

PAUL KLEMPERER

# America's patent protection has gone too far

Innovation is essential to economic success, so it is only right that strong patent protection has a central role in the modern economy. But if patent protection is too broad, patents can also prevent innovations being used as widely as they should be and discourage follow-on innovations. Patent protection has gradually broadened over time and may have gone too far in the US, which now permits patenting of business methods and software, innovations that would generally not be patentable in Europe. This makes it all the more worrying that some Europeans would like to follow suit.

Why do we see this "patent creep"? Probably because if a mistake is made and a patent, or a change to the patent system, goes too far, the whole economy suffers, yet individual companies may not wish to risk challenging it. Competition is a social good but few private companies profit from encouraging it.

Consider the US patent granted recently to International Business Machines for a "smooth-finish" auction, an auction that is programmed to end at a random time. Perhaps this sounds like just the kind of original idea that patents were designed to protect. But the patent examiners appear not to have read Samuel Pepys, the

17th-century British diarist, who describes the Admiralty's auction of two ships by a "candle" auction. Candle auctions end when a candle goes out, or when a pin pushed into the candle falls out because enough wax has melted. They have been used for centuries and while, as Pepys noted, some candles expire at fairly predictable times, it requires neither much imagination to consider making an auction's ending time less predictable, nor much computing skill to programme this randomness.

Maybe the IBM patent was just a mistake. The problem is that it is not easily rectified. I could challenge its validity. But why should I bother? The

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beneficiaries of a successful lawsuit would be all those who might wish to run auctions competing with IBM, and all those who would benefit from auctions being run at competitive prices; but only I would bear the costs of the suit.

Furthermore, under current US law, I probably could not contest the patent without first entering the market to run auctions in competition with IBM. But this might mean putting a substantial investment at risk. Maybe the judge would think that what Pepys described was sufficiently different, or perhaps he would decide that Pepys had priority for sales of second-hand warships but that IBM had a valid claim for auctions of all other products.

Even if I ultimately prevailed, I might be badly damaged if IBM could obtain a preliminary injunction. That is what happened when

Amazon.com patented "one-click shopping", an idea that some regard as less than startlingly inventive. Amazon obtained an injunction forcing Barnesandnoble.com, a competing online bookstore, to make consumers click twice for purchases, seriously damaging both Barnes & Noble's critical Christmas sales and its brand loyalty.

Rather than betting my business before the judge, perhaps I would agree to pay licence fees to IBM, just as Barnes & Noble reached a settlement with Amazon. Similarly, several companies have agreed to pay royalties to Priceline for its price-matching system, also arguably only a slight variation on centuries-old sales mechanisms. Why should I be the one to pay millions of dollars and risk my company to fight IBM's patent?

Patent creep also results from the difficulties for patent offices in handling new kinds of innovation. For example, the US granted a patent on the business method of charging higher prices on less price-sensitive goods, a technique well-known to economists and businessmen for generations, but apparently less familiar to patent examiners who are usually more expert in science and engineering.

The patent system is certainly not all bad, providing valuable incentives for innovation in many fields. But the lessons of the US experience are clear. As the European Union considers the proposed directive on the patentability of computer-implemented innovations, we should be cautious about moves that extend protection to business methods and software in Europe. We should make it easier to challenge patents and the US should harmonise its rules with Europe's, rather than the other way around.

*The writer is Edgeworth professor of economics at the University of Oxford, a member of the UK Competition Commission and author of Auctions: Theory and Practice (Princeton University Press). [www.paulklempere.org](http://www.paulklempere.org)*

## How US system might eliminate dubious patents

*From Prof Bronwyn Hall.*

Sir, In commenting on Paul Klemperer's article of March 2, Simon Mounteney (Letters, March 5) argues that we need not worry about patents such as that for International Business Machines' "smooth-finish" auction, because such doubtfully inventive patents can be challenged.

Mr Mounteney is technically correct that anyone can apply to the US patent office to have a patent re-examined. However, re-examination is a very narrow process with a presumption of validity that favours the patent and no allowance for back and forth argument between the parties, and would almost certainly not invalidate a patent based on an informal discussion of a similar auction in Samuel Pepys' 17th-century

diaries – even though Pepys' writing might cast serious doubt on whether IBM's innovation really is non-obvious.

