portion of price or profit attributable to invention
13. Customary profit split
14. Opinion testimony of experts
15. Hypothetical negotiation



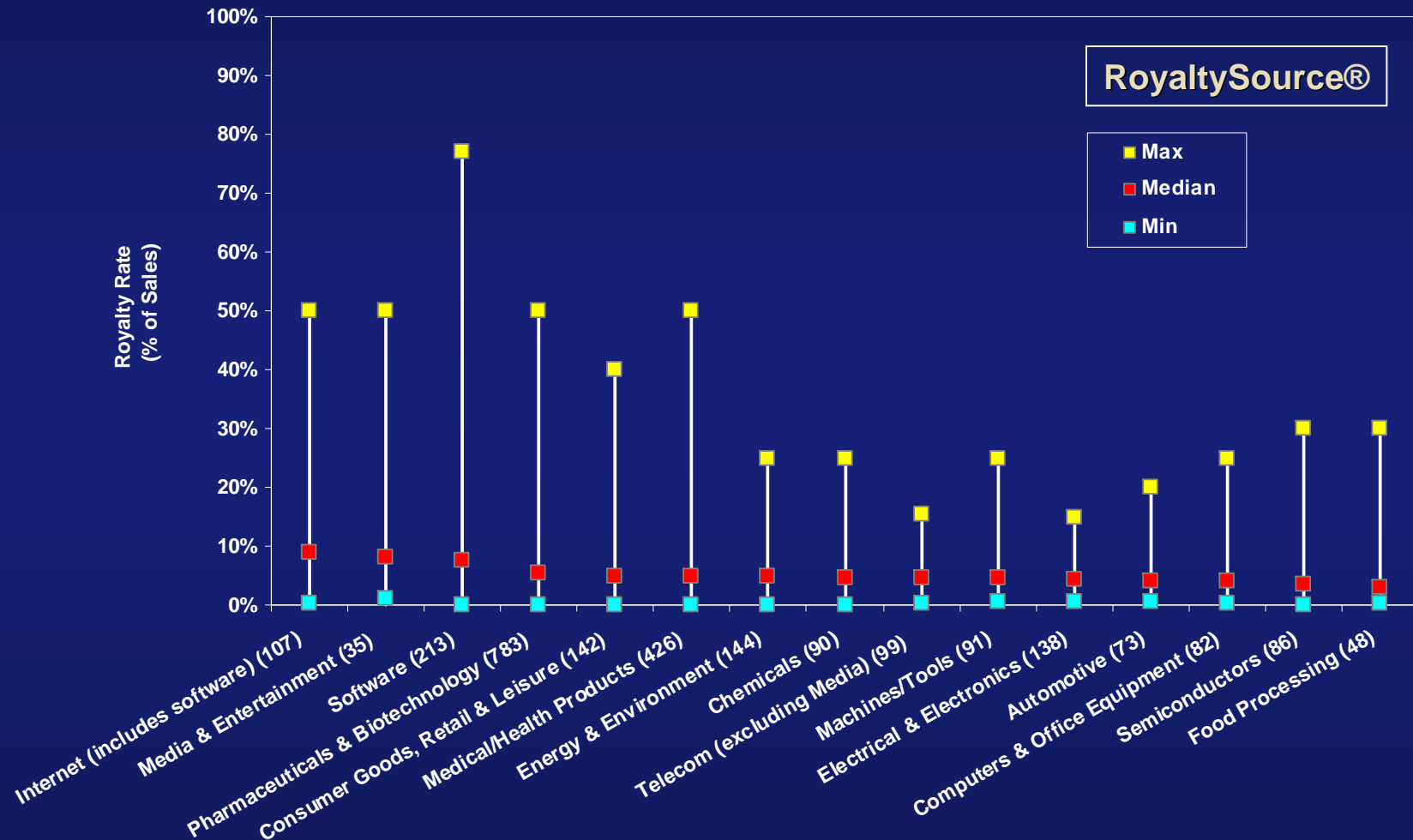
# Industry Royalty Rates



Source: Licensing Economics Review, December 2006, at 6. Number of observations in parentheses; total sample size = 2,557.



