

Improving Patents for Smaller Firms: Insurance, Incontestability, Arbitration?

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U European patents; Small businesses

INTRODUCTION

Two research projects concerned with protecting the patents of small firms have been completed recently. The object of the first of these was to develop a practical insurance scheme to cover the costs of patent litigation and the second studied the implications of giving small firms an initial period during which the defence of invalidity of the patent would not be open to an infringer. The model for such a period of incontestability of protection is the 1983 Orphan Drug Act of the United States.

Both of these reflect increasing awareness on the part of the authorities that the potential for innovation by smaller firms (SMEs) is not being realised in Europe to anything like the extent that it is in the United States. In that country, for example, firms with up to 500 employees receive less than 4 per cent of Federal support for research, yet they have produced more than half of the innovations and obtained close to two-fifths of all patents.¹

New information published recently has added to this concern. The best measure of SME technological competitiveness is the number of US patents obtained by firms of this kind from foreign countries. Only the inventions that are subjectively considered to be the best in any country will be patented in the United States, and all US patents will have been through the same examining process—like is genuinely being compared with like. In 1994, *Taiwanese* small firms obtained 44 per cent as many US patents as the 25 countries of the European Union combined; in 2003, the proportion was 73 per cent. Consequently, by this measure, a single far-eastern country on its own must now be close to overhauling the whole of Europe, if indeed it has not already done so.²

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

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

LITIGATION COSTS

Both of these recent studies address the same deterrent to European SME innovation, which is the cost of *protecting* patents. Awareness of this is not new, for example, a 1999 report by experts to the European Commission stated that:

"In our view, by far the greatest deterrent to the use of intellectual property rights, in particular patents, by SMEs as well as universities and similar institutions, is the fear of heavy costs to enforce them."³

Concern with this became more sharply focused as a result of the investigation commissioned by the EU and published by it in 2001, entitled "Enforcing Small Firms' Patent Rights".⁴ This was the first time that EU-wide research had been carried out by direct contact with the SME patentees themselves.

It showed convincingly just how bad SMEs' experience was in terms of the cost of litigation to defend their patents. For example, it was found that *every* patent owned in the United States by small European firms that had any value, was infringed there. It is next to impossible for such a firm to assert its rights, because of the readiness of larger firms to intimidate smaller ones with the threat of imposing litigation costs on them which they will be unable to stand. Large firms have also shown themselves to be very ready and able to drag out litigation so as to load unsustainable costs on their weaker opponents.

The Danish Patent Office was the first official body to grasp and take action about the problems SMEs have in defending their patents. It concluded that litigation insurance was a possible solution, and has tirelessly promoted the case for investigating it. Its lobbying persuaded the European Commission to fund two successive studies by external contractors, and the research recently published is the second of these.⁵ The funding of the limited incontestability study has been provided by a competitive award from the Research Fund of the European Patent Office. In what follows, the results of each of the investigations and their results will first be analysed individually, then their possible contributions towards solving SMEs' problems with patents will be compared, and some complementary suggestions will be added to them.

PATENT INSURANCE

It is a tribute to the strength and persistence of the urging of the Danish Patent Office that the EU authorities agreed to spend significant sums on commissioning research into the feasibility of patent insurance, because this was in the face of much evidence

that this could not succeed. No insurance scheme, anywhere, has so far shown any capacity to provide adequate cover at premiums affordable by patentees in general. Several firms which attempted to offer this type of insurance in the past abandoned it after suffering heavy losses. Recent attempts by insurers in several countries to widen the market for it were unsuccessful. Even a state-backed scheme in France was a failure. Furthermore, during the research itself, not only did "the tacitly assumed successful and wide use of insurance in the USA prove to be illusory", but "one of the world's major insurers decided to withdraw from significant involvement in the market".^{5a}

The reasons for these failures had in fact been identified by earlier research conducted by the German insurance industry, which concluded that: (i) firms would not pay the economic cost of the insurance; and (ii) "where in spite of the high premium a general interest in the product is shown, it may be assumed that insurance will be resorted to".⁶ In other words, firms would tend to insure only the patents most likely to be involved in a claim, which makes a nonsense of the whole idea of spreading a risk widely.

However, in spite of the forbidding nature of the problem, the Commission did engage contractors, who produced a report of which the key conclusion was that "without a compulsory element, any scheme would be likely to fail".⁷ This was disappointing, especially as a subsequent Report of the UK Government's Intellectual Property Advisory Committee called attention to "widespread opposition amongst respondents to any form of compulsory insurance for patentees".⁸

Nevertheless, the Commission pressed on, and awarded a second contract:

"to find a means of ensuring access to patents by small and medium-sized enterprises which do not have extensive legal resources and are put off from developing, patenting and litigating patents on new technologies due to the expense, complexities and delays in EC patent systems."

