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Intellectual Property Wales (IP Wales) Legal Expense Insurance Report

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Preface Foreword

Intellectual Property Wales is a unique business support initiative managed by the Law Department at University of Wales, Swansea. IP Wales is based upon a successful pilot project in the City of Swansea (Swansea IPR Initiative) under the Wales Regional Technology Plan. The IP Wales model of business support is recognised by the World Intellectual Property Organisation as an example of best practice in supporting Small/Medium Enterprises in promoting intellectual property activity.

IP Wales has the three tasks of raising the awareness of intellectual property assets amongst SMEs in Wales, helping the firms to protect their intellectual capital and encouraging the firms to go on to exploit their intellectual property assets. The aim of IP Wales is to help SMEs in Wales to grow the business through their commercial exploitation of Patents, Trade Marks, Industrial Designs, Copyright, Database Rights, Know-How and Licensing (In & Out) Agreements.

In the first phase of its operation from 2002 to 2004, IP Wales has set itself the targets of assisting 850 firms and advising 425 of these with a view to giving selected financial support, in the form of 50%+ reimbursement grants, towards the legal costs of protecting and commercially exploiting their IP assets. At the conclusion of this phase it is envisaged that 276 new jobs will have been created in Wales (110 in High Tech industries) and 830 safeguarded as a direct result of IP Wales activities. In addition, 100 new patent applications will have been filed and 66 new trade mark applications filed.

By now over 1250 businesses have registered their entitlement to unlimited assistance via the www.ipwales.com web site providing access to the IP Wales monthly newsletter, access to training materials/demonstrations and access to IP Wales Research Reports/Seminars. 700 of these firms consider themselves to be R&D active and todate over 300 firms have been advised via the on-line IP Audit Report with follow-up contact and guidance from a field operative. Over 80 applications have been made by these firms for financial assistance, approximately 30 of which have already been supported leading to 47 new patent applications and 12 new trade mark applications.

Andrew Beale Director IP Wales

This is the first research paper as part of IP Wales' Research Programme.

This study examines the phenomenon of insurance as a mechanism for supporting SMEs in legal disputes involving the enforcement or defence of their Intellectual Property Rights.

We believe that this study will be a significant contribution to the debate as to the role of insurance in bolstering IP monopoly rights, especially in respect of patents. Two comparatively recent EU reports emanating from the Danish Patent Office and the other from Trinity College Dublin have produced contrasting models in respect of patent protection for SMEs within the European Union. The present study evaluates these contrasting models. This is then followed by a more wide-ranging legal and economic analysis of the issues identified, culminating in an empirical survey of SMEs in England and Wales. The methodology for this survey was prepared by Kerry Beynon. Further contributions were made by Andrew Beale, Director IP Wales and Professor David Blackaby and Professor Marc Clement of the University of Wales Swansea.

The key findings of the survey demonstrate that the awareness of Intellectual Property Rights within the SME community in England and Wales is very low. Moreover, even when there is awareness, legal expenses insurance is not perceived as meeting the needs of SMEs. This has clear implications for policymakers.

Professor Iwan Davies

Research Director

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1. Summary of Findings

1.1 The nature of the report

focuses specifically upon the phenomenon of insurance as a mechanism for supporting representative sample of the economy in England and Wales so as to reflect a realistic position of the nature of IP assets and IP insurance held by SMEs.

1.2 The problem of protection and enforcement of intellectual property rights

When considering whether to take out a patent, an SME must consider the costs and benefits of doing so, notably the development and marketing costs of the product or process.³ However, there is also the risk of legal costs if they are forced into litigation over the patent. These must then be compared with the benefits of the patent being granted. The costs of legal action could be a significant deterrent to firms when considering when to invest in developing IP assets. As exemplified by the Danish Report, legal expenses associated with the enforcement and defence of patents are often substantial and are unsustainable in terms of financial burden, especially for SMEs. The survey undertaken by Trinity College Dublin concluded that many SMEs were affected by infringement of their patents and that the key problem facing patent holders was their inability to enforce their rights, even when they discovered that infringement had taken place. The evidence from SMEs was that they would rather settle disputes out of court because they found litigation to be costly, time-consuming and inefficient. The focus of the Trinity College Dublin report was upon alternative dispute resolution, notably compulsory arbitration as bolstered by the establishment of a patent defence union.