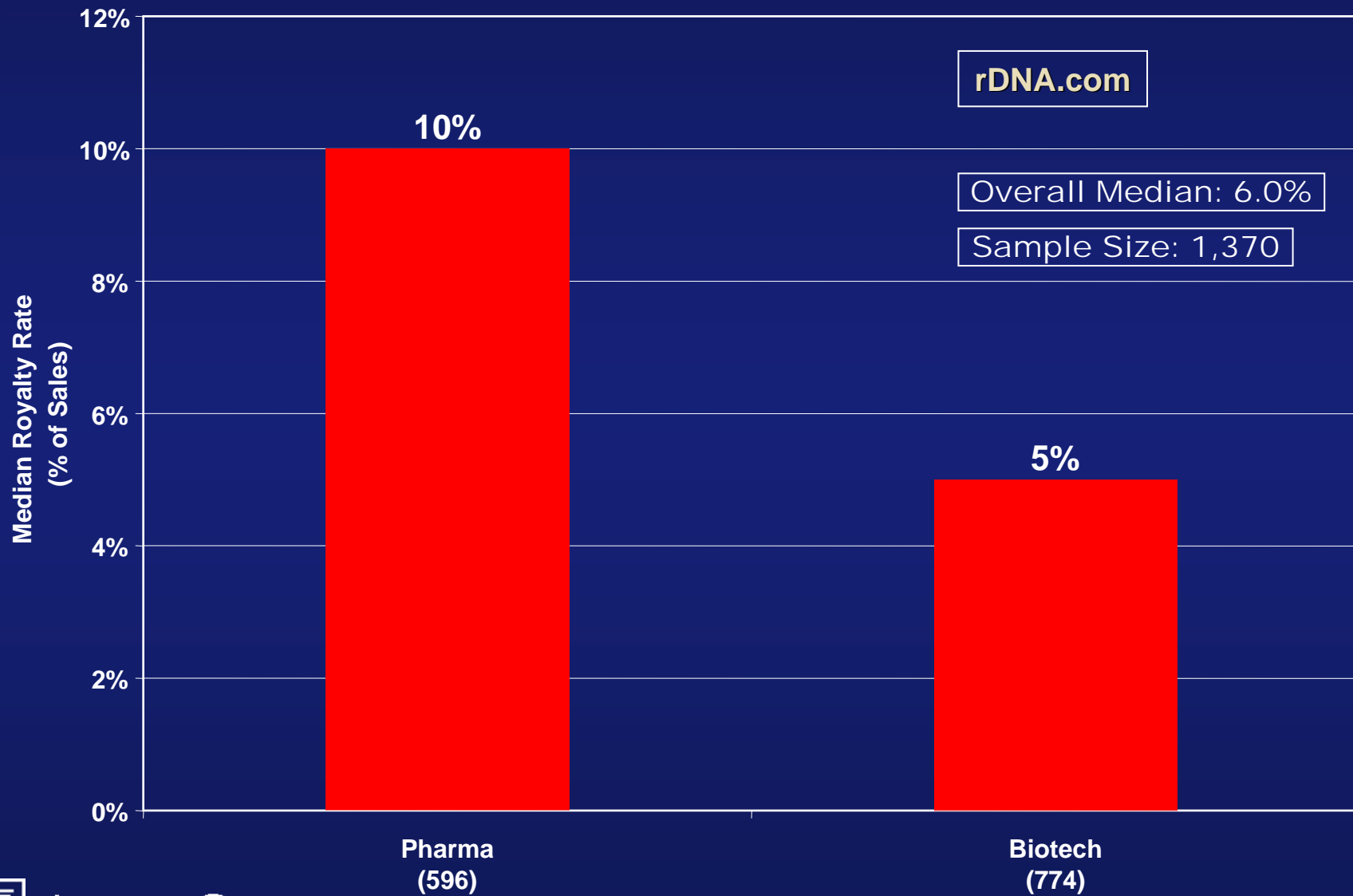
# Royalty Rates – Variation Within Industry



Source: Licensing Economics Review, December 2006, at 6. Number of observations in parentheses; total sample size = 2,557.