At the same time, point 4 of the terms of reference for this contract reflects caution about whether the insurance industry could deliver such a means without help. It specified that the options to be evaluated "would not necessarily be limited to those presented in the Commission's first study", which had only related to patent litigation insurance *per se*. The new research was intended to evaluate "a small number of alternative schemes for insuring European patents, and, when they exist, Community patents". Also, a possibility of subsidy was implied in a clause which sought "a new analysis" in which an important element "will be the possibilities for involvement by the public sector . . . and the implications this has for the feasibility of the various schemes". In the event, the contractors' report, which was delivered in June 2006, only dealt with the option of patent insurance, and it also stressed "that no public funding is directly incorporated or assumed" in what it proposes.⁹

³ EUR 18914 "Strategic Dimensions of Intellectual Property Rights in the Context of S&T Policy", an ETAN Report (1999) 23.

⁴ EU 2001 Report, "Enforcing Small Firms' Patent Rights", available at: www.cordis.lu/innovation-policy/studies/2001/management03.htm

⁵ Available at: http://ec.europa.eu/internal_market/indprop/patent/index.en.htm#studies

^{5a} See fn.5 above, ss.3.2.3 (p.8) and 13.2.1 (p.38).

⁶ See fn.4 above, s.12.2 ("Views of Official Bodies").

⁷ http://ec.europa.eu/internal_market/indprop/docs/patent/studies/litigation_en.pdf Recommendation 5.2.2

⁸ See www.intellectual-property.gov.uk/ipac/pdf/enf_govresponse.pdf (para.29).

⁹ See fn.5 above, s.16.1.4.

CONTRACTORS' METHODOLOGY

Since the statistics they needed were not already available, the contractors used a questionnaire, devised with the advice of insurance experts, to obtain information from patent agents and attorneys on the costs of litigation and damages in 14 of the EU states. These varied widely: almost 60 per cent of the patents in force were in a combination of only three of the countries, Germany, the United Kingdom and France; it was found that the cost of litigation and damages per patent in force ranged from €741 in Germany to €17 in France to €6 in Greece; and they estimated the life of a European patent to be about eight years in Germany and the United Kingdom; about six years in France, the Netherlands, Denmark and Sweden; and less elsewhere.

As well as the patent experts, the contractors obtained advice from two firms of insurance consultants, both UK-based. These believed that only a scheme which involved the great majority of patentees would overcome the present situation that insurance has been found attractive only to a minute proportion of patentees and for a very small number of disputes and litigations. This view converged with the earlier report's conclusion that no insurance scheme could succeed if it was not compulsory, as well as with that of the German insurance industry: a voluntary scheme could not work because the only patents which would be insured were those which their owners considered were likely to be infringed and thus be the subject of claims.

However, requiring "a great majority" of patentees immediately encountered the problem of the large, especially multinational firms. These are the biggest users of patents, they do not need insurance, and they would lose their advantage in litigation with SMEs if the latter could obtain it. Consequently, they could be expected to oppose compulsion, first on the ground of principle (which it would be difficult to question) and secondly from having to pay to assist the SMEs in whose interest the change is being introduced. If, in the event, large firms were forced into a compulsory insurance system, it is inevitable that they would also be claimants, which would divert the system from its original objective of helping SMEs.

EXEMPTING TRANS-NATIONAL FIRMS

The contractors therefore concluded that exemption from a mandatory scheme would have to be given to firms that can demonstrate their own significant patent litigation expenditure and thus have no external risk to cover; or which have a global orientation. They guesstimated that this exemption would apply to 50 per cent of European patents and then set to work to sketch out a scheme for the remainder.¹⁰ (From other research work, this 50 per cent figure seems low, but it would not be difficult to arrive at an accurate estimate.)

All insurance practice has to be based on a true measure of the average risk of the patents insured, which is known as the technical risk assessment. Such assessments

¹⁰ *ibid.*, s.18.4.

undertaken at the time when cover is agreed add greatly to the cost of a scheme, because they have to be done for claimers and non-claimers alike. They are also complex because they have to take into account the circumstances of each individual case. To remove this deterrent to insurance, therefore, an important feature of the envisaged scheme would be that there would be no technical risk assessment of the patent at the outset, but only if and when a claim arose. However, there would be initial assessment of each patentee relating to the size of company, industry sector, technology, etc. and this would affect the premium for insuring his patents.

NEED FOR COMPULSION

Making the technical risk assessment only at the time a claim is made, means that the insurance has to begin on the basis of a *general* risk, which can only be assessed if all patentees are required to buy insurance. The insurer has to be able to base his actuarial calculations on the litigation costs and statistics from the whole market, and this is only possible if the body of patents insured is typical of the whole. For the same reason, each patentee must insure all of his patents, so as to deny him the opportunity of exercising selection against the interests of insurers by putting forward only his riskier patents for cover. This, of course, is the point made in the earlier study by the German insurance industry, and it explains why it cannot be economic for insurers to provide an acceptable level of cover in patent insurance that is *voluntary*.

