

# Patents Are An Economic Absurdity

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## Warnings

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In particular, you are free to republish it as you like, although I'd appreciate being forewarned about that. The article itself is around 7700 words, plus bibliography; the introductory material on this page is around 1000 words.

In case you're reading a paper copy, this article (with working hypertext pointers throughout and in the bibliography) may be found at URL <http://fare.tunes.org/articles/patents.html>.

If you want me to continue writing it, feel free to send me encouragements, suggestions, money, whatever.

This article is the original one, in English; it is not a translation from french; up to my knowledge, it hasn't been translated to any other language yet.

Read more detailed [warnings](#) about my [articles](#).

*Faré*

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## Abstract

We show how patents and most particularly software patents, like all other forms of protectionism, are an absurd kind of government intervention the effects of which are opposite to its alleged rationale. We show that the net cost of such protectionism exceeds at least the double of the visible benefits it brings to a privileged class of protected industrialists and lawyers. We show that the alleged incentive to create is not justified in economics any more than in psychology or in technology. Finally, we explore the social consequences of patents on workers, which we find to be dreadful.

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## Foreword

The European Commission was having [a consultation](#) about whether to extend patent laws so that patents may cover software algorithms and business methods, as they can in the United States of America. [I am very worried](#) about the possibility of the EU adopting new laws that would strengthen the validity of patent claims over software, and think it is very important that software patents be weakened instead. I am a computer professional: computer user, software developer, scientific researcher and entrepreneur. In all aspects of my computer activities, I feel threatened by the possibility of an extension of patent law, and would much prefer reduction of patent applicability.

In the hope that it will help convince whoever may decide that patents are a bad idea that shouldn't be extended, and particularly not in the software industry, I wrote the below economic analysis of the issues at stake. I am familiar with both the computer technology businesses and political economics in general, and have held conferences on the subject, including [this one](#) (in French) at the [EURO92 institute](#) of economic studies.

Although I am not a professional economist, my analysis is as far as I know essentially the same as that of many economists who have studied the subject, including some I know personally like Henri Lepage or Bertrand Lemennicier. However, they didn't formally review this particular article, and neither did any professional economist, so I cannot claim their endorsement of it. Instead, if this article doesn't convince you, or worse, has a negative effect on your opinion, I invite you to read what professional economists wrote on this very same topic, or even to contact them. To this effect, see the [bibliography](#) at the end of this article.

Finally, I do not in any way represent the whole movement of people against software patents. In this movement are people who approve of patents in general except for software, people who think that patents are useful in some specific cases outside of the software industry but not in general, people without opinion on patents in general but against software patents, and people who oppose patents in general. As far as I know, most people in the movement against software patents

are in the third category "without an opinion in general", and most of the remaining are in the first two categories. As far as I know, the reason is that they don't have a clear understanding of how patents in general work or do not work, so they tend to accept the legitimacy of existing laws *a priori*, until proven incorrect. Such was also my opinion (or lack thereof) about patents, until I undertook to untangle the economic issues behind patents. I am now most definitely in the last category, *a posteriori*, after a lot of hard thought, the conclusion of which I'm presenting in the current document. I do not claim to represent anyone but myself, and I expect my arguments to be considered *a posteriori*, after pondering them, for what they are, good or bad, and not *a priori*, without pondering them, for the number or quality of people who back them.

This article was written between 2000-11-24 and 2000-12-13, before the end of the above-mentioned consultation. Thanks to John Tobey and Xavier Dudris Ferran for their feedback.

PS: I know that my writing style is much too emphatic. That's just the way I am. I will tell you what I think, and do it according to the way I feel it. I would like you to ponder separately these two issues of reason and feelings; please do not let the common or alien nature of my feelings with respect to yours alter your rational judgement on the issues at hand. I can but once again beg your pardon for the additional difficulty that my style might induce in your understanding the points (or hopefully not, the lack thereof) that I am trying to make with this article.

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## Macroeconomic Effects of Patents

### Patents are a Privilege, not Property

The essence of a Patent is a *de jure* monopoly: a total control on all activities related to some technique, device, or whatever is subject to the patent: use of a technique, experimentation with it, enhancement to it, technical support about it, etc. Such monopoly does not reside in a natural inability of other people to produce the same services without causing harm to someone. On the contrary it consists in a state-enforced prohibition for others to carry out activities in which they could otherwise engage most legitimately, without harming anyone, for the benefit of all concerned.

Such monopolies are not natural property: they are privileges granted by governments to a first claimer under the pretense of promoting creation of new techniques. Nobody can deny that patents are a privilege, rather than natural property. The [US constitution](#), Article I, Section 8, Clause 8, makes it explicit: "*The Congress shall have power [...] To promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries; [...]*". The State grants a time-limited privilege in as much as it hopes that this privilege will foster innovation. Thomas Jefferson, who co-originated this section of the US constitution, clearly explains it in some [letters of his correspondance](#).