# Pharma/Biotech Royalty Rates - All Licenses



# Factors Affecting Royalties

- Legal strength of the IP ↑
- Profitability of products embodying the IP ↑
- Exclusivity of rights transferred ↑
- Later stage of development of the IP ↑
- Non-competitive relationship between licensor and licensee ↓
- Absence of additional provisions such as supply and joint collaboration ↓



## Reasonable Royalties – Other Key Issues

- 1. In the case of bundled products or system sales, what should be included in the royalty base?**
- 2. What is the appropriate date of the hypothetical negotiation in the presence of long lead time for product development?**
- 3. Should expert's analysis be limited to information known at the time of the hypothetical negotiation?**



# Law & Economics of Permanent Injunctions

## Four-Factor Test

For injunction, patent holder must show:

1. Irreparable Injury (If No Injunction)
2. No Adequate Remedy at Law
3. Balance of Hardships Favors Patent Holder
4. Public Interest Not Disserved by Injunction




# eBay v. MercExchange



[← Back to list of items](#) Listed in category: [Toys & Hobbies](#) > [TV, Movie, Character Toys](#) > [Smurfs](#)

### Smurfs Collectible. Smurfs Keychain

Buyer or seller of this item? [Sign in](#) for your status



**Buy It Now** Price: **US \$1.50**

[Buy It Now >](#)

Time left: **2 days 13 hours**  
3-day listing  
Ends Oct-23-03 17:37:01 PDT

Location: Muncie, Indiana  
United States / Indianapolis

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# *eBay v. MercExchange*

## Case Background

- **2003: Federal jury found that eBay infringed with its “buy it now” feature**
  - **\$29.5m in damages**
  - **Court imposed no injunction**
  - **Judge Friedman noted a trend by the Patent Office to award patents in haste**
- **2005: Appeals Court upheld the finding and damages**
  - **Imposed injunction**
  - **Cited a “general rule that courts will issue permanent injunctions against patent infringements absent exceptional circumstances”**



# *eBay v. MercExchange*

## Case Background (cont'd)

- **May 15, 2006: Supreme Court vacated the injunction**
  - **Said injunctions should not be granted automatically in patent cases**
  - **Required application of traditional four-factor test for determination of availability of permanent injunction**
    - **Said the District Court was too restrictive in its interpretation of test**
    - **Said the Appeals Court was too expansive in its interpretation of test**



## Subsequent Cases

**Since the May 15, 2006 Court decision:**

- **32 patent cases have applied *eBay v. MercExchange***
- **Permanent injunction was granted in 25 cases**
- **Permanent injunction was denied in 7 cases**



# Subsequent Cases

## Permanent injunction granted

- Rosco, Inc. v. Mirror Lite Co., 2006 U.S. Dist. LEXIS 73366 (D.N.Y. 2006)
- Telequip Corp. v. Change Exch., 2006 U.S. Dist. LEXIS 61469 (D.N.Y. 2006)
- Transocean Offshore Deepwater Drilling, Inc. v. Globalsantafe Corp., 2006 U.S. Dist. LEXIS 93408 (D. Tex. 2006)
- Visto Corp. v. Seven Networks, Inc., 2006 U.S. Dist. LEXIS 91453 (D. Tex. 2006)
- TiVo Inc. v. EchoStar Comm. Corp., 446 F. Supp. 2d 664 (D. Tex. 2006)
- MPT, Inc. v. Marathon Labels, Inc., 2007 U.S. Dist. LEXIS 3992 (D. Ohio 2007)
- Smith & Nephew, Inc. v. Synthes (U.S.A.), 2006 U.S. Dist. LEXIS 91851 (D. Tenn. 2006)
- Am. Seating Co. v. USSC Group, Inc., 2006 U.S. Dist. LEXIS 59212 (D. Mich. 2006)
- Black & Decker v. Robert Bosch Tool Corp., 2006 U.S. Dist. LEXIS 86990 (D. Ill. 2006)
- 3M Innovative Props. Co. v. Avery Dennison Corp., 2006 U.S. Dist. LEXIS 70263 (D. Minn. 2006)
- Litecubes, L.L.C. v. Northern Light Prods., 2006 U.S. Dist. LEXIS 60575 (D. Mo. 2006)
- Floe Int'l, Inc. v. Newmans' Mfg. Inc., 2006 U.S. Dist. LEXIS 59872 (D. Minn. 2006) (Defendant stipulated to injunction)
- Wald v. Mudhopper Oilfield Servs., 2006 U.S. Dist. LEXIS 51669 (D. Okla. 2006)
- Novozymes v. Genecor Int'l, Inc., 2007 U.S. Dist. LEXIS 10577 (D. Del. 2007)
- MPS IP Serv. Corp. v. Modis Comm., Inc., 2007 U.S. Dist. LEXIS 15637 (M.D. Fla. 2007)
- Ortho-McNeil Pharm., Inc. v. Mylan Lab. Inc., 2007 U.S. Dist. LEXIS 19494 (D. N.J. 2007)
- 800 Adept, Inc. v. Murex Securities, Ltd., 2007 U.S. Dist. LEXIS 27051 (M.D. Fla. 2007)