How is it proposed that compulsion would be imposed? Once a European patent is granted, it then has to be validated in each of the countries which have been "designated" in its application. The intention is that the patentee would have to show a certificate of his patent insurance to the National Patent Office where he wants his patent to come into force. Similarly, at each subsequent renewal of the patent by that office, evidence of being insured would have to be provided. European patents without an insurance certificate could neither be validated nor renewed and thus would not be in force in that Member State. All new European patents from a given date would therefore have to be kept insured throughout their life. The same would be the case for Community patents, if these come into existence.

Aspects of the proposed insurance policies with which patentees would already be familiar from other policies which they are likely to hold are excess, co-insurance and front-loading. Excess is the part of any claim which the insured has to bear; co-insurance is the share he has to bear of a claim once its cost to the insurer passes a prescribed level; and front-loading means that a higher premium may have to be paid in the earlier years of the insurance, until the insurer fully knows the risk with which he is dealing.

Another feature common to insurance policies is the "known event". If before the insurance commences, a prospect of litigation becomes apparent to the patentee, this specific risk must of course be disclosed to the insurer, who could then either exclude it or require a technical risk assessment before offering cover. The risk may be of an action against an identified possible infringer, or the need for defence against infringement of a patent owned by an identified third party. The insurance experts pointed out that if the known event was not excluded by the insurer with the agreement of the patentee, the

insurance would fall outside the scope of the scheme for mandatory insurance which is predicated on no technical risk assessment of the patent concerned being needed at the time of deciding on the initial premium. The scheme proposes that if cover is denied because of a known event, the patentee would be provided with a certificate of exemption from the insurer for the purposes of obtaining initial validation and later renewals from a National Patent Office.¹¹ A feature of the scheme which would not be familiar to patentees, however, is the way in which the technical risk assessment could be used. As noted above, technical assessment would be made at the time of any claim, and the patentee would be liable for its cost, save when defence was involved, unless the assessment of the chances of winning the case was 51 per cent or better. Also, without such a favourable assessment, an insurer can refuse cover. However, if the insured still goes ahead with the action, or defends an action for infringement against it, and wins, the insurer "would, or should" pay the costs as if cover had not been denied.

Another set of conditions for the proposed insurance with which patentees will not be familiar arises from insurers' preference for having litigation conducted by practitioners from their own panel of lawyers and patent attorneys. These operate under an agreed protocol covering the reporting back of changes in the odds of success as the case progresses, with regular re-evaluations of the case in the light of the chances of settlement because of new evidence or other factors. The protocol would also regulate charges for each step the practitioner takes in processing the case.

The report also makes the point that it is normal for the underwriters or their representatives to take direct control of the conduct of a litigation protection case when costs reach a certain level (for instance €10,000). An examination of the litigation cost statistics in the report shows that except in a very few Member States, this means that all litigation will be directly controlled by the underwriters or their representatives and not by the insured patentee.¹²

LIKELY PREMIUM LEVELS

On the basis of the numbers of European patents in force, and the patent experts' estimates of legal costs in the various countries, the insurance experts were then asked to indicate what premiums and cover they thought might apply in a compulsory scheme. Naturally, they made it clear that their responses depended wholly on the accuracy of the figures which had been obtained from the patent lawyers.

Of the possible options, the preferred one, at least at the start of the scheme, would provide cover for legal expenses for pursuit (enforcement), and defence against allegations of infringement of a third party's European patent, but not for damages. These were excluded because although the patent practitioners' statistics indicated that they were surprisingly rare and not very high, they are very uncertain, and consequently harder to insure.

¹¹ *ibid.*, s.15.19.2.

¹² *ibid.*, s.15.26.2.

The experts first set low indemnity cover for a single year's claims at €100,000, standard cover at €250,000 and high cover at €500,000. For standard cover, the annual premium in the United Kingdom would be €600. It would be twice this amount in Germany, but half of it or somewhat less in Sweden, the Netherlands or France. The basic excess payable in all these countries would be €10,000. It was estimated that cover for other options, one of which would include damages, could raise these premiums by from 40 to 75 per cent.

ESTABLISHING THE SCHEME

Set-up costs for the scheme were estimated to be in the region of €2 million. Insurers concerned at the uncertainties of the start-up period could be expected to want to hedge this risk by measures such as increased excess, co-insurance, frontloaded premiums and the right to opt out after three years. The contractors do not suggest in which country their proposed scheme might be tried first, but the United Kingdom seems to be the obvious choice, since they reported that only Lloyd's of London has indicated any significant interest in the proposal.

This lack of interest is somewhat surprising, since the figures in the report suggest that the size of the market resulting from the scheme (if it could be put into effect) might have an annual value of at least €100 million in the United Kingdom alone. This figure is reached by taking half of the contractors' figure for European patents in force in the United Kingdom (because multinational firms would not be compelled to insure under the scheme) and multiplying this by the premium they indicate for standard cover, which gives about €80 million, to which must be added some amount for the higher premiums which would apply to pharmaceutical and similar patents.