Even disregarding the authority of the US founding fathers, it is clear that these monopolies are not legitimate property of patent holders: indeed, even the most extended patent laws acknowledge that freedom must ultimately (after a number of years) be returned to the public to freely use the patented technology. Legitimate

property would last forever, whereas patents last for a mostly arbitrary number of years that changes depending on the country, the date, and the whim of the legislator (and on the growing influence of patent lobbies on governments).

Patents are a privilege, the cost of which is borne by the public. Any economic account of patents that displays their alleged benefits without even considering their cost is a shameful lie; it is a disgrace that most people (and most legislators, too) are so easily fooled by the omnipresent protectionist propaganda of patent lobbies.

Thus we will be analyzing in more detail the benefits and costs of patents, and we will see if they balance each other, or if one exceeds the other.

## **First Order Effects of Patents: Monopoly Inefficiency**

Not only does the usual criticism of monopolies apply as regards the effects of patents, but the negative effects are tremendous in the case of software patents. Let me summarize the case against monopolies in general, then the case of patents more specifically, and finally the case of software patents in particular.

The fact that the net global effect of *de jure* monopolies over economy is negative is the first and foremost result in economics, both historically (see Turgot or Adam Smith in the Eighteenth Century) and conceptually (it is the fundamental principle that justifies free trade and the EEC). Monopolies have a beneficial effect on the monopolist, that is clearly seen, because it is focused. But this effect is achieved only at the cost of a *double* negative effect on both the consumers and the competitors, that is not seen, because it is scattered over a large population.

Indeed, the increased wealth of the monopoly does not magically appear; the only way a monopoly may enrich someone is by preventing someone else from proposing a competitive service. Non-competitive service need no monopoly to be excluded: the market (i.e. the consumers) will reject it because of its cost. Not only cannot this negative effect be denied: it is the very justification of monopoly, to begin with.

The double loss to the society at large is not a vain expression, but an exact figure, that can be accounted for, penny for penny: any gain by the monopolist *because of the monopoly* is a gain of what would have instead been paid by the consumer to a competitor for an equivalent service; but the only reason the consumer would go to a competitor is because the competitor offers equivalent service at lesser price, that is, because the competitor is overall more productive. Let us thus compare the net wealth in Europe with or without monopoly. With the monopoly, Europe is richer in a service S, at a cost X; Without the monopoly, Europe is richer in the same service S, at a lesser cost Y, with the difference  $R=X-Y$  being the monopoly rent. The net result of the monopoly is a loss of productivity equal to the monopoly rent. (Of course, there may be additional transfers of money between the consumer and producer above or below this rent, due to imperfection in the market; but these transfers do not increase or decrease the overall wealth of Europe; their net effect on the economy is null; moreover, similar imperfections exist no less in presence of monopolies; actually, a ternary effect of monopolies is to make these imperfections bigger by removing the free market price system as a source of information for resource management.)

So much for monopolies in general: their overall global effect is negative, in direct

proportion to the enrichment of those who benefit. Every single Euro won by the monopolist because of the monopoly is one Euro lost by the consumer plus another Euro lost in decreased productivity, totalling a net decrease of wealth of two Euros for the rest of society.

Again, this double negative effect of protectionism, monopolies, and other economic restrictions and prohibitions is perfectly known since at least 1830, as witnesses Free Trade literature of the Nineteenth Century. Acknowledgement that Free Trade is good for the economy as well as for peace is the very reason why Free Trade ultimately won, and why the EEC and now the EU are economically justified.

Now, let us consider the case of patents as a particular case of monopoly. Patents allegedly increase the wealth of a nation by creating an incentive for certain activities that would not be done without it. Let us examine what conditions need exist for such increase in wealth to arise; we'll see that these conditions are clearly not present in the case of software patents, and will even emit reservations as to their being gathered in other cases.

Once again, the incentive induced by patents is not magical. Patent law is not a magical spell that endowes people with a sudden inspiration to create. Any incentive it induces is in direct proportion to the economic gains it promises to would be patent holders. Now, we have seen that any gain earned by a holder because of his monopoly is in direct proportion to a double loss by other people, and thus a net loss to the economy at large equivalent to these gains. Any measure of the beneficial effects of patents for patent holders is also a measure of the detrimental effects of patents on European economy at large. A loss is the direct and primary effect of patents.

## **Second Order Effects of Patents: Disincentive and Misincentive**

There remains to determine if there are secondary effects, and if these secondary effects are worth the tremendous cost incurred by the primary effects. If we are to accept that the global incentive to innovate is proportionnal to the potential market earnings, then to the net decrease in wealth due to patent monopolies corresponds a net decrease in the overall incentive to innovate. Once again, the focused beneficial effects will be seen, while the distributed detrimental effects will not be seen; but the detrimental effects will be twice as big as the beneficial effects. You'll see a few overpaid researchers in a big monopolist structure, and you won't see the plenty of inventors that could not be paid by smaller businesses because of the decreased opportunities.

Any successful incentive to innovate that patents may foster leads to a new monopoly where everyone is disincented to innovate anymore, since competition is lessened. The incentive of patents is an incentive to find ways of earning money at destroying the global economy; it makes possible and encourages business models centered around rent-seeking and parasiting the economy at large, to the double detriment of the public, and against the global interest of society. Innovations will be incented not in direct proportion to their global social utility, but in direct proportion of their ability to generate monopoly rent and prevent subsequent social utility. It is the worst inventions that are most incented by the patent systems: those the patenting of which detracts the public most.

