



OPINION

Limited Incontestability for Small-firm Patents

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 Keywords to Follow

Introduction

It is well known that European small- and medium-sized enterprises (“SMEs”) are far less innovative than their counterparts in the United States. In that country, firms with no more than 500 employees (most with less than 50) receive less than 4 per cent of federal support for research, yet they have been found to produce more than half of the innovations and get close to two-fifths of all patents.¹

There is a new development which should cause even more concern in Europe. The best measure of SME technological competitiveness is the number of US patents obtained by firms of this kind in foreign countries. Only the inventions that are subjectively considered to be the best in any country will have patents applied for in the United States, and every granted patent will have been through the same examining process—so that in international comparisons, like is genuinely being compared with like. In 1994, Taiwanese small firms obtained 44 per cent as many US patents as small firms in the 25 countries of the European Union combined; by 2003, the proportion was 73 per cent. Consequently, by this criterion and this trend, a single far Eastern country on its own must now be close to overhauling the whole of Europe.²

It makes sense for SMEs to avoid innovation

The starting point for any response to this concern must be that innovation can only take place to the extent that there is protection for the results of risky investment in generating information. Present arrangements simply do not deliver this. The international intellectual property system as it exists at present is designed for the economic advantage of large firms from the United States, not for that of European SMEs. Limiting consideration to patents, the present law in all our countries is substantially that of the 1952 US Act, which was written in a hurry to enable that country’s pharmaceutical industry handle the antibiotic revolution.³ It has been incapable of developing organically to deliver appropriate protection for other industries, other kinds of information and new ways of inventing.

This applies to efforts to innovate by European firms of all sizes. But for SMEs, there is additionally the great fear of *enforcement* costs. A patent which cannot be enforced is no more than a worthless piece of paper. Empirical research has shown that one of the strongest deterrents to innovation by such firms is that their owners and managers are aware of this—many having learned the hard way through experiencing the costs of litigation, as an EU-sponsored report showed.⁴

The same research also revealed how far large firms routinely intimidate smaller ones by holding the threat of such costs over them. There are numerous stratagems open to a financially strong opponent to increase an

* This is an extended version of the author’s paper at the EU/EPO Patinova Conference, 2005.

References without an author name are to his own articles.

1 *The State of Small Business: A Report of the President* (US Government Printing Office, Washington, D.C., 1997).

2 Statistics from special tabulations provided by the US Patent and Trademark Office for *Patents and the Measurement of International Technological Competitiveness* (Edward Elgar Publishers, forthcoming 2006).

3 See “Antibiotics, invention and innovation” (2000) 29(6) *Research Policy* 679–710.

4 *Enforcing Small Firms’ Patent Rights* (2001) available at www.cordis.lu.

SME's litigation costs in terms of time and effort as well as money.⁵ In the EU report just cited, intimidation was found to be *the rule* in the United States, and it was found that *every single* European-owned SME patent that was of any value was infringed, with only very rare owners having the resources to do anything about it.

In common law countries where losers have to bear a winner's legal costs, a large firm may even be able to prevent litigation from getting under way at all by asking the court to require their opponent to provide security for any costs which may be awarded against it, which an SME is likely to find it impossible to do. Nor is there contingency fee support in Europe, in contrast to the situation in the United States. Lawyers there are allowed to take cases on the basis that their client does not have to pay them, but if they win, they receive a large share of whatever damages may be awarded, 40 per cent being typical and a 50–50 split not uncommon, especially if there is an appeal. Some competent legal practices specialise in this kind of work. As well as this, courts can and do award triple damages for *deliberate* infringement. Because of such provisions, an SME patentee with a good case has a much better chance of getting it to and through the courts in the United States than in Europe.

SMEs better off without any patent system at all

SME owners/managers are not fools, and are well able to weigh all this up and come to the perfectly rational decision *not* to try to innovate on the basis of a flawed patent system. Similarly, the rational decision for venture capitalists is to avoid investing where the only protection a project has is a patent. The net earnings of the small number of SME inventions that are financially successful are surely less than all the costs of the vast majority that earn nothing. And this does not take into account the huge waste of one of society's most valuable and scarcest resources—inventive and innovative creativity.⁶

One definition of innovation is “the imagined, deemed possible”, and the managers of SMEs, especially if they are owner-managers, have more freedom to imagine than employees of large firms, which is an important reason why SMEs have so much potential for innovation. It is also true that the imagination of those who run such firms may push them towards financial decisions which are not strictly rational, and this is why we get as many attempts to innovate by smaller firms as we do.