INCONTESTABILITY PERIOD

The idea of an incontestability period for helping SMEs deal with the problems of cost and intimidation in litigation to protect their patents was first put forward in an article in *Intellectual Property Quarterly* in 2004.¹³ Its source was the Orphan Drug Act of 1983 in the United States.

The background to this Act 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 the 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.

¹³ William Kingston, "Making Patents Useful to Small Firms" (2004) I.P.Q. 369.

The results from this have been spectacularly successful, including a 12-fold annual increase in new "orphan" drugs, with both actual and relative declines in death rates from the diseases they treat.¹⁴ 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 be clearer, nor could the lesson that can be drawn from them: appropriate protection results in more innovation.

EASILY COPIED FOR SME PATENTS

The US patent system has great difficulty in adapting to new needs, because of the intellectual property clause in the Constitution. In light of this, two aspects of the Orphan Drug Act are especially interesting. First, this Act is delivering what is unquestionably a novel kind of intellectual property, one which is capable of producing remarkable results, but which has originated *outside* the Patent and Trademark Office. Secondly, it is a system of protection of *innovation*, not invention. Protection is granted, not for the concept of the new drug, nor even for laboratory proofs that it is effective, but only for the fully developed and tested drug, ready to go onto the market.¹⁵

It was not a very radical step to think that if such a remarkable improvement can be achieved in an area where patents work best (because their present form, laid down by the 1952 US Act and its copies in other countries, 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? That is, 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 and claimed 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

¹⁴ Henry Grabowski, "Increasing R&D Incentives for Neglected Diseases: Lessons from the Orphan Drug Act" in Keith E. Maskus and Jerome H. Reichman (eds), *International Public Goods and Transfer of Technology under a Globalized Intellectual Property Regime* (Cambridge University Press, 2005), pp.457-480.

¹⁵ For a multi-author study of this type of protection, see W. Kingston (ed.), *Direct Protection of Innovation* (Kluwer Academic Publishers, Dordrecht/Boston, 1987).

patents by businessmen.¹⁶ 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. However, 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.

MORE AND BETTER INNOVATION

Removal of fear of litigation during the earlier stages of a patent's exploitation would consequently make investment in research and development 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 12-fold increase delivered by the Orphan Drug Act? 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 under-utilised, so that more attention to them could be expected to produce more innovation.

These potential advantages for SMEs resulted in an award to investigate them from the Research Fund of the European Patent Office. The basic approach of this research was 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, it was intended to collect as many views as possible about the usefulness or otherwise of the change proposed from patent attorneys.

PATENTEE SURVEY

Establishing the initial list of 1997 SME patentees proved to be a frustratingly difficult task, since the records of European patents do not carry any indication of firm size. Also, as was to be expected, because of the length of time which had elapsed, some firms had gone out of business and many more had changed their address. Nevertheless, 231 usable responses to a mail questionnaire were received, from 16 of the 17 EU countries which were members of the European Patent Convention in 1997. Ninety-two per cent of these were from small firms which had actually commercialised the inventions to

¹⁶ See W. Cohen, R. Nelson and J. Walsh, "Appropriability mechanisms: use and change over time", Working Paper Series No.7552, National Bureau of Economic Research, Cambridge, MA.

which the questionnaire related. Consequently, these responses were from individuals who had practical experience of trying to make the patent system work.

These patentees were first asked about the way in which commercialisation of each invention took place. For 80 per cent, it was by self-manufacture and sale only; another 12 per cent used licensing only, and 8 per cent commercialised their invention by using both methods.

Asked about the return on investment obtained from the invention, 4 per cent reported that this was "excellent", 13 per cent "very good", 49 per cent "good" and 21 per cent "poor". Another 13 per cent did not reply to this question, so it seems reasonable to infer that they had no worthwhile return at all from their invention. This would mean that in about one in three cases (34 per cent), the return on investing in invention was either "nothing at all" or "poor".

In spite of this, of all those whose patents were commercialised, two-thirds (67 per cent) said that their experience with the patent system encouraged them to use it again.

More than half (55 per cent) of the patents whose inventions were commercialised suffered attempts at infringement. Of these, the cause was a larger firm in 50 per cent of the cases. In 26 per cent, it was a firm of about the same size and in 15 per cent it was a smaller firm. In a further 9 per cent of cases, attempted infringement was by firms of more than one of these size categories, or the size of the infringer compared with that of the patentee was not known.

The effect of infringement or attempted infringement on the SME patentees was also explored. In 40 per cent of cases, the resulting damage was assessed as being "serious"; in a further 43 per cent it was "bearable", and in nearly one-fifth of cases (17 per cent) it was considered to be "unimportant".

Nearly two out of three of the patentees whose patents were infringed (63 per cent) took some legal action to defend them. Although about one-fifth (21 per cent) of the replies to this question were impossible to interpret conclusively, it appears that the results of this action were that 14 per cent were abandoned and 16 per cent settled before the case came to court; 26 per cent were settled as a result of litigation and 23 per cent needed an appeal from the initial court decision.

