Patents vs. Prizes: a comment on Adler's *Eyes on a Climate Prize*

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Environmental Law and Policy Annual Review Conference

> Environmental Law Institute Vanderbilt Law School

Russell Senate Office Building, Washington, DC Apr. 13, 2012

George Carlin on Prizes:

"She said she later found a note he'd written about the award, which he was pleased to learn was officially called a prize. Because? Because,' said Kelly, with perfect Carlinesque timing, 'because he said an award is what grown-ups win. A prize is something a kid wins."

Kelly Carlin speaking about the Twain Prize for American Humor awarded posthumously to her father, George

Not why support innovation, but why prizes?

- We've got other rewards for innovation: Patents, grants
- Economic analysis doesn't really answer the question: Patent models treat winning a patent as winning a prize
 - o First to get profits from the patent
- Emphasis on making patented product at marginal cost
 - o Pharmaceuticals in developing countries
 - o Not the issue typically with prizes
 - o Patent rights typically not ceded, especially with private prizes
- Why Prof. Adler's work so important
 - o We know less about prizes vs. other mechanisms than one might think

Patent buyouts, grants as alternatives

- Why government buyouts of patents aren't the answer
 - o Raising prices elsewhere to pay for them just shifts the problem
 - o Would the government get stuck with "dog" patents?
- Shouldn't the market tell us what to invent? Maybe not for climate
 - o Innovation inducement as substitute for failing to price GHGs
- Adler mentions this comparing prizes to grants
 - o But prizes are just as if not more centralized as grants
 - o Prize holder has to specify "victory conditions"
 - o Is peer review of grants more politically charged than agency designation of what innovations merit prizes?
 - o Grants reduce cost risk, but prizes reduce value risk

Institutional advantages of prizes over patents

- Publicity benefits, social contribution, fun: G. Carlin
- More flexible contest design
 - o Intermediate stage awards, rewards for coming in second, third
- Control patent race costs by managing contestants
 - o Share information, determine eligibility
 - o Tradeoff benefits against potential loss of competition
- Meeting victory conditions less uncertain than whether patent will stand up in court or be enforced
- Biggest: Not all innovations are patentable
 - o Idea of flying across Atlantic, suborbital flight, 100 mpg car

Economic fundamentals on prizes vs. patents

- Generality vs. specificity
 - o Prizes highly specific
 - o Patent process open ended
- Risk
 - o Innovators face uncertainty regarding chance of winning, cost of innovative effort, and benefits of success
 - o Prizes mitigates last of these, and generally risk overall
- Prizes better with known goal, risk averse innovators
- Patents better with unknown goal, less risk aversion
- Formal model yet to be done, and may not add much
- Why Prof. Adler's insights are so valuable