

# Post-Grant Patent Review

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# The problem – brief review

- ✿ Rapid growth in patent applications leading to
  - Large increase in patent office workload
  - Higher grant rates?
- ✿ Increase in patent litigation
- ✿ Consensus that the average standard being applied during the past decade is too low, especially in newer technology areas
  - Long list of legal, economic, policy scholars and practitioners.....

# Possible causes

- overburdened patent office
- lack of expertise in the relevant areas
- lack of prior art databases
- weakening of the non-obviousness test, partly through court decisions
- Some of these problems already addressed by USPTO
  - Hiring changes (computer scientists)
  - Second exam for 705 patents
  - Increased prior art availability; better searching methods
  - Etc....

# More is not necessarily better

- ✿ Trivial patents confer market power without consumer benefit
- ✿ Slows advance in cumulative technologies
  - increases level of fragmentation of rights
- ✿ Some areas of research avoided by small and new firms (Lerner 1995)
- ✿ More patents => more litigation
  - Investment in innovation and commercialization slowed by uncertainty over patent validity
- ✿ Clogs the process at the USPTO, especially as others increase patenting in response

# Evidence?

- ✿ Compare grant rates at the EPO for applications with US and non-US priority dates
  - Difference in grant rates has risen from 0% to about 16% during the past 20 years
  - Suggests a decline in the standard of US applications
- ✿ Compare grant rates for US priority patent equivalents at EPO and USPTO (OECD study)
  - Difference in grant rates at USPTO versus EPO has grown from 12% to 30% during the past 20 years
  - Suggests a decline in the standard of patentability

Source: OECD and Harhoff calculations

# Post-grant patent reviews – expected benefits

- Who is most likely to be able to demonstrate obviousness using non-published prior art?
  - Competitors who are familiar with the area
- Fast feedback to current patent examination
- Second pair of eyes improves quality; PTO spends more time on valuable patents
- Revoked patents cannot cause litigation high welfare gains (Graham et al. 2004)
- Dampening effect on aggressive patent portfolio strategies

# Post-grant patent reviews – expected drawbacks

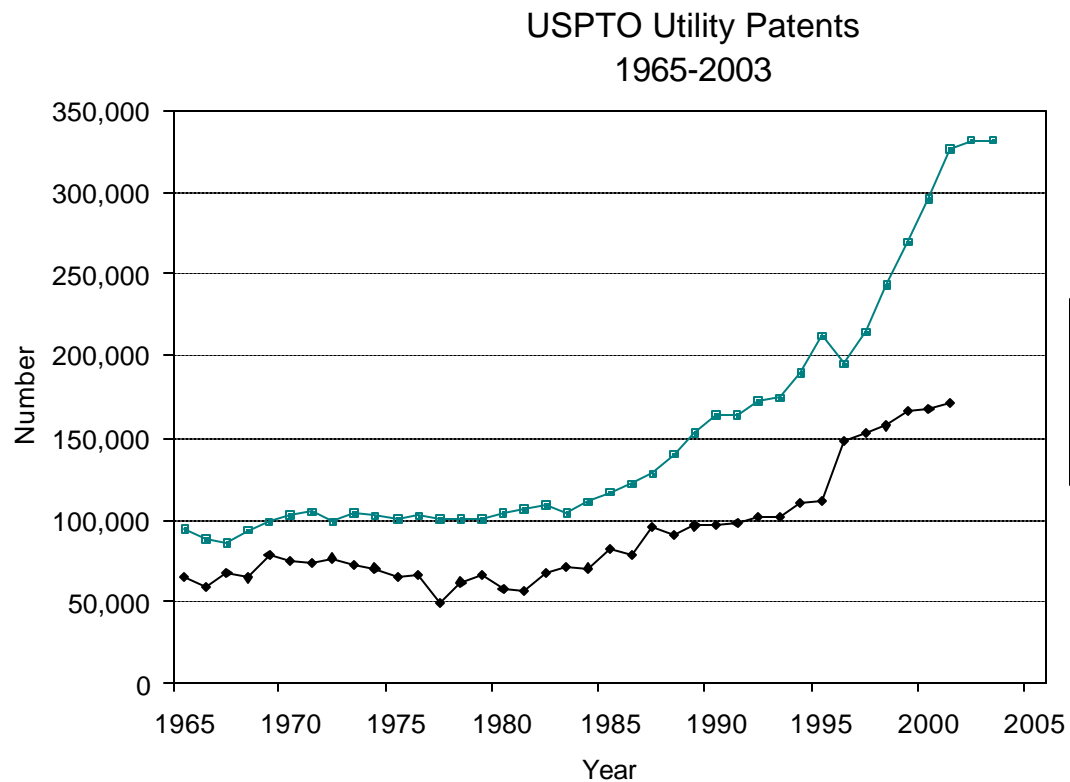
- Too costly?
  - additional financial burden for patent holders
- Too lengthy?
  - delays enforcement of patent rights (but so does litigation)
  - general delay of uncertainty resolution?
- Is the USPTO capable of running such a process?
  - Not without additional resources
- Independent inventors and small entities may be disadvantaged in such a process
  - But no evidence that they are more subject to either US re-exam or European opposition
  - Process costs less than litigation and should be faster