In nearly three-quarters (73 per cent) of the cases where some legal action had been taken to try to enforce the patent, the infringer used the defence that the patent in question was not valid.

The question was consequently put to the patentees who had been infringed and had taken some legal action to enforce their patent, "what would it have been worth to you if the defence of invalidity had not been available to your opponent?" The number of respondents to this question clearly included a few who had not themselves been involved in litigation. Out of all who responded, 15 per cent considered that such a change in the law would be worth "nothing", and 10 per cent thought it would be worth only "a little". Twenty-three per cent thought it would be worth "a lot" and 52 per cent "very much".

The patentees were also asked if they would be more encouraged to use the patent system in future if there was a limited period during which invalidity of a patent could not be claimed by an infringer. Seventy-three per cent of all those whose patents had been commercialised (67 per cent of all respondents) considered that it would. Of these, 16 per cent considered that they would be "somewhat" more encouraged, but such a

change would mean "quite a lot" to 44 per cent and "a great deal" to 40 per cent. These percentages, of course, should be interpreted in the light of the fact that they relate to only two-thirds of all those who responded to the survey. By not answering this question, the other third presumably were indicating that they do not consider that any such change would encourage them in their use of the patent system.

Finally, for those who did feel that a period of incontestability would encourage their future use of the patent system, the survey sought to discover what they thought the minimum length of such a period would have to be, for it to be useful. For 13 per cent, this was three years, for 40 per cent, five years, and for 31 per cent, seven years. Sixteen per cent thought that more than seven years would be needed.

In follow-up telephone interviews by national researchers in each country, a few of the patentees were cautious about the proposal, feeling that granting a period of incontestability to other small firms could inhibit their own actions. A national association of inventors took the view that such a change was "essential". In broad terms, therefore, the survey indicated that a limited period of incontestability for their patents would be welcomed by SMEs, even if this was for a significantly shorter period than the seven years of the Orphan Drug Act in the United States.

VIEWS OF PATENT ATTORNEYS

In all the larger countries, and in some of the smaller ones, telephone interviews were also carried out by the national researchers with patent attorneys, both in private practice and in the intellectual property departments of larger firms. These were as antagonistic to the idea as the patentees were in favour of it. One German patent attorney did welcome the proposal, but even he felt that it carried with it a danger that SMEs would then look for too much protection. The objections of the patent attorneys can be grouped under a number of headings, as set out below.

Inadequacies of patent examination

Although the European Patent Office has good searching capability, there is always the risk of some prior art not being found by the patent examiner. Apart from the question of human error, the information available for examinations is incomplete. Opposition at the EPO would be possible for the first nine months after grant, and this would force competitors to use the EPO opposition as the only means of invalidating the patent. Large firms would have to become more aggressive in opposing patents and "the EPO is scarcely looking forward to a surge in oppositions".

The proposal would in fact benefit big companies

Big companies would find ways of profiting from the period of incontestability. If they could not do this by simply creating their own SME subsidiary or participating in the capital of an SME, they could use a simple confidential contract. The whole problem of identifying the real owner or economic beneficiary of a patent might not be able to be solved just by looking at the list of registered shareholders of a company. The risk of abuse by bigger firms not entitled to the proposed protection would remain.

In the case of doubt as to the qualification of a company as an SME, an adversary would still be able to allege the nullity of the patent as a defence, claiming that this special protection should not apply in the instant case. If the procedure allows for a partial decision, the matter might be easily resolved. However, should the procedure not allow for such a partial decision, or should the judge refuse to issue a partial ruling on the qualification of a company as a small or medium enterprise, the whole defence of the invalidity of the patent would then have to be examined in front of the court. No costs would be spared. Companies with bigger pockets and clever litigation attorneys could still use such procedural issues to render the procedure longer or more expensive.

The idea is wrong in principle

A period of incontestability contradicts the basic principles of patent law. It would be an "exorbitant monopoly". It is not compatible with legal principles and in particular with the official maxims of statute law. It interferes with the rights of third parties, by denying them the possibility of challenge. This is not only between a large firm and a small one, but also between two small firms. Any enterprise, of whatever size, could be in such a third party situation.

In some countries, actually unconstitutional?

A rule which protected the industrial property rights of SMEs in such a radical and all-encompassing fashion in France would be contrary to "l'ordre républicain". Article 3 of the German constitution would not allow such a period of incontestability for SMEs, because of its principle of parity, which is that if a law gives one kind of company an advantage over another, there must be a difference in reality between the two which explains the differential. The simple political purpose of strengthening the position of SMEs would not suffice. A similar constitutional barrier exists in Austria.

No need for it, where costs of litigation are low

The litigation costs involved in cases involving objections to and invalidity of patents are in fact quite small in Germany and legal aid is available under s.144 of the patent law if the costs of an action are likely to put a litigant's business in danger. In the Netherlands, there is the "kort geding", which is a short court case that takes only a few days. Such cases are sometimes even held in the weekend, if they are urgent.