Prof Klemperer is correct that challenging a US patent on the basis of anything other than the publication of essentially identical prior art is limited to those with a standing-to-sue, which would probably require making prior investment to compete with IBM in running auctions. In addition, any company contemplating such action would be unlikely to request a re-examination, since such an action would bar the presentation of the prior art in Pepys in any subsequent litigation.

My work with Stuart Graham, Dietmar Harhoff and David Mowery suggests that a more adversarial

system such as the opposition system in use at the European Patent Office might be more effective in eliminating doubtful patents that are obvious in the light of prior art that was not available to the patent examiner.

With respect to small companies and inventors, it is probably safe to say their usual reaction to the presence of such patents held by IBM will either be to avoid the area altogether or pay royalties rather than take a chance on litigation. The costs of litigation can be anywhere from \$1m to \$3m and up, which is a substantial deterrent.

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Tuesday March 16 2004

## Re-examination can be more useful than suggested

*From Mr Simon Mounteney.*

Sir, Prof Bronwyn H. Hall's criticism (Letters, March 11) of the mechanisms for attacking dubious US patents seems to me unjustified. The cost of patent litigation, particularly in the US, is a problem in that it deters small companies from challenging dubious patents. But where litigation is not a realistic prospect, re-examination can

be more useful than either Prof Paul Klemperer (March 2) or Prof Hall suggest.

While it is true that patent re-examination in the US has been narrow in the past, the procedures have recently been modified to allow so-called "third party re-examinations" that allow for substantially more input from the applicant.

It is even possible to view and respond to the patent holder's counter-arguments – the kind of back and forth argument that Prof Hall appears to suggest is unavailable.

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Wednesday March 24 2004

## Few take up fight over patents

*From Prof Bronwyn H. Hall.*

Sir, Simon Mounteney's reply (Letters, March 16) to my letter of March 12 (and Professor Paul Klemperer's article of March 2) concerning the US Patent Office re-examination procedures pointed out that the US Patent Office recently revised its re-examination procedure to allow more input from the applicant and argued that this should provide a lower-cost route for challenging dubious patents than litigation.

Although technically he is correct, take-up of this opportunity has been extremely low – there were just five such re-examination requests in 2000-02. In late 2002 the rules were further broadened but requests for *inter partes* re-examination are still only about 5 per cent of the total requests for re-examination, and these in turn are minimal compared to opposition requests in the European system.

The problem seems to be the US's estoppel provision that any prior art that could have been raised in such a proceeding is barred from use in subsequent litigation. It is interesting that the Intellectual Property Owners Association (the main intellectual property trade association) on March 16 endorsed removing formal estoppel provisions from the US re-examination system (see [www.ipo.org](http://www.ipo.org)).

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## No case for copyright extension

Sir, We are concerned about the sudden, and unexplained, change in the Government's position in relation to the proposed Copyright Term Extension for Sound Recordings.

In 2006 the Government received the recommendations of an independent and comprehensive review of intellectual property policy, commissioned by the Chancellor, then Gordon Brown. The review, led by Andrew Gowers, took "an evidence-based approach to its policy analysis", supplementing a formal call for evidence with commissioned external expertise. The review examined several extension options, including the increase to 70 years, and explicitly rejected an extension as being a bad deal for the UK in cultural and economic terms.

The Government clearly supported this view. What then occasions a sudden apparent volte-face two years later? We are not aware of any new evidence that has come to light, and the only independent study available since then, that of Professor Hugenholtz at the University of Amsterdam, has also been highly critical of extension.

There has been some talk of moral arguments for extension but it is hard to discern a compelling moral case for a proposal, the prime effect of which is to benefit major record label shareholders and a few, already highly successful, artists while imposing significantly greater costs on new creators, the general listening public and the custodians of our cultural heritage.

As Gowers concluded, and the Government has until now consistently reaffirmed, policymaking in this area should be evidence-based and designed to promote the broader welfare of society as a whole. Policies that appear to reflect nothing more than lobbying will only perpetuate the "marked lack of public legitimacy" that the Gowers report lamented — and discourage those who wish to contribute constructively to future government policymaking in these areas. We therefore call on the Government to present any evidence for this apparent change of policy.

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