1.3 Legal expense insurance in economic theory

The standard theory of insurance is

concerned with the ability to transfer risk and bring greater certainty of outcomes to risk averse individuals or firms. However, legal expense insurance is perceived in economic theory as being different in that it is not just about attempting to reduce risks but also about improving bargaining positions in a legal dispute. Applying standard bargaining theory, this should imply that legal expense insurance could be used to get a better settlement out of a defendant. This has a potential deterrent effect in that insured firms should be infringed less, but it also creates the potential for predatory behaviour on other agents who are without insurance. Additional factors that need to be taken into account are moral hazard and adverse selection. The effect of moral hazard is that claims will increase once a person or firm has insurance, unless steps are taken to negate this effect. In the case of adverse selection the underlying concept is that the person or firm most likely to buy insurance is the one who is most likely to need it. To mitigate these matters, the legal expense insurance market for patents will need to identify how vulnerable a patent is to challenge in order to calculate how high an insurance premium should be charged. Whilst it is possible to solve the problem of adverse selection for legal expense insurance for patents by charging higher prices to high-risk patents the dilemma of policy here is that those groups that most need insurance are likely to be the ones who find it to be most expensive or unobtainable.

1.4 Legal expense insurance and legal context in England and Wales

Legal expense insurance is a tool by which access to justice is promoted because insurance may be seen to provide an equalisation of legal resources, thereby facilitating access to justice for those previously denied due to cost. Where resources are limited, a party may be forced into accepting an inadequate out-of-court settlement or succumb to a claim which is devoid of any valid legal defence. In such a setting, the legal expense insurance may be seen to be a harbinger of justice in facilitating the equalisation of legal resources. However, a standard term in all legal expense insurance contracts is the obligation placed upon the insured to notify the insurer of any circumstances likely to lead to a claim. This has been known to cause insurers to raise premiums significantly and, in this situation, an SME will be compromised in its relationship with a wealthy insurance company. Thus, as opposed to closing the gap, legal expense insurance may only serve to widen the financial ravine between the small business and a large corporation. This brings into focus the need for effective regulation of the provisions of the insurance contract.

1.5 The empirical survey

Electronic questionnaires were sent to 11,700 recipients: 700 IP Professionals; 10,000 English SMEs; and 1,000 Welsh SMEs all of which were IP Wales members. The research achieved approximately a 10% response rate - 985 responses were received

This report was prepared by IP Wales and

SMEs in legal disputes involving the enforcement or defence of their intellectual property rights. There has been considerable interest in Europe in the use of insurance as a mechanism to assist in the enforcement of intellectual property rights. Indeed, two separate EU Commission reports, one emanating from the Danish Patent Office1 and the other from Trinity College Dublin², have produced contrasting models in respect of patent protection for SMEs within the European Union. In evaluating the two schemes referred to, it was necessary to consider the literature in economics, as this relates to patents. This was then followed by a more wide-ranging legal and economic analysis of the issues identified, culminating in an empirical survey of SMEs in England and Wales. The central themes identified for such a survey were: First, the nature and characteristics of SMEs which hold IP assets; second, whether IP assets held, if any, have been infringed; third, the consequences by way of litigation or otherwise of such an infringement; fourthly, the phenomenon of insurance as a mechanism to assist in the enforcement or defence of IP assets. Whilst the survey conducted builds upon the previous work undertaken at Trinity College Dublin and also the Danish Patent Office, its scope is wider to include patents, copyright, industrial design rights and trade marks, as distinct from merely patents. Furthermore, in this study, we have sought to achieve a

1. Danish Ministry of Trade and of Legal Expense Insurance for

2. European Commission, for Enterprise, EUR 17032.

3. It should be noted that may not be patented under s4(2) of the Patents Act 1977 as amended by subsequent legislation. Processes that may be s1(3) of the Patents Act 1977 (as amended) may also not be

in total from the 11,700 questionnaires sent.