Blocking of technological development

More than one attorney claimed that the majority of all registered patents are null, so that to take away the possibility of contesting them would have grave consequences for the economy as technological advances could be blocked in this way.

Danger of injustice

With incontestability, faulty granting of a patent would lead to an unacceptably unjust situation. From the economic point of view, a patent is already an exception to free competition, because it confers a monopoly privilege. With a period of incontestability, this exception would be even stronger. Is this not unjust?

Even disadvantageous for SMEs

Some attorneys thought that such a measure would result in more legal difficulties than advantages, even for SMEs. A sword of Damocles would hang over their heads throughout the period of incontestability, with the possibility of larger firms awaiting the end of it before infringing the patent and forcing the patentee to pursue them in the courts. Even at the end of the period the SME might still not be strong enough in financial terms to fight them.

Litigation not just with big firms

Disputes between SMEs are quite often more frequent than a fight between a large and a small company. Promoting patents and reinforcing patent rights with an incontestability period could end up creating a litigation industry as already exists in the United States.

Against international harmonisation

US patent law, for example, is going in a different direction, as illustrated by new re-examination proceedings, especially *inter partes* re-examinations.

DISCUSSION

Both of the proposals outlined above would require a change in the patent law, and it is clear from their respective research projects that the necessary changes would be difficult—or even impossible—to achieve. In the case of the insurance proposal, the structure of the European Patent Convention itself is the barrier; in that of incontestability, it is the primarily the opposition of larger firms which is reflected in the objections of the patent attorneys.

Patent insurance in the form proposed could not be introduced without the agreement of the entire membership of the European Patent Convention ("EPC"). Article 137(1) of this provides that a patent application transmitted to a National Patent Office by the European Patent Office with its certificate of grant approval:

"shall not be subjected to formal requirements of national law which are different from or additional to those provided for in this Convention".

Making the provision of a certificate of insurance a condition of validation, as proposed in the contractors' scheme, would clearly be such a requirement.

Consequently, even if all the EU countries which are members of the EPC were in agreement, approval for such a change would also be required from EPC countries that are not in the European Union. Even amongst the members of the European Union, the negotiations about the Community patent have been so tortured that it is unlikely that any of the parties involved would want to introduce another complication into them. The many difficulties a few years ago about appointing a new President of the European Patent Office are a further indication of the obstacles in face of the unanimity needed to allow the introduction of a compulsory patent insurance regime as proposed.

WOULD SMES SUPPORT IT?

Apart from this legal roadblock, is difficult to see the smaller firms that the scheme is intended to benefit becoming excited about the proposals which have emerged from this particular study. This indicated that premiums as a per cent of costs over 10 years would be 15.5 per cent in Germany, somewhat more than half of this percentage in the United Kingdom, and about one-quarter of it in France. The report estimates the average life of a European patent as about eight years in Germany and the United Kingdom, and six years in France. As the majority of SME patents are worth nothing, their average life must be lower than the general average. Their owners may therefore be reluctant to pay a fee that is not trivial in relation to their filing or early maintenance fees for insurance cover they never expect to call on. Also, they may not be enthusiastic about the financial limits on the cover offered, and will strongly dislike the provision that the insurer will be in charge of any litigation there may be, including decisions concerning settlement. These have all been features of the various policies which were offered in the past, on which patentees turned their backs.

COMPULSORY EXPERT ARBITRATION

It might be possible to overcome these drawbacks, but the barrier set up by Art.137(1) of the EPC is probably insuperable. There is, however, one option which might make patent insurance feasible. This would be to link it to compulsory technical arbitration of disputes and limiting its provenance to *appeals* from these to the courts.

Patents are unique in the world of technology in not using expert technical arbitration as means of settling disputes. This is why in other technical areas so few disputes ever reach the courts. The difference between these other technical areas and patents is that in the former the parties involved are related by a contract, which invariably includes an expert arbitration condition; obviously, there is no contract between two parties in contention over a patent. For settling patent disputes in the cost-effective way that applies to other disputes concerning technology, therefore, any requirement for technical arbitration must be inserted into the only contract which does exist, i.e. that between the inventor and the state, which is the patent grant.¹⁷

On this point, the expert group cited earlier (ETAN) reported as follows to the European Commission:

"We have been convinced by empirical evidence presented to us that the main element in the excessive cost of resolving IP disputes is the use of the *ordinary courts* to deal with what are essentially technical matters. Part of the problem is that even judges with a science or engineering background usually need to be educated in the technology concerned, which requires time and money. The US 1992 Commission

¹⁷ For a full discussion, see William Kingston, "The Case for Compulsory Arbitration: Empirical Evidence" (2004) E.I.P.R.154.

on Patent Law concluded that '*litigation is an increasingly inefficient, ineffective and undesirable means of resolving patent related disputes.*'¹⁸

Disputes can of course be referred to arbitration, such as the Arbitration and Mediation schemes operated by WIPO and by Chambers of Commerce. The problem with this, as with all alternative dispute resolution mechanisms (ADRs) is that the use of ADRs is voluntary, and the economically stronger party is unlikely to throw away its inherent advantage in resources for financing litigation.¹⁹

The report then went on to recommend investigation of a specific form of *compulsory* expert technical arbitration, and to discuss some aspects of how this might work.