## Backup slides follow

- Aggregate US patent applications and grants 1965-2003
- Further data on grant differences at EPO between US priority and non-US priority



# The problem?

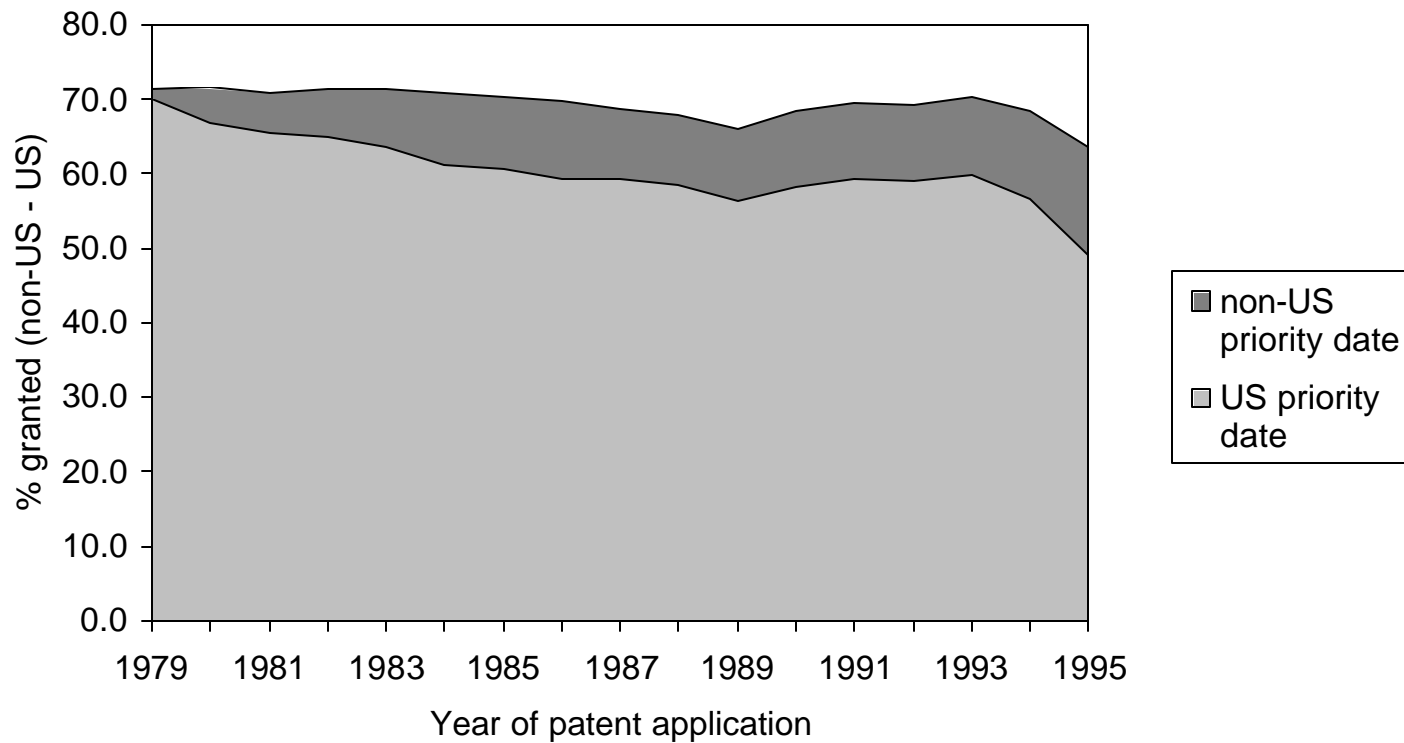


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# Difference in Grant Probabilities at the EPO for US and non-US Priority Patents All Technologies



# A look at the European experience

## Outcomes of EPO examination – by technical field

Technical Field	Non-US Grant Rate*	US Grant Rate**	D
Electrical	69.7%	57.8%	11.9%
Instruments	67.0%	60.1%	6.9%
Chemicals	68.4%	56.7%	11.7%
Processes	68.4%	61.7%	6.7%
Mechanical	70.4%	61.7%	8.7%
Construction	62.9%	51.6%	11.3%
All Fields	68.3%	58.4%	9.9%

Application years 1990 and earlier. Grants include grants after appeal.

\* Grant rate for EPO applications with non-US priority

\*\* Grant rate for EPO applications with US priority