Patent Policy

Econ 121
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Why patents?

- Incentives to innovate if otherwise spillovers would destroy private reward
  - Even though spillovers increase total welfare once the innovation has been made
- Decrease/reverse incentive for inventor to keep invention secret
  - Lawyers' idea of "patent bargain"

Two Key Margins

- Demand margin: want p near MC, or near IC if demand is lumpy
- Supply margin: want p near MB, or near IB if supply is lumpy
- Both work well under perfect competition
- Otherwise, there may be a tension

Price/profit regulation

- Natural monopoly threatens to make demand margin work poorly
- Don't worry too much about supply margin
  - Unless p < AC, can tell the firm to supply the good
  - No need to provide incentives for initiative if industry is boring
  - Tends to reinforce/cause boring industry

Opposite case: innovation

- Without policy, risk that supply margin works poorly
- No point optimizing demand margin if good isn't supplied
- What about the AC solution?
  - Research grants
  - Prizes

Optimizing Supply Margin

- Ideally give innovator total social benefit
- Implies no consumer surplus!
- What does this depend on?
  - No "business-stealing"
  - Alternative is no innovation
- Tradeoff versus efficiency conditional on innovation

Classic Single-Innovator Policy

- Potential innovation
- Strength of reward/protection x
- Determines probability/speed of innovation
- Worsens social use of innovation
- p(x)W(x)
  - p increasing in x
  - W decreasing in x

Example: prescription drugs

- Costly to develop and get approval for new drugs
- Identifying the best projects/strategies
- Limited life of patent; then generic entry
- US and rest of world
- Bayh-Dole
- Hatch-Waxman

Less Optimistic Example

- Microelectronics
- Patent thicket
- Standards holdup
- The industry's historical work-around
- How the work-around is failing
- Non-producing patentees

Cumulative Invention

- "Basic" and "applications"
  - "Research" and "development"
  - "Innovation" and "product introduction"
- Rewarding complementary activities
  - NTP, RIM?
  - Each "causes" the result!
  - Other applications: pricing phone calls
- Kitch "prospect theory"
- Compare ICE
  - Trust incentives or seek open opportunity

Use or Avoid Patented Technology

- Patent policy works best if potential users choose with good information
- Just like consumption of "ordinary" goods
- Does the patent system work like that?

Secret/obscure patents

- Applications secret
  - Since 1999, usually "only" for 18 months
  - Why?
- Dysfunctional "willfulness" rules
- Patent claims construction
- Uncertain validity

Uncertain validity

- Alternative to license: challenge, vs eschew
- In simplest model, benchmark license fee
- "Rational Ignorance at the Patent Office"
- How this breaks down
  - Sunk costs, injunctions
  - Relativity, Blonder-Tongue
- Policy activity; what to do?

Impending Final

- May 17, 8-11am, 213 Wheeler
  - you should confirm
  - 3 hours
  - Closed book
  - Bring 2 bluebooks, calculator
- What to expect
  - 4 or 5 questions
  - Mix of styles (multiple choice, problem, explanation…)
  - Mix of difficulties
  - Full semester but one earmarked for recent material

More on exam

- Review session probably Monday afternoon
  - Jenny will confirm
- My office hours
  - today
  - next Tuesday 5-6
- Readings; lectures