Unless it can be established that monopoly rent is in any way proportional (and with a positive rate) to the utility of secondary side effects of innovation, then the incentive induced as a secondary effect of patent monopolies will have no net positive effect to begin to balance the cost of these monopolies. But (as we'll see in section [Technological Consequences of Patents](#)), the marginal technological effect of patents at the second order are also dreadful.

The patent system is thus pure destruction of riches and prevention of innovation at both the first and second order.

### **Third Order Effects of Patents: Disorganization**

Thus, we are to look at tertiary effects of patents on the industry, to see if they lead to industrial organization that leads to better innovation. Since patent monopolies lead to large benefits at one place to the detriment of a doubly larger loss spread everywhere, it could be argued whether or not the induced concentration of money is a benefit or not to society. One point about rents is that since they are not the result of free market competition, the way they are spent is not subject to the direct feedback that maximizes the productivity with which they are spent, and thus they lead to decreased industrial efficiency, as opposed to the same amount of money being spent by the consumer in other free market activities; of course, it may happen that the monopolist is also wiser than average at spending his rent earnings, but in absence of economic feedback mechanism, he won't be on average; actually, he'll be much worse off, having no economic comparison with competition to base his R&D decisions upon. So the net statistical effect of patents on the organization of research is increased fragility of the economy in the case of failure of such an inflated player, since risks are higher and less spread.

As for the technical advancement of society, the concentration of benefits also concentrates in the monopolist the advantages of any enhancement or creative use of the patented technique. This means that any incentive to create derivative works will suddenly be decreased or even annulled, in proportion to the strength of the patent law, for everyone but the patent holder. All the knowledge, risks, and other factors involved in creation of derivative products now largely resides on the shoulders of the monopoly holder, with other people being discouraged in proportion of the license fees the holder may demand. Thus, patents are a clear disincentive to innovate anything that depends on a patent one doesn't hold. Patents, when they are successful to the holder, are also an incentive to prevent innovation in competitors, by means of pressure, lies, legal threats, and lobbying, so that they don't find a technique that would make the patent useless. The monopoly holder, being rich and influential thanks to his huge monopoly rent, is especially able to exert such strong hand practices, and to buy out the weakened competitor's technology so as to bury it, should this technology look like a real danger to them. In the end, since the monopoly holder faces decreased competition concerning the patented technique, it is unclear whether he himself will be incited to continue innovation; at least the market pressure for him to do so will be limited, and without much useful feedback, since the market won't be able to choose among as many marginal innovations.

This point is essential. It means that patents can have no beneficial tertiary effects at all that begin to compensate for tremendously negative primary and secondary effects, unless innovation is somehow "atomic", that is, if innovation in the field where patents apply never leads to further innovation, and conversely never

depends on previous innovation. In all other cases, patents will be detrimental to innovation for their whole duration. It is doubtful at best that innovation is thus "atomic" in any industry; it is doubtful that "atomic" innovations, when they exist, are of such value to society as to justify a system that has important detrimental effects on all other innovations. Actually, any "atomic" innovation might arguably be considered so worthless as not to deserve any protection: all interesting research starts as variants on an existing problem, and generates lots of new variants; the interest of the research only appears after these variants have been freely created and confronted, when the coverage of a lively community of freely exchanging scientists is such that a new point of view has emerged and been confirmed.

## Specific Effects of Software Patents: Junk

Finally, let us consider the particular case of *software* patents.

As a computer professional, I can certify that innovation is *never* atomic in the computer industry. On the contrary, computer software constantly and crucially depends on the ability to freely and quickly reuse, combine and evolve previous techniques.

In the age of interconnected computers, software plays an essential and ubiquitous role in the way computers, people, businesses, countries, etc., communicate with each other. Industrial property on software thus leads to monopoly lock-ins in the way people communicate. To computer professionals, software patents are as dreadful as if someone had patents on part of the English language (or whichever language they use). It prevents not only innovation, but the use of computers at all, and leads to proprietary systems from big monopolies that few can use, and that no one can innovate upon.

Patents induce such a technological stagnation in the computer industry that it is almost visible. Software engineers constantly curse the way they must conform to proprietary protocols that are not well documented (if at all), misdesigned (often with gross mistakes that peer review would have immediately eliminated), that they cannot improve upon, that exist in a wealth of gratuitously incompatible variants, and with which they must stay compatible for decades and decades. The field of computer development is thus filled with junk, that accumulates with time, and that no one has the right to clean, least he becomes incompatible with the others. Every patent on a successful software program or technique is an obstacle to the whole industry, that remains until it expires; even the holder, when he wants to improve his previous technique, finds himself faced with the inertia of a whole industry that adapted to his own junk, contorting either to interface to it, or to work around it.