# Subsequent Cases

## Permanent injunction granted (cont.)

- **MGM Well Services, Inc. v. Mega Lift Systems, LLC, 2007 U.S. Dist. LEXIS 30536 (D. Tex. 2007)**
- **O2 Micro Int'l, Ltd. v. Beyond Innovation Technology, Ltd., 2007 U.S. Dist. LEXIS 25948 (D. Tex. 2007)**
- **Brooktrout, Inc. v. Eicon Networks Corp., 2007 U.S. Dist. LEXIS 43107 (D. Tex. 2007)**
- **Commonwealth Scientific and Industrial Research Organisation v. Buffalo Technology, Inc., 2007 U.S. Dist. LEXIS 43832 (D. Tex. 2007)**
- **Sanofi-Synthelabo v. Apotex, Inc., 2007 U.S. Dist. LEXIS 44033 (D.N.Y. 2007)**
- **Allan Block Corporation v. E. Dillon & Company, 2007 U.S. Dist. LEXIS 61163 (D. Minn. 2007)**
- **The Johns Hopkins University, et al. v. Datascope Corporation, 2007 U.S. Dist. LEXIS 68972 (D. Mar. 2007)**
- **Muniauction, Inc. v. Thomson Corp., 2007 U.S. Dist. LEXIS 55433 (W.D. Pa. 2007)**

## Permanent injunction denied

- **Paice LLC v. Toyota Motor Corp., 2006 U.S. Dist. LEXIS 61600 (D. Tex. 2006)**
- **z4 Techs., Inc. v. Microsoft Corp., 434 F. Supp. 2d 437 (D. Tex. 2006)**
- **Sundance, Inc. v. Demonte Fabricating Ltd., 2007 U.S. Dist. LEXIS 158 (D. Mich. 2007)**
- **Voda v. Cordis Corp., 2006 U.S. Dist. LEXIS 63623 (D. Okla. 2006)**
- **Finisar Corp. v. Directv Group, Inc., 2006 U.S. Dist. LEXIS 70300 (E.D. Tex. 2006)**
- **Praxair, Inc. v. ATMI, Inc., 2007 U.S. Dist. LEXIS 21589 (D. Del. 2007)**
- **MercExchange, LLC v. eBay, Inc., 2007 U.S. Dist. LEXIS 54642 (E.D. Va. 2007)**



# Key Economic and Legal Issues

## Competition between patent holder and infringer matters

- Permanent injunction more likely for direct competitors – but not automatic - *Praxair* (6/15/2007), *eBay* (7/27/2007)
- No permanent injunction more likely for non-competitors – but not automatic - *Commonwealth Scientific* (3/27/2007)
- Definition of “competition” unclear - How? How Much? When?