Of those 985 responses received, 571 respondents claimed that they did not hold any IP assets (1.5% of a random test sample of this group did have registered UK trade marks, however). 240 respondents stated that they were not interested in IP (although 33% of a random test sample did in fact hold registered UK trade marks). 174 respondents completed the questionnaire.

The key findings of the survey are:

- SMEs are largely unaware of their IP assets and the value attached thereto
- Rank order of IP assets held by questionnaire respondents: Copyright; trade marks; industrial designs; patents
- 67% of questionnaire respondents viewed the main purpose of IP as being to acquire legal ownership
- Reasons for not owning IP: Unaware of IP; IP not important; lack of resources to register IP; other
- 71% of IP owning questionnaire respondents reported that they were unaware of any infringement of their IP assets
- 77% of questionnaire respondents preferred to resolve IP disputes via informal means
- Only 49% of questionnaire respondents were aware of infringement insurance;
 57% were aware of enforcement insurance; and 62% were aware of legal expense insurance
- Only 4% of questionnaire respondents had purchased infringement and enforcement insurance policies, whilst 12% had purchased legal expense

- insurance (statistically more likely to be IP practitioners than SMEs)
- Reasons for the non-purchase of IP insurance by questionnaire respondents:
 IP insurance unnecessary; unaware of IP insurance; insurance too expensive.

1.6 Concluding remarks

The level of awareness of intellectual property rights in England and Wales is very low. It is not surprising therefore, that SMEs are also unaware of the availability of IP legal expense insurance as a potential mechanism for enforcing or defending their IP rights. Even where there is awareness, legal expense insurance is not perceived to meet the needs of the SMEs. Whilst the underlying assumption of such insurance is that disputes involving intellectual property assets will lead to litigation, this is not necessarily the case. Indeed, many disputants who seek recourse in enforcing or defending their IP rights fail to avail themselves of intellectual property insurance, citing such factors as cost, exclusion clauses and procedural requirements.

Whilst there is evidence that SMEs experience infringement of their intellectual property assets, it is only in a relatively small number of cases that litigation is involved. Indeed, the pre-disposition of the SME in England and Wales appears to be to seek an informal resolution of a dispute. Ultimately, this brings into focus the appropriateness or otherwise of the different dispute resolution mechanisms available for resolving such disputes. ⁴

2. The Nature of the Problem

- 5. Clarke, R. 'Property Rights in Knowledge-Based Products and Applications' (1989) 6 Expert Systems no.3, Aug 1989, pp.158 65: Goldstein, H. 'It's All in Your Head [Industrial Property]' (2002) 39 IEEE Spectrum, no.3, pp.65-8; Phukan, S. and Dhillon, G. 'Ethical in a Multicultural Global Economy (2002) 7 Electronic Journal on Information Systems in Developing Countries, Jan 2002; Denicolo, V. Breadth and Length' (1996) 64 Journal of Industrial Economics, pp 249-265; Nordhaus, W. D. Invention, Growth and Welfare: A Theoretical Treatment of Technological Change (1969)
- 6. The survey, commissioned by the London office of US law firm Howrey Simon Arnold & White canvassed the views of 100 fund managers, analysts, private equity firms and venture capitalists. See "IP Under Greater Scrutiny from Investors", Managing Intellectual Property News December 2001 / January 2002.
- **7.** The issue of creating security interests in intellectual property assets will be considered in a future report from IP Wales.
- 8. Bloom, N. and Van Reenen, J. Real Options, Patents, Productivity and Market Value: Evidence from a Panel of British Firms, (2000) Institute of Fiscal Studies Working Paper 00/21; Gould, D. M. & Gruben, W. C. 'The Role of Intellectual Property Rights in Economic Growth' (1996) 48 Journal of Development Economics, pp.323-350; Griffith, R. How Important is Business R&D for Economic Growth and Should the Government Subsidise it? (2000) Institute for Fiscal Studies Briefing Note No 12; Griffith, R., Redding, S. and Van Reenen, J. Mapping the Two Faces of R&D: Productivity Growth in a Panel of OECD Industries (2001) Institute of Fiscal Studies Working Paper 02/00.
- 9. The scope of intellectual property is very wide as essentially it encompasses the whole product of the human intellect. For the purpose of this study, a distinction is drawn between "intellectual property rights" in copyright, patents, trade marks, design rights and "intangible rights", notably goodwill and confidentiality. Rights such as passing off or breach of confidential information are essentially procedural in nature and are as such "weaker rights" than those, for example, arising under

