

## Potential Costs imposed by PAEs

- Systematic overcompensation
- Resource diversion
- "Unpooling"
- Impact on competition

- Caveats:
  - harm to competitions vs. harm to competition
  - what matters for policy is

## Systematic Overcompensation

- Rewards to PAEs may be "high" relative to some benchmark value of an asserted patent
  - What benchmark? How much higher?

- Impacting:
  - Pricing in the MFT => misallocation of R&D
  - End-user prices => welfare losses
    - Double-marginalization distortions?
  - Risk/reward for innovators => less innovation

## Resource Diversion

- Transfer of rewards away from innovators => less innovation
- Increase in equilibrium number of lawsuits and associated unavoidable costs
- Opportunity costs of time/treasure/talent used by PAEs
- Burden on PTO of processing speculative/opportunistic applications
- Defensive responses by innovators and producers
  - Abandoned projects
  - Second best technological solutions
  - Pre-emptive acquisition of "unnecessary" IP

## "Unpooling"

- Strong complementarities between inventions creates challenges in apportioning economic value among components of a portfolio
  - portfolio licensing, pooling, bundling of IP
  - royalty stacking provisions
- Innovators/producers tend to contract efficiently exante over the entire bundle of IP relevant to a product or technology
- If a PAE unpacks a bundle, creates potential for paradoxical results (and overcompensation)
  - sum of values of subsets > value of the whole