# Key Economic and Legal Issues

## Measuring damages without injunction is more complex

- Traditional damages analyses assume that infringement damages cease following a finding of liability
- With no injunction, infringement damages will be inflicted indefinitely (or until the infringer chooses to cease infringement)
- Assessing damages without an injunction involves the valuation of a perpetual involuntary license



# Key Economic and Legal Issues

## Options for measuring damages without an injunction

- **Lump sum damages award at the time of the initial trial compensating patent holder for expected future infringement**
- **Establishment of a running royalty to be applied to future sales**
  - **“Post-verdict” royalty may not be the same as the “reasonable royalty” established prior to the finding of infringement**
- **Recurring future proceedings regarding on-going damages**

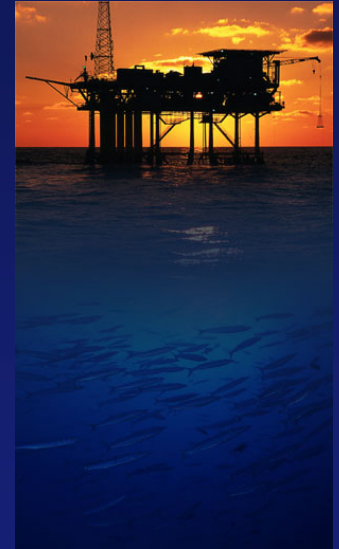


# Recent Damages Decisions

## Riles v. Shell Exploration and Production Co.

298 F.3d 1302 (Fed. Cir. 2002)

- Method of anchoring offshore oil rigs
- Riles' royalty expert presented 3 "economic" models
  1. Cost of Shell's platform
    - Injunction would not shut down entire platform
    - Must consider relative value and non-infringing alternatives
  2. Gross Revenues from first year of production
    - Injunction would not shut down entire platform
    - Must consider relative value and non-infringing alternatives
  3. Sum of Shell's platform costs and revenues
    - This just compounds the errors
- Reasonable royalty must reflect:
  - Likely outcome of a before-the-fact hypothetical negotiation
  - Riles established licensing practices (based on cost savings)
- Royalty might be capped at incremental cost of design-around



## Recent Damages Decisions

### **Poly-America, L.P. v. GSE Lining Technology, Inc.,**

2003 U.S. Dist. LEXIS 14130 (N.D. Tex. 2003), aff'd-in-part and rev'd-in-part, 383 F.3d 1303 (Fed. Cir. 2004)

- Patent holder is Poly-America, but Poly-Flex is the entity that manufactures and sells landfill liners. The 2 parties are separate corporate entities but share a parent.
- Poly-Flex is non-exclusive licensee of Poly-America. In general, a licensee may not sue for damages unless it has exclusive rights
- Poly-America can sue for its own lost profits, but not those of Poly-Flex
- “Poly-America and Poly-Flex may not enjoy the advantages of their separate corporate structure and, at the same time, avoid the consequential limitations of that structure – in this case, the inability of the patent holder to claim the lost profits of its non-exclusive licensee”



# Recent Damages Decisions

## Monsanto Co. v. Kem L. Ralph

382 F.3d 1374 (Fed. Cir. 2004)

- Recombinant gene sequences inserted into plant seeds
- Ralph argued that reasonable royalty should never be in excess of its anticipated profits
- Anticipated profits is only one factor to consider, especially in view of Monsanto's proven unwillingness to license broadly
- Law does not require that infringer be allowed to make a profit



# Recent Damages Decisions

## Juicy Whip, Inc. v. Orange Bang, Inc., et al.

382 F.3d 1367 (Fed. Cir. 2004)

- Beverage dispensing device
- Juicy Whip argued a functional relationship between patented dispenser and unpatented syrup, asserting the Entire Market Value Rule entitled it to lost profits on sales of syrup
- Orange Bang argued that the items could be sold independently
- Lower court should have heard evidence on functional relationship, even though the devices are not part of the same “unit”
- “despite some limited interchangeability...the items do function together to achieve one result”



# Recent Damages Decisions

## Avocent Huntsville Corp. v. Clearcube Technology

2006 U.S. Dist. LEXIS 55307 (N.D. Ala. 2006)

- **Managed (non- desktop) PC solution**
- **First step of 2-supplier test is to define a relevant market, which requires:**
  1. **Identify patented invention**
  2. **Include substitutes that have similar physical and functional characteristics**
  3. **Exclude alternatives with different characteristics and prices**
- **Avocent never undertook 2. above**
- **Clearcube identified at least 4 alternatives**
- **Even though Clearcube's single customer sought another bid from only Avocent, the "ridiculous" price and oversized hardware may have led the customer to obtain other bids in a "but-for" world**