In the venture capital industry in the United States it is accepted the bulk of the very first money that is put behind a new business project, which has to be invested under uncertainty, not even risk, comes from “founders, family and fools”. But even if the owner-managers of SMEs are sometimes ready to take an investment decision that is not completely rational, those to whom they look for their next tranche of capital can never do so. Professional investors can only stay in business by taking decisions on a basis of calculable risks which they try to diversify away through their portfolio. The enormous success of the public SME support programmes in the United States is because they are specifically geared towards eliminating the uncertainty from promising projects so as to bring these to the stage where they can be seriously considered by venture capitalists on a basis of assessed risk.

The blunt truth, then, is that it would be better for European technology-focused SMEs if the patent system did not exist at all, and none of the present proposals of the European Commission will be able to change this. One of the arguments made for the Community patent, for example, has been that it could reduce patenting costs. But these are trivial in comparison with the expense of enforcing a patent if it is infringed. Even if a unitary patent for the EU ever becomes a reality, its contribution to European SME

⁵ Mark Schankerman and Jean Lanjouw, “Protecting Intellectual Property Rights: Are Small Firms Handicapped?” (April 2004) *Journal of Law and Economics* 45–74.

⁶ e.g. the inventor and innovator James Dyson's damages for infringement by Hoover, although large, did not remotely compensate him for the distraction from what he could do best in the public's interest.

innovation can only be marginal, and SMEs would continue to have to face much bigger problems than just the cost of obtaining patents.

How to stimulate SME innovatory power

What all this adds up to is that we are clearly failing to get an enormous amount of innovation because the protection available to SMEs does not justify them in risking energy and money in research, and particularly in development. They have no reassurance that if they achieve technical success, they will be able to prevent copying by firms with far more resources for obstructing them through litigation than they have.

If we want more innovation from such firms, therefore, our task is simple: we have to make decisions to invest in innovation more rational for them, and one promising way of doing this is to discriminate in favour of their patents. Europeans are free to improve their intellectual property laws in ways that are not open as easily to the United States, because of restrictions imposed by Art.1.8 in that country's Constitution.⁷ Compulsory technical arbitration of all disputes⁸ and bringing a financial dimension into measurement of grants⁹ hold out great promise for enabling all sizes of firms to innovate. Pending these, the patent system could easily be modified in ways which would discriminate positively in favour of SMEs. There is an overwhelmingly strong case for such discrimination, on the ground of the special ability of smaller firms to contribute to invention and the earlier stages of innovation.

Indeed, there are already precedents for discriminating in just this way, in the US patent law itself. For example, "small entities"—SMEs, individuals and "not for profit" bodies such as universities—are given a 50 per cent discount on all Patent Office fees. Under the "national treatment" provision of the Paris Convention, of course, this privilege also has to be extended to applicants from other Convention countries, and about 4,000 new patents from the European Union benefit from it in a typical year.¹⁰

"Orphan" drug legislation

But by far the most important US initiative which could be copied in the interest of European SMEs has not come from the Patent Office. It is the initial period of incontestability in the Orphan Drug Act of 1983. The background to this is that there are numerous disorders ("orphan diseases") which affect too few people to justify the investment which large drug firms have to make to produce a profitable product under present arrangements—including the patents that protect them. This Act empowered the Food and Drug Administration ("FDA") to fill this gap by offering to any firm which produced a relevant drug an undertaking that it would not license a competitor for seven years. Since no drug can be sold without an FDA licence, this is an effective monopoly, offering much better protection than a patent, with no danger of its being contested.

The results from this have been spectacularly successful, including a *twelvefold* annual increase in new "orphan" drugs, with both actual and relative declines in death rates from the diseases they treat.¹¹ We can be certain, therefore, that before that Act, the potential for innovation of drugs of this kind was not being exploited because the arrangements for protecting the results of the risky investment needed to do this—predominantly patents—were not considered to hold out enough prospect of profit. In contrast, the protection offered by the Orphan Drug Act is certain, complete, and carries no danger of litigation costs. The benefits could not

⁷ "Intellectual Property's Problems: How Far is the U.S. Constitution to Blame?" (2002) 4 *Intellectual Property Quarterly* 315–341.