Thus, the specific effect of patents in the software industry is to make software development and computer communication slower, more complex, more expensive. The amount of money, computer hardware, developer time, user time, etc., that is wasted and could be saved by removing protectionist barriers is so insanely high as to give vertigo to anyone.

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## Technological Consequences of Patents



## **Delays in Publication**

Patents were allegedly made to foster publication of inventions that would otherwise remain secret. But actually, patents result in scientific findings being published later, and in disuse of techniques that could not in any way remain secret.

Indeed, due to patent regulations, research centers will hesitate to publish results in ways that would prevent their patenting them. This particular problem is not intrinsic to the principle of patenting (that, as we saw, is dreadful enough without it), but is due to regulations that prevent patenting of previously published material. In such case, the patent system will actually delay (or even suppress) publication of material that would otherwise be published; the effects are such that some research centers will have a default policy of not publishing without complex approval processes, that leads to a disincentive for researchers to publish.

A bigger problem with patents, is that they will be used to prevent use of techniques that could easily be reverse-engineered. Indeed, industries can only take advantage of a technique by exploiting it; the patent system allegedly encourages such techniques to be published, so that they do not disappear with the inventor; but it is not possible to exploit a technique on a large scale, generating large revenues, without making it possible for competitors to reverse-engineer it. Thus, if a patent's extent in time is longer than the time it takes for a competitor to find a way to copy the technique, then the patent is a net technical loss to society (in addition to all its economic effects), since its effect will be to delay rather than speed up the free use of the technique by the public.

Considering the ever increasing speed at which techniques progress, patent duration should thus be ever decreased, until it is abolished, instead of being ever increased as it is today.

## **Technical Lock-in and Research Avoidance**

Once a patented technique is successfully spread, it creates incentives for a whole range of nasty behavior from the privilege holder, whereas other people are forced into passiveness, or strongly incited into it.

Successful patent monopolists, deriving lots of (socially destructive) revenues from their patents (which is the primary economic effect of protection), are incited into finding ways to secure these revenues. We have already covered part of this phenomenon in our analysis of secondary and tertiary economic effects of patents; let us now uncover the technical aspect of this rent-seeking behavior: the monopolist will try to accumulate new patents regularly, so that even when his original patent expires, he still has a monopoly on the modern form of the technique. At first glance, it looks like this will foster innovation, but then, the kind of innovation that is incited is not superior ways to use the technique, for the benefit of the public; it is ways to secure monopolistic revenues. This means that a large part of the research will be diverted from making things cheaper, simpler and better, into making them more expensive, more complex to interface to; the most wicked kind of "innovation" that this leads to is tricks that make customers prone to paying additional money for derived services that would otherwise be free if there were competition. With industrial protection, technology becomes a way to put consumers into shackles, instead of a way to free them.



Since the monopolist doesn't face technical competition within his technical domain, he will neglect domain-specific enhancements, and invest into marketing tricks that might extend his protected domain. This means that he'll have apparently more attractive products, that turn out not to be satisfying to people who actually use them (especially technically aware people). As compared to a free market in the same technical domain, this results in decreased quality, higher costs, and a lot of customers tricked into products that turn out not as good as promised: all in all, useless dissipation of wealth for the society at large.

Companies that hold patents will tend to fund research that depends on their existing patents, and to discard research that circumvents their patents. For instance, a cheap mechanism for blocking the AIDS virus that does not depend on patented molecules will find no funding from patent holders, because they won't be able to grab as enormous a share of profit with it. In the absence of patents, there would be no such incentive to avoid research; on the contrary, research laboratories would compete to find the best and cheapest technique, independently from any lock-in requirement. The net effect of patents on innovation is thus to divert it from useful innovation into harmful innovation.

## Redundant Developments

In the presence of information protectionism, every industry will develop its own secret or proprietary recipes. For every technique, you'll find tens of mutually incompatible programs that do essentially the same thing, but in subtly different ways, both so as to avoid industrial property disputes, and so as to try to capture a market monopoly. In as much as patents have "encouraged" any work, this work not only does not create riches, but destroys riches; it is the costly aspect of work that has been encouraged, whereas its productive aspect has been discouraged. This exactly matches the 1848 critique of protectionism by Bastiat in "[Les deux haches](#)" and "[Autre chose](#)" (in English "[The Two Hatchets](#)" and "[Something Else](#)").

This is particularly true in the software industry, where the same programs get written over and over and over, because they are covered by patents and copyrights; everyone ends up reimplementing things in a different way so as to avoid the neighbour's patent and copyright claims, yet has to go through very difficult routes so as to be compatible with proprietary software from other vendors. Protectionism generates a huge amount of useless work, with people both building barriers around themselves and digging holes to avoid other people's barriers in an immensely wasteful con game, instead of spending their forces at doing something productive.

In the case of software patents, this multiplication of redundant yet incompatible effort takes such gigantic proportions as to be the primary problem that overwhelms all the other sources of cost in software development.

## Technical Inertia and Dead Techniques

Many superior techniques are abandoned, because the overhead of paying a license and the unsafety of depending on a vendor's good will far outweigh the benefits of the technique.