See Patents Act 1977 Trade Marks Act 1994, Registered Designs Act 1949, the Copyright Designs and Broadcasting Act 1996 and the Plant Varieties Act 1997. There are European Community regulations No 40/94 of 20 December 1993 on the Community trade mark: Council Regulation (EC) No. 2100/94 of 27 July 1994 on Community plant Regulation (EC) No 240/96 of 31 January 1996 on the application of the Treaty to certain categories of technology transfer agreements: Council Regulation (EC) No.6/2002 of 12 December 2001 on community designs. There are also a number of important directives. legal protection of computer programs; Council Directive the legal protection of computer October 1993; Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases: Parliament and of the Council of 6 July 1998 on the legal protection of October 1998 on the legal protection of designs; Directive May 2001 on the harmonisation of related rights in the information

2.1 Background

The 20th century witnessed the metamorphosis of British industry and the British labour market. Indeed, the past three decades have seen a decline in traditional heavy industry, with increased activity in the technological and service sector industries. These developments have ultimately led to the creation of a "knowledge-based" society where considerable emphasis is placed upon the creation and safeguarding of intellectual property rights.⁵

A recent study⁶ has indicated that a significant proportion of venture capitalists are unwilling to invest in a company that does not have an adequate Intellectual Property (IP) strategy⁷ dealing with the promotion, protection and enforcement of intellectual property rights.8 In this respect, it is important to note that mere "recognition" of the significance of intellectual property rights is not sufficient to safeguard them: there remains the legaleconomic issue as to how to protect and enforce primary intellectual property assets. For our purposes, we have identified these assets as patents, industrial design rights, trade marks and copyright held by individuals and companies.9

4. This will be the subject of a further study by IP Wales

- 10. Danish Ministry of Trade and of Legal Expense Insurance for referred to as "the Danish Report
- 11. 2002 WL 31442573. This case the bagless vacuum cleaner held
- 12. As guoted by Graham, Hall, Patent Ouality Control: A Comparative Study of U.S. Patent Re-examinations and European Patent Oppositions (2002) NBER Working Paper 8807 p.8.
- 13. As Schutz has pointed out: "i you're a small company and concerned that you wouldn't have the horsepower to enforce your costs". See R. Schutz of Robins, Kaplan, Miller & Ciresi Solicitors as quoted by Bergsman in "Protecting Your Brainpower" 15 CFO, Issue 2

assets.13

14. This can be elaborated as follows: "[w]here an event is loss or burden, it will very often of insurance under which, in return for a premium, the insurer will undertake to indemnify the insured in respect of certain partly." See Hey G.B 'Statistics in of the Royal Statistical Society Series A (General) Issue 1, p.56

15. Op cit fn 10.

16. Furopean Commission 'Enforcing Small Firms' Patent Rights' (2001) Directorate-General for Enterprise, EUR 17032.

17. Op cit fn 10 at Chap 3.

enforcement of intellectual property rights may be achieved via the formal court system. However, as exemplified by the Danish Ministry of Trade and Industry's report, Economic Consequences of Legal Expense Insurance for Patents, 10 legal expenses associated with the enforcement of patents are often substantial and are unsuitable in terms of a financial burden, especially for SMEs. Indeed, the minimum legal expenses per side for a single court intellectual property action is set at 15000 euros. On the other end of the spectrum and by way of example, the **Dyson Limited v Hoover** Limited¹¹ case lasted over three and a half years and incurred costs in excess of £2 million. Estimates of legal costs in patent litigation in the United States for example, run from \$1-3 million per suit to \$500,000 per claim, per side.¹² In the light of such expense, it is sometimes suggested that legal expense insurance is necessary, in particular for SMEs to protect and enforce their respective intellectual property

It is clear that the protection and

In this study, we shall focus upon the phenomenon of IP insurance as a mechanism for supporting SMEs in legal disputes involving the enforcement or defence of their intellectual property rights, with particular reference to England and Wales.