⁸ "Compulsory Arbitration—Empirical Evidence" [2000] E.I.P.R. 154–158.

⁹ "Intellectual Property Needs Help from Accounting" [2002] E.I.P.R. 508–515.

¹⁰ Figures from the US Patent and Trademark Office. See fn.2 above.

¹¹ Henry Grabowski, "Increasing R&D Incentives for Neglected Diseases: Lessons from the Orphan Drug Act", in *International Public Goods and Transfer of Technology under a Globalized Intellectual Property Regime* (Keith E. Maskus and Jerome H. Reichman ed., Cambridge University Press, 2005), pp.457–480.

be clearer, nor could the lesson that can be drawn from them: appropriate protection results in more innovation.

Easily copied for SME patents

If such a remarkable improvement can be achieved in an area where patents work best (because, as noted earlier, their present form was specifically designed to protect pharmaceutical inventions) how much greater must the untapped potential be in areas where patents work badly or not at all? Specifically, could the model not be transferred easily to the present patent system to do for European SME innovation what a limited period of incontestability has done in the United States for orphan drugs?

What would it mean to offer incontestability (say for seven years, as for the orphan drugs?) to any patent owned by an SME? When infringement is claimed, the usual response of an infringer is that the patent is invalid, but this defence, with all the extra costs in litigation which instantly follow from it for the patentee, would then be denied to infringers during the earlier stages of exploiting an invention. The only issue for a court to decide when a patentee filed a claim for injunctive relief or damages during this period, would be the simple one of “is what is disclosed in this patent infringed or not?”

The implications for injunctive relief are especially important for SMEs. If they cannot stop an infringer in his tracks, their patent has become effectively worthless, because the infringer can then get the great advantage of lead time in the market. This is an alternative means of protecting innovation which is in any event widely preferred to patents by businessmen.¹² Moreover, in some jurisdictions, if a patentee does obtain an injunction, but loses the subsequent trial, he can be liable for the damage the injunction has caused to the other party. It is obvious what a great deterrent this is to an SME patentee in seeking what he sees as his rights, through the court process. But with a period of incontestability, injunctions would be much easier to obtain (because the court would start from the position that the patent was valid) and for the same reason it would also become more difficult to claim that damage had ensued as a result of them.

Potential for a flood of innovations

Removal of fear of litigation during this first stage of a patent's exploitation would consequently make investment in R&D more rational for the owners/managers of SMEs, and would also make their projects much more attractive to venture capitalists. Eliminating the threat of intimidation could lead to a flood of innovations—indeed, why should the positive results for innovation not be a large multiple of what we have at present, on the precedent of the twelvefold increase delivered by the Orphan Drug Act?

Moreover, although large firms would not be eligible for a period of incontestability for their own patents, they would still benefit significantly. The first reason is that when arm's-length subcontracting is combined with effective intellectual property in the hands of subcontractors, product improvements and quicker diffusion of their innovations have been shown to result for *both* parties to the contract.¹³ The proposed improvement would multiply the opportunities for large firm subcontracting to SMEs. Secondly, since these smaller firms will be stimulated to produce more inventions, these will be available to be taken up by larger firms when the balance of their respective resources for an appropriate scale of manufacture and marketing justifies it. This would both reduce the lag in Europe's large-firm innovation relative to other countries and provide money for further SME research and development, leading to a virtuous circle.

¹² W. Cohen, R. Nelson and J. Walsh, “Appropriability mechanisms: use and change over time”, paper presented to the Swedish International Symposium on Law, Economics and Intellectual Property, Gothenburg, June 26–30, 2000. See also their Working Paper Series 7552, National Bureau of Economic Research, Cambridge, MA.

¹³ Ashish Aurora and Robert P. Merges, “Specialized supply firms, property rights and firm boundaries” (2004) 13(3) *Industrial and Corporate Change* 451–475.

The legality of the proposed change

Three international agreements have a bearing on this proposal, the European Patent Convention (“EPC”), the Paris Convention, and the TRIPs Annex to the World Trade Agreement. According to the EPC, the conditions which apply to any European patent in a designated state are those of that state’s national patents, and the case law on this is perfectly clear. The Paris Convention includes a provision which is positively encouraging. This is Art. 19:

“The countries of the Union reserve the right to make separately between themselves special agreements for the protection of industrial property, in so far as these agreements do not contravene the provisions of this Convention.”