In the computer industry, superior data formats or protocols have thus been abandoned, because their own patent protection was too drastic, and/or because

the market was locked by other patents into using incompatible techniques. The same superior techniques would without hesitation have been widespread if neither side of the technical exchange had to care about patents and the double lock-ins that they try to avoid from providers and impose to customers. The effect of patents in the spread of superior techniques is thus to slow it down considerably. Often, so considerably as to make them no longer financially viable for too small a monopolist to support, so that they will die, whereas they would have survived in a free market.

Ultimately, because of the above mentioned problems, or just because of the evolution of its own concerns, because of the random mishaps that any company ultimately faces, a vendor will kill a project, abandon a product line, etc. Patent monopolies then make it very difficult for anyone to take over such deceased product, all the more when it in turn depends on a complex net of third party patents, and the situation gets even worse when the demise of a company or department leads to plans being lost, to "industrial property" assets being disputed between creditors, former partners, etc. Considering the many years that patents take to expire (and the decades needed for software copyrights), it is such an eternity in the technological world as to mean that the technique will never be used again, being forgotten (or considered a legend) long before anyone has the right to use it again, even though the knowledge is still readily available, lively in the heads of original inventors, and just in reach of competing engineers.

As a result, the corresponding patented and copyrighted techniques suddenly fall into disuse. Even though their users were technically most satisfied with them, they suddenly have to migrate to different techniques, at a high cost, because they will not be able to find support and service anymore. Competitors, former employees, and even the original inventors, are prohibited from providing a valuable service that the privilege holder can't or won't provide anymore, but that could nevertheless create value and riches to both customers and inventors.

All in all, patent protection makes technical progress much less lively than it would be without it: superior techniques will have a lot more trouble spreading, and they can disappear for good without any chance of reappearing before an eternity.

## Negative Research

Even worse than the above, companies that hold a monopoly on a given domain thanks to a portfolio of patents will be incited to secure their monopoly by patenting useful techniques that could be used by competitors, not so as to exploit them, but so as to prevent them from ever being deployed. For instance, oil companies would hold patents on other sources of energy than oil (like alcohol made from crops), so as to prevent anyone from ever developing oil-less vehicles that would stop their milking billions of car-owners.

Research done not so as to deploy a technique, but so as to prevent its deployment, can be considered as *negative research*. Patenting, by definition, consists in preventing deployment of techniques (by non-holders), so it is always something negative done with research; but it is never as frankly so as when the holder conspicuously refuses (or proves unable, being himself prevented by other patents) to deploy the technique, making the patented research a pure loss to mankind. Of course, sometimes, and especially with government funding, research done with negative intent may lead to actually deployed techniques; but these techniques and

research will have been considerably slowed down in the mean time, being prohibited to most, and reserved to a sole privilege holder who isn't enthusiastic about risking himself in a technique that threatens his main business. And even then, you'll still face a patent monopoly, with all its costs.

What the patents amount to, in such cases, is clearly negative research: research done, at a cost, so as to prevent the public from benefitting from it, and to lock it into using inferior techniques.

## **Contradiction between Patents and Public Research**

This gets even worse when all that negative research is funded with public tax money.

Public research, contrarily to patents, is not an economic absurdity. Its first order effect is neutral, as a normal economic activity: some researchers get paid in exchange for finding new techniques and technical variants. It may be discussed in what circumstances its second order effects are positive or negative, which is a particular case of the question of where government intervention is or isn't useful in economic matters. Moreover, even without specific government funding of research, on a reserved budget, it may be argued that, in as much as public institutions exist, they have their own technological needs, and research is thus a legitimate way among other things to spend their resources so as to optimize their efficacy, within their own normal budget. Thus, from a political point of view, public research may or may not be positive, but let us repeat that from a strictly economic point of view, it is not an absurdity at all, and is even a very good idea, under some circumstances.

Now, things begin to get really bad when the result of public research is patented, as universities have recently been encouraged to do throughout Europe. I would go so far as to assert that patenting of public research is the greatest economic absurdity there can be.

Patents were meant as an indirect way to foster innovation; so far, we have found them to fail on this account. But even should they, by some magic, succeed in certain cases, it would be absurd to patent the results of public research: indeed, in the case of public research, the public has already paid for the research, through taxes, so it needn't pay for it a second time; the only result of the patent is the monopoly, that restricts the use of the technique that was paid for, and deprives the public from both the technique and from the monopoly rent. And of course, it would be absurd to assert that monopoly is necessary to ensure that the technique would be deployed, since more competitors, as prohibited by the monopoly, could only mean more deployment of the technique (and if no third party wants to deploy it, there's no need to grant a monopoly to the first-come industrialist so that he may remain the sole exploiter of it).

The patent is absolutely no incremental encouragement to innovate for public research, since the encouragement was already completely given as public funds; but the patent will still have its detrimental effects on the public, and its limiting effects on the use of the discovered technique. Patents issued from public research is proactively negative research; it is citizens paying to be oppressed rather than to be freed.

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## **Social Consequences of Patents**

The consequences of intellectual property monopolies are dreadful. Every single europenny earned by the privileged industrialists is paid twice by the public which is deprived from its rights to benefit from competition.