The relevance of compulsory expert arbitration to patent insurance is that since the courts are the ultimate arbiters of laws, including the patent law, there would have to be the possibility of an appeal to them from any arbitration. The ETAN report just cited suggested that the cost of such appeals might become a commercially insurable risk, as there is strong evidence that courts pay great attention to technical expertise in patent cases. Also, an arbitration would produce information on both sides of a case which would reduce an insurer's costs in assessing his risk, and over time, data from *numbers* of arbitrations might eventually enable normal actuarial estimates of risk to be made for patent insurance covering appeals.

It has also been suggested that there could be legal aid for the party which does *not* appeal from an arbitration, paid for out of the large subsidy which the National Patent Offices in EPC countries receive from the European Patent Office.²⁰ This would have the same effect as the German legal aid referred to above. It would be of most benefit to small firms, since they are least likely to appeal to the courts, since to do so would move the dispute onto ground where their richer opponent has the advantage. However, because it would be available to large and small firms without distinction, it would not contravene the Constitution in Germany, France or Austria, also mentioned above.

One way or another, there is already clear empirical evidence that compulsory expert arbitration works very well in patent cases, from the perfect working model of it that exists in the "interference" arrangements of the US Patent and Trademark Office. These are necessitated by that country's "first to invent" system, and disputes are settled by "Administrative Judges" recruited from the examiner corps. There are about 200 disputes to be resolved each year, the board delivers between 40 and 50 final decisions a year, and the median time a case takes is only 12 months. Over a period of nine years studied in detail, just over one-third of the final decisions were appealed to the courts, but only 5 per cent of them were wholly or even partially reversed.²¹

Also, in contrast to the present proposals for patent insurance, which would appear to require unanimity amongst the member countries of the EPC to change Art.37 of the

¹⁸ US Advisory Committee on Patent Law Reform, "Report to the Secretary of Commerce" (1992), p.76.

¹⁹ See fn.3 above: Strategic Dimensions of Intellectual Property Rights in the Context of S&T Policy, p.26.

²⁰ In the reference in fn.17 above.

²¹ The research was done by two of the administrative judges, I. A. Calvert and M. Sofocleous, who published their findings in (1989) *Journal of the Patent Office Society* 71 at pp.399-410; 74 (1992) at pp.822-826; and 77 (1995) at pp.417-422.

Convention, it would be open to any single country or to any group of countries to introduce both compulsory arbitration and legal aid or a scheme of patent insurance covering appeals from arbitrations to the courts, unilaterally. Denmark, for example, whose patent office has done so much to try to bring about change to benefit SMEs, might crown these efforts by taking such an initiative.

INCONTESTABILITY

To some extent, the negative reaction of the patent attorneys to the incontestability proposal must reflect their view of the interest of their employers or of the big patent-using clients on whom their practices are built. This does not mean that their objections are invalid, especially concerning the danger of injustice because of Patent Office examining errors, which could not be corrected within a period of incontestability.

However, it seems that some national researchers may not have stressed to the attorneys that the suggestion of a period of incontestability could only apply to patents which had been through the examination procedure of the European Patent Office. Consequently, some of these attorneys condemned the idea because so many national patents are not now examined at all. To offer incontestability to one of these would indeed be "madness", as one attorney commented. In fact, in the original formulation of the proposal in the *IPQ* article, the caveat was included that the period of incontestability might possibly be granted "after *pre-examination* opposition", which would improve the quality of patents still further.²² On the latter point, it is interesting that the two Patent Reform bills which are at present going through the US Congress provide for this.²³ A trend in this direction is undoubtedly beginning.

Several attorneys believed that large firms would take advantage of the proposal by setting up covert subsidiaries. The United States very effectively prevents large firms from taking advantage of the patent fee discounts available to "small entities" by the sanction that if this can be shown to have happened, any related patent is rendered invalid. Of course, the value of what is at stake in this is trivial compared to that of the kind of patent which would tempt a firm to act fraudulently.²⁴

In favour of such an approach is the argument that presumption of an examined patent's validity has traditionally been a feature of patent law. The ideal, which of course is a patent issued after a perfect search carried out by an omniscient examiner, is impossible of achievement. However, European patent examination is accepted as being very good, and the power to oppose within nine months after grant provides a safety net in case there are errors during the examination process. Surely an even greater presumption of validity must attach to a patent which has been through this opposition procedure? It ought to be possible to grant a first period of incontestability to all patents as from the date of grant, reflecting a basic level of presumption of validity, and a second, longer one after an opposition procedure which has strengthened this

²² See fn.13 above, p.377.