The only relevant provision of the Convention in this case is that of “national treatment”. As for TRIPs, this does no more than establish “*minimum* levels of protection that each government has to give to the intellectual property of fellow WTO members”. Consequently, it has nothing to say about anything *extra* such as proposed.

From all three sets of rules, then, national treatment is the only apparent restriction, and it is not a serious one. There seems to be nothing to prevent a group of countries from agreeing among themselves to give a period of incontestability to any European patent issued to their SMEs as long as they offer this also to SMEs in the other countries entitled to “national treatment” from them under the Paris Convention. This in fact is just what the United States has done with its fee concessions to “small entities”, as noted earlier.

Putting this proposal into effect offers a new and genuinely positive role for the national patent offices, which have needed one since the European Patent Office took over so much of their business. Regrettably, some of them have even been spending the large subsidy they receive from European patent renewal fees in trying to generate more patenting of a kind which is intrinsically incapable of leading to more innovation.¹⁴ The EU has now provided them with a forum for co-operation by funding a new network within which they can meet regularly. Bringing about the change would not require a diplomatic conference, nor would it require any funding, and it would be exactly the kind of “subsidiarity” which the EU claims to foster. Once a start had been made, even by a small group of countries, it would be reasonable to expect that other member countries of the European Patent Convention, and of the Paris Convention itself, would quickly follow them, because of the advantages a period of incontestability would confer on their own SMEs.

“The best is the enemy of the good”

After the publication of the EU study *Enforcing Small Firms’ Patent Rights*, a dynamic group of SME inventors in the United Kingdom tried to get a guarantee of validity from the Patent Office for the patents it issued. This was refused on the ground that search and grant are inevitably subject to human fallibility, although new arrangements for a Patent Office review of validity were put in place in the new Act in 2004.¹⁵ These are not of a kind that would be likely to deter a predatory infringer. The ideal, which of course is a perfect search carried out by an omniscient examiner, is impossible of achievement.

What we have here, then, is a classic case of the principle that “the best is the enemy of the good”. Although the “best” is out of our reach, Patent Office practices are actually effective enough to ensure that only very few patents are invalid. This is especially the case for European patents because of the opposition procedure. Yet for the sake of this trivial number many valid patents issued to SMEs are made virtually worthless because of the cost of enforcing them. It is time to stop paying such an absurdly high price for this “doctrinal purity” of the patent system. The large positive benefits

¹⁴ “What Role Now for European National Patent Offices?” [2003] E.I.P.R. 289–291.

¹⁵ s.13 of the Patents Act 2004.

of much more innovation could be achieved if we were to settle for the practical “good”, instead of the notional “best”. All that this would require is accepting that in some very rare cases competition could be limited *temporarily* when it should be free.

A further benefit of a period of incontestability is that it would force firms, especially SMEs, to monitor published patent specifications in their own interest, lest they be faced with a temporarily incontestable grant to a competitor through failing to file opposition at the appropriate time. It is well known that such specifications are a resource for the generation of new ideas which is greatly underutilised, so that more attention to it could be expected to produce more innovation.

Researching the proposal

The apparent advantages of this proposal for SMEs are so considerable that some resources to investigate it are being provided from the Research Fund of the European Patent Office. The basic approach of this research is to find out if and how the history of the inventions claimed in all SME European patents granted in 1997 would have been different if the patents had been incontestable during the seven years to 2004. In addition to this, as many views as possible about the usefulness or otherwise of the change proposed will be obtained from national patent and trade mark organisations, individual patent agents and lawyers, judges with intellectual property experience, venture capital sources, large innovating firms and public industrial development agencies in each country which was a member of the EPC in 1997.

Conclusion

So far from providing an incentive for SME innovation, the present patent system actually harms it by purporting to offer protection which it cannot deliver. The SME owners and managers with most capacity for innovation know this, and are rightly deterred from innovating, mainly by the costs of defending any patents they might obtain. A limited period of incontestability for SME patents, on the model of the highly successful Orphan Drug legislation in the United States, appears to have useful potential as a remedy.

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