### **Difficulties for Inventors**

Patents were allegedly instituted to protect inventors. But their actual effect is to make it more difficult for inventors to find investors, and to put them in a lesser situation when they found them.

Let us examine the case of free-lance inventors. Once again, the one directly protected by a patent is the patent-holding industrialist or monopolist. So as to directly benefit from a patent, the inventor will have to turn himself into an industrialist, which might be difficult for him, since entrepreneurship and invention are quite different (although not incompatible) avocations. This difficulty in itself is already a source of economic inefficiency that is caused by the patent system. Assuming he is able to have this double proficiency, or to ally himself with people who do, the inventor will have to spend weeks, months, years, and several tens of thousands of Euros in registering a patent. This non-negligible amount of time and money could very well have been used to begin production instead, providing the inventor with an appreciable edge with respect to competition; but instead, it will be wasted in non-productive activities. In the end, the inventor will have a paper that does not protect him much, since the acceptance by the patent office, despite its huge cost, is no guarantee, and he will have to spend millions in legal battles, should he want to actually defend it. All in all, small inventors, who are tricked by patent lawyers into registering patents, pay a lot for little. It is unclear whether the inventor actually gains anything, but it is very clear that the net economic effect of it all is a huge waste.

Now, should the inventor be afraid of going free-lance, he will have to find investors or industrialists or monopolists, who will develop his technique and/or fund its further developments. And then, after some company acquires his original patent, he shares the same fate as other researching employees.

### **Indenture of Employees**

Consider the consequences on employees, including inventors among them: Employees who develop proficiencies the application of which depend on patents find themselves suddenly undervalued in the labour market. Indeed, patents reduce the number of potential employers, since only license holders may take advantage of these proficiencies. Thus the market for these proficiencies is artificially reduced, and the employee is thus forced to accept lower wages and work under worse conditions. They find themselves indentured to patent holders.

Again, patent monopolies do not protect inventors, but industrialists (and not even the real industrialist, but actually the monopoly holder); so that if the inventor, researcher, or software developer, gets any professional, intellectual, sentimental, or other attach to his creation, if he has any ideas about it he wants to express, then he has to stay with his current employer. Should he leave, he'd leave years of personal investment behind. Should his employer go bankrupt, should his project

be cancelled by his management, or otherwise join the ranks of dead techniques (see [thus-named section](#) above), then his years of proficiencies are suddenly worth nothing; even though he knows how he could leverage them, he doesn't have the right to do it. Employee inventors do not directly benefit from patents (the famous transistor patent earned its inventors one symbolic dollar from the company they worked for); but they are directly oppressed by them.

This indenture of employees to privilege holders means reduced mobility for employees in general, and thus a more expensive and less efficient job market. In the end, the companies themselves will have to pay higher wages for less adapted employees. Everyone loses with patents.

## **Loss of Liberty to Customers**

The consequences to customers are just as dreadful. Since they will face reduced competition, they will have to pay more, will be provided services of lower quality. This economic aspect has been discussed at length above, so let us just be reminded that the customer, in the end, is the one who pays for all the economic inefficiencies created by patents. But this is not all there is to it, and we can detail the social aspect.

Because of monopolies, customers won't be able to influence the direction in which services evolve by differential purchase. In a free market, they will purchase the products that suit them best, and industrialists will have to compete in innovation so as to keep ahead one of another. Presented with a large choice of providers in every domain, customers will be able to buy from whichever source fulfills their needs best, being thus able to influence the evolution of techniques, by signalling their tastes to producers. In the end, a free market allows for services finely tuned to the tastes of customers. But this does not happen at all in presence of patent monopolies.

With industrial protectionism, innovation is no longer consumer-driven, but producer-driven. The evolution of any product line resides on the shoulders of a one monopolistic provider. A consumer cannot compare between providers and choose one that suits him better. Even assuming this provider is devoted to the public, and doesn't try any trick as he might be incited to do, as described in the [above section](#) about technical lock-ins, assuming there is never a conflict of interest between him and the public in which he could and would use his monopoly to resolve the issue to the detriment of the public, the monopolistic producer will still have less information available to know the public's taste than would a free market producer. Thus, the risks for the customers are high that, even in good faith, the monopolistic producer will lead the whole industry into quite suboptimal (or sometimes catastrophic) choices.

The overall result, for customers, is thus not only bad quality of services and high prices, but less liberty in choice of technological solutions, and thus solutions that are less adapted to their needs.

## **Disappearing Services**

In a free market, when a consumer has precise tastes that no producer fulfills or specific needs or problems that require incremental technical development, he may spend the proper amount of money to have a taylor-made solution at competitive

price by some service provider within the free market. This concerns casual users who will have a "bug" fixed, as well as large industries that will develop custom solutions.

Now, in presence of industrial protectionism, should the consumer have precise tastes, he has only one service provider to contact. If the monopolist refuses to make the specific modification, asks insane amounts of money for it, or is unable to come up with a satisfying solution within an acceptable delay, the consumer has absolutely no recourse. Well, actually, if the customer is rich enough, he may purchase the whole monopolist provider, but then again the price of the provider is inflated by the monopoly power.