²³ H.2795 in the House of Representatives and S.3818 in the Senate.

²⁴ For details of the US "small entity" arrangements, see fn.2 above.

presumption. Furthermore, of course the presumption of validity would be all the stronger if *pre-examination* opposition becomes a reality in Europe, as it may well soon be in the United States.

On this point, the Gowers Report has recommended that the United Kingdom should copy the pilot study of the Community Patent Review project of New York University and the United States Patent and Trademark Office, which is currently beginning.²⁵

This project is premised on the belief that it is absurd to issue patents on an inadequate basis of information, when this could be provided by bringing the proved enormous power of open source - "the collective intelligence that the Net now makes possible" - to bear upon it. Wikipedia, for example, the result of countless voluntary submissions, has been shown to be little less accurate than *Encyclopaedia Britannica*, for all the costly resources which the latter requires. In patent cases, an inventor's or firm's competitors are far more likely to be aware of relevant prior art than any individual patent examiner could possibly be, and to be motivated to call attention to it.

It is therefore claimed that Open Review would strengthen the presumption of a patent's validity and incontestability. It should significantly increase the value of good inventions because these will have been endorsed by a community of experts. In order to test it, several firms of the calibre of IBM, Microsoft, Intel, and Hewlett-Packard, as well as some smaller ones, have agreed to allow 250-400 of their software-related patent applications to be published immediately for the world to evaluate (IBM, in fact, has decided to open *all* its future applications in this way). Part of the USPTO's contribution to this pilot study is to give priority to such applications in the subsequent process of deciding their patentability.

A somewhat surprising aspect of the patentees' responses was the indication that the period of incontestability would not need to be very long to be useful to them—such as a term between three and five years rather than the seven years of the Orphan Drug Act. This opens up another possibility which was suggested by one of the patent attorneys interviewed. A short period of incontestability could be granted to *all* firms, irrespective of size. The small firms would get all the benefits discussed above from it, and it would add little or nothing to the market power of larger ones, since this depends to such a large extent on factors other than their patent protection. This approach to a period of incontestability would also meet the Constitutional requirement for parity of treatment as between sizes of firm in countries such as Germany, France and Austria.

Denial of such possibilities would seem to be a classic case of the principle that "the best is the enemy of the good". Although the "best" is out of our reach, European Patent Office practice is actually effective enough to ensure that only relatively few patents are invalid. Yet for the sake of this trivial number many valid patents issued to SMEs are made 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 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.

The fact that SMEs would not look for a very long period of incontestability converges with a second suggestion in the original *IPQ* article. This was about the possibility of

²⁵ http://dotank.nyls.edu/communitypatent/docs/openreview_sep_02.pdf

extending the priority period under the Paris Convention for SMEs, so as to give them more time to find backers or licensees for their inventions.

Those who responded to the incontestability questionnaire were sent a summary report of the results as a token of appreciation of their help. In some cases, the covering letter with this asked if the patentee had used the Convention priority period to make patent applications in other countries; if yes, did they find it long enough; if it was not enough, how long did they think it should be? They were also asked if they would be prepared to pay for any lengthening of this period by allowing their patent specifications to be published earlier than 18 months after filing.

No statistical reliability can be claimed for the results from this, because these questions were not even asked in all the countries of the survey. But it would be surprising if a proper investigation did not support the hint they give that a longer priority period would indeed do something to ameliorate SMEs' problems with the patent system.

It was suggested in the earlier *IPQ* article that it would be open to a group of countries to agree to extend the priority period mutually in this way, under Art.19 of the Paris Convention. In fact, there may even be an easier method of achieving much the same end, which would be through action by the World Intellectual Property Organisation ("WIPO") in respect of the Patent Co-operation Treaty ("PCT") system which it operates. If a local application is followed up by a PCT application within 12 months, an applicant then has 30 months from his first filing date before he has to invest in applying in other countries. This is two-and-a-half times longer than if he does not follow the PCT route, to find out if there is enough commercial interest in the invention to justify foreign applications. Now that the United Kingdom has abandoned the requirement of an "address for service" within its territory from applicants in any country in the European Economic Area, as well as an initial filing fee, it has become the obvious country in which to make such first filings.

It is of course true that the cost of a PCT application is high, but there are already discounts for PCT applications from developing countries, so it would not be a radical change for WIPO to allow them also for small firms. The same sanction (invalidating the patent) as the United States uses for its "small entity" discounts could prevent such a PCT discount being obtained through "fraud on the Office".²⁶

Best of all of course for SME patentees, would be the combination of PCT discount, a short period of incontestability, compulsory expert arbitration of all disputes, and legal aid or an insurance scheme to deal with appeals from arbitrations to the courts. This could also be highly beneficial for lagging EU economies, because, as the Orphan Drug Act has demonstrated, more appropriate protection results in more and better innovation.

²⁶ See fn.2 above.