# Recent Damages Decisions

## **Novozymes A/S v. Genencor Int'l, Inc., et al.**

2007 U.S. Dist. LEXIS 10577 (D. Del. 2007)

- Enzymes used in the production of fuel ethanol
- Novozymes cannot recover NZNA's (indirect, wholly-owned U.S. subsidiary) alleged lost profits; it receives a royalty payment from NZNA
- A reasonable royalty must consider the availability and acceptability of alternatives
- Must consider long-run anticipated profits
- Factors supporting a royalty rate higher than in an actual license:
  - Direct competitors, with high profit margins
  - Novozymes' policy of refusing to license third parties
  - Long patent term
  - Improvements of the patent over existing technologies
  - Genencor's extensive use of the patent



# Recent Damages Decisions

## Monolithic Power Systems v. O2 Micro

2007 U.S. Dist. LEXIS 12390 (N.D. Cal. 2007)



- Power converter circuits
- \$149 million in royalty damages, on infringing sales of \$77.9 million
- O2 (patent holder) expert report excluded:
  - Royalty model applied to notebook market only, yet only a portion of accused MPS products used in notebooks
  - O2 benchmark comparison did not include the patented invention
  - No accounting for the price elasticity of demand (tripling of price, but no presumed impact on quantity)



# Recent Damages Decisions

## AT&T v. Microsoft

127 S. Ct. 1746 (2007)

- Microsoft Windows found to infringe AT&T patent on a computer used to digitally encode and compress recorded speech.
- Microsoft sells Windows to foreign manufacturers by sending a master disk which is used to generate copies. These copies are installed on foreign computers.
- Section 271(f) provides that infringement does occur when one “supplies...from the U.S.,” for “combination” abroad, a patented invention’s “components.”
- Supreme Court found that, “[b]ecause Microsoft does not export from the United State the copies actually installed, it does not ‘supply...from the United States’ ‘components’ of the relevant computers, and therefore is not liable under Section 271(f) as written.”



# Recent Damages Decisions

## Monsanto Co. v. Homan McFarling

488 F.3d 973 (Fed. Cir. 2007)



- Genetically modified crop seeds that resist glyphosphate herbicide (Roundup Ready)
- Monsanto distributed seeds through various companies
  - Purchase seed (from seed company)
  - Pay a separate Technology Fee (to Monsanto)
  - Agree to not replant
- McFarling (farmer) argued that there is an “established royalty” (the Technology Fee)
- McFarling did not, but should have:
  - Purchased the seed (for later years) – \$19 to \$22/bag
  - Paid a Technology Fee – \$6.50/bag
- Royalty should consider losses to Monsanto (\$25.50 to \$28.50/bag) and benefits to farmer (\$31 to \$61/bag)
- Jury verdict of \$40/bag justified



# Recent Damages Decisions

## **Wechsler v. Macke International Trade, Inc.**

486 F.3d 1286 (Fed. Cir. 2007)

- **Portable device for carrying and dispensing water for a pet**
- **Wechsler was not in the business, but awarded lost profits**
- **Availability of lost profits determined by court; amount determined by jury**
- **Despite Wechsler's manufacturing and marketing after infringing period, Wechsler did not adequately establish capability beforehand**
- **Later sales and prices could have been shown to be impacted, but were not (could have/would have)**



# Recent Damages Decisions

## Lucent (Alcatel) v. Microsoft

2007 U.S. Dist. LEXIS 57135

- MP3 audio patents (embedded in Windows Media Player)
- \$1.5 billion damages awarded
- Overturn of jury award
  - 1 of the 2 patents already licensed to Microsoft
  - 0.5% royalty rate applied to price of PC was over-inflated
- Entire Market Value Rule not properly applied to establish royalty base
  1. No established link between demand for PC and existence of either Windows Media Player or MP3 technology
    - At best, there was proof of a desirability that PCs have MP3 capability
  2. No proof that patented features produced any customer demand/value
    - The patented features are a subset of MP3 technology
- 0.5% royalty rate inappropriate
  - Insufficient relevance of other technology licenses
  - Date of hypothetical negotiation
  - Scope of license
- Rate to be re-determined along with base re-determination