In the software industry, there is a particularly great demand for fixing bugs and customizing software, and the limitations and price increases due to industrial protection are greatly harmful to corporate customers, whereas they prevent the very appearance of a servicing industry for private customers.

The effect of protectionism is to prevent these services from being exchanged. Customers won't find satisfaction. Riches that could be created will not be. Service industries that could have prospered will fail to exist. This is a great damage to the economy at large, but this damage is not visible, because it consists precisely in things that do not happen. Monopolists will boast about the things that happen, but no one can mourn the things that did not happen because of them, even though this invisible damage largely exceeds the visible benefits. Monopolists will thus use the riches they show to have governments extend their monopolies over and over again, while customers mumble, curse, and get used to their dissatisfaction, and potential service providers have to accept indenture to the monopolist, or to seek a job in a different industry so as to survive.

### **The Absurdity of "Defensive" Patents**

Even industrialists who don't want to play the foul game of patent monopolies, find themselves incited to file "defensive" patents, so as to prevent their being sued by monopolist competitors. The principle of defensive patents is that in case an industrialist is attacked by some patent holder, he'll himself have some patents so he can trade licenses with the attacker, and no one has to pay anything. Industrialists thus enter cross-license agreements about patented techniques.

What this all amounts to is a tremendous dissipation of forces by industrialists into unproductive legal matters, risks of legal procedures, ways around them, and management hassles caused by them or the fear of them. Some companies are known to have paid quite a high price for this: they have gone bankrupt on patent litigation, and even, in some cases, on litigation for patents that have later been found to be invalid.

But this waste doesn't stop here. Such networks of cross-licenses between industrialists already present in a sector serve as a way to exclude competition from newcomers. This makes it much more risky to invest in the industry, and makes things more difficult for beginning inventors, entrepreneurs, etc. Even without monopolies, this creates oligopolies that share some rent to the detriment of the public: all the negative effects described above still exist, albeit in a reduced way.

The patent system thus induces a lot of lose-lose situations for everyone, even for

those who otherwise want to play fair. The purpose of law in general is to reduce conflicts within society. Here, we have laws that create artificial conflicts that wouldn't otherwise exist; companies resort to private contracts so as to eliminate these conflicts, but even then, the mere potentiality of these conflicts is detrimental to all.

## **Fostering a Class of Parasites**

If the patent system is thus detrimental to everyone, why does it survive? What are the forces that keep it in place? It is the greed of a whole class of parasites who have learnt to extract a rent out of this dreadful institution.

We have already lengthily discussed the case of big monopolist firms, specialized in patent rent, that accumulate thousands of patents to secure some industrial monopolies or oligopolies, and then milk the public. Such companies can use their huge earnings to lobby governments, by explaining how their impressive corporations would suffer from lack of patent protection, without showing how the public and the competition have paid doubly all these gigantic earnings, with an equivalent amount of riches being completely wasted, together with a loss of liberty to the public. This is a typical case of ["what is seen and what is not seen"](#), with the protection lobbyists showing the positive side of protectionism while diverting the attention from the flip side, the negative effects of which are huger, but spread over the whole population.

These monopolists have accomplices, who are the lawyers and officers specialized in selling patents, this government-sanctioned protectionist snake oil. These lawyers and officers are the infrastructure that makes the whole system stand.

As with any law, apart from the economic effects (that we showed were dreadful), there are administrative costs: the cost of the patent administration, the cost of cost law enforcement institutions, the cost of judicial procedures, the cost of advisors who avoid judicial procedures. Such costs are implied by any law, and exist in addition of any positive or negative effects of the law as such; even a law that looks "economically neutral" on face value will actually be a economically detrimental law, once the enforcement costs are considered. This is why no law should be passed unless it is certain that this law is necessary, or at least immensely beneficial; This is also why the burden of the proof should always be on the proponents of more public institutions and more governmental privileges.

Things are even worse since patent officers and industrial property lawyers themselves benefit from "protection" in their activities, which again means that the public will have to pay more for less. Patent officers have a government monopoly on filing patents; all they do mostly is put a seal on a document and be done with it, but it costs a dreadful lot. They are meant to do some prior art verification, but it is mostly limited to the patent database, and has little value in a court litigation, since most prior works were not patented, but published in technical journals, conferences, or even just commercialized without formal publication; for these reasons, the patent office issues patents "without guarantee of the government". One may wonder what good the patent office serves. The registration monopoly is completely unnecessary, even considering patent laws. Even assuming patent laws, there could be competing registration offices. If industrial property were anything like a natural right, inventors should be able to file their patents by publishing their invention in just any large enough journal, such that anyone may see it, with the



invention declaration itself being freely copyable, and written in technical language understandable by any technician instead of legalese. This would encourage people to publish sooner instead of later and completely remove publication delays due to the current patent system (since many laboratories will currently delay publication because of some actual or potential patent filing procedure). It would dispel the false belief in the worthless official seal of a patent, that iniquitously biases court decisions towards registered patents, even though their claim may be ridiculous. It would thus move the burden of proving patent validity where it is due: to the litigator, making for a saner and safer judicial system. Finally, it would encourage value-added registration authorities that would actually provide (limited) financial or legal guarantees at competitive rates according to meaningful prior art research.

IP lawyers have also captured a share of the patent racket by being necessary intermediates in registering and defending a patent: they will translate technical claims into obscure legalese that will confuse the patent reviewers and jurors alike, and induce fear into people who are demanded license fees; they will instill a climate of fear in the industry, encouraging companies to play the game of monopoly, threatening innocent entrepreneurs into paying licenses, using the strong bias of juries toward officially sanctioned patents, suing over patent claims of dubious technical value, inciting even honest industrialists into registering "defensive" patents. But they provide no more of a guarantee, and are paid flat rate. It can be argued that if some class of people most certainly benefits from patent laws, it is industrial property lawyers. Industrials have to fight each other with their patents, a few among them becoming monopolies, most perishing, some trying to play fair, all paying IP lawyers. In any particular case, lawyers may play opposite roles to each other, but they all play the same play, and win both ways. The industrialists play patent roulette, some win, most lose. The IP lawyers are the croupiers who collect the stakes; in the average, IP lawyers win while industrialists lose (unless they actually become firms specialized in monopoly rent, with a big legal department); and in the meantime, all this energy is wasted.

The members of these parasite institutions are destroyers of riches. Even though they claim they do a profitable job (to themselves at least), even though they increase (meaningless) statistics of patent registrations that provide a false measure of "innovation", even though they participate in huge economic transactions (levy of patent protection racket), even though they work at preventing and resolving legal conflicts (that they created to begin with), their role is to run a machine that harms the economy and slows down innovation. Yet, as part of the public administration and the legal system, as coeducated with the legal staff who redact laws, as rich people who can afford socializing in the high spheres of power, as allies of the few immensely powerful companies that feed on monopoly rent, patent officers and lawyers are near the ear of the politicians who vote laws. At the same time, the victims are disorganized, scattered, made poorer by the monopoly, each with but a small individual interest in the large common cause. It is thus no surprise that parasites can easily influence political decisions towards their interest, to the detriment of the public.

This is not the least danger of patent laws. Like all protectionist laws, patent laws are a great danger to the public: for even if a little bit of protection ever were beneficial, the mere existence of such powerful lobbies as created by this protection will incite politicians into voting more and more protection, until it gets out of proportion, and becomes a huge system of legal plunder.

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## Conclusion

The EC now EU was created to promote free markets within Europe, to remove the barriers to free enterprise, so that Europe would become a peaceful place where industry can grow and prosper and people can be free. Patents are the very essence of what the EU and the EC were created to fight: protectionism.

Historically, economically, philosophically, morally, technically, psychologically, socially, patents are but privileges that have no justification. They are harmful to the public at large, as customers, workers and investors alike.

Like all political frauds, patents are based on showing large benefits that are seen for a few, visible because of the focus, without showing the immense costs for everyone, that largely surpass the benefits, but are not seen because they are spread over so many people.

The EU should not extend protectionist patent laws so as to cover software. On the contrary, it should free the industry from the protectionist barriers of patents, and from the parasitism of industrial property lawyers.

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## Post Scriptum

One of the official justifications for patents is that patents would encourage inventors to publish their techniques instead of keeping them secret, so the inventions won't disappear with them. After any kind of rational examination, this justification appears as completely bogus. If secrecy were a working method to ensure an indefinite monopoly on a technique, and the monopoly were the prime motivator of inventors, then inventors would certainly *not* publish in exchange of a patent that gave them a monopoly for only a few years, when they could have an indefinite monopoly by not publishing! More generally, the patent system is only meaningful when reverse-engineering would otherwise allow the invention to be universally deployed despite attempts to preserve secrecy. Thus, the technical effect of the patent system is always to slow down the way inventions are spread, never to speed it up!

There remains the problem of secrecy and its enforcement. That's precisely what non-disclosure agreements and exclusivity contracts are about, and it is very important that companies and individuals be able to sign such contracts and be bound by them. The essential difference between contract-based secrecy and "intellectual property" is that a contract only binds contractants. Hence the enforcement costs are born by the set of contracting parties who share the secrets (and it is sure that the benefits are properly shared among them -- otherwise, they wouldn't sign up), not by the public that is excluded from this secret. Not only is this "owner pays property enforcement" principle an elementary principle of justice, it is also an essential principle of economically sound law, to prevent negative externalities in enforcement costs. Indeed, with intellectual property, the privileged parties are the one who receive the benefits of monopoly enforcement, whereas everyone else bears the costs: potential customers and competitors as well as taxpayers. Thus, the predictable and observable effect of intellectual property is that we see a strong lobby of privilege holders and rent-seekers that

will use the strength of its current and expected future privilege money to push toward extending ever more the privileges and their enforcement costs, way beyond any possible positive effects of the monopoly (if they exist at all) since they get to receive all the relatively small but concentrated benefits, while others get to pay the huge but very decentralized bill.

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