2.2 Intellectual property insurance

The primary function of insurance is to provide for risk sharing.14 In the context of legal expense insurance what is entailed is that in return for a premium, the insurer undertakes to indemnify the insured either wholly or partly, in respect of legal expenses arising out of a dispute. There are two aspects to this, namely, enforcement insurance and infringement insurance. These insurance policies seek to cover the legal expenses incurred as a result of enforcing intellectual property rights, or defending the claim of a breach of another's intellectual

There has been considerable interest in Europe in the use of insurance as a mechanism to assist in the enforcement of intellectual property rights. Indeed, two separate EU Commission reports, one as we have previously identified emanating from the Danish Patent Office¹⁵ and the other from Trinity College Dublin, 16 have recently concluded in favour of contrasting models for the protection of patents registered by SMEs. The report from the Danish Patent Office championed a scheme to subsidise legal expense insurance for patents.¹⁷ The report suggests that high litigation costs are one factor that leads to SMEs undertaking less patenting activity. To deal with this, the Danish proposal focuses upon legal fees insurance as a means of reducing the risks involved in protecting patents, that is, instead of having to bear the full costs of legal action, an SME would pay an insurance premium and a small deductible. In this way, the argument is that SMEs could avoid the predatory behaviour of large firms who

infringe their patent rights on the assumption that the SME will not have the financial means to enforce their patent through an expensive litigation process. The benefit of legal expense insurance to the SME would therefore be to deter large firms from engaging in such behaviour.¹⁸

The Danish report identifies that only the UK and the USA have any meaningful IP insurance schemes.¹⁹ In view of the limited market for legal expense insurance to defend patents in Europe, the Danish report notes that the State should have a role in setting up such schemes. The report also recognises that it would be difficult for anyone to set up a profitable insurance market in areas such as biotechnology because of the number of disputed patents in this context. To deal with this dilemma, the report recommends that the State should provide for insuring patents in those areas of industrial activity where the private market will not supply.²⁰

The economic premise underlying the Danish approach is that legal expense insurance will increase patents and R&D activity, as well as knowledge spill-overs, where one firm can learn from another. The reasoning here is that the presence of such schemes will reduce the risks that SMEs face in undertaking patenting activity. The total benefit of the insurance scheme for all European firms in Europe is estimated in the report as being between 6-21 billion euros.²¹

In the European Commission report emanating from Trinity College Dublin, a survey was taken of SMEs engaged in patenting activity. The conclusion of the survey was that European SMEs want a quick resolution to disputes because speed to the market is often more important than a patent for market power.²² It was also pointed out that large firms have legal divisions to enforce and challenge patents, whereas small firms effectively waste their innovative energy in defending patents. The key proposal in the Trinity College report was the need to establish a patent defence union (PDU) within the European Union.²³ It is envisaged that SMEs would join such a union and would contribute a small fee. This would allow for binding voluntary arbitration between members and a fund to fight intimidation by large firms. The PDU would provide a specialist section to deal with legal disputes, which would select the most worthy disputes²⁴ to litigate and relieve the SME from dealing with the day-to-day legal process. Whilst the scheme would require a one-off subsidy to activate it, it should become self-financing from the fees generated by the members of the PDU.25

In evaluating the two schemes referred to above, it is necessary to consider the literature in economics as this relates to patents.²⁶

2.2.1 Patents and economic activity

Whilst the first example of patent protection was introduced 150 years ago,²⁷ it is only in the last 35 years that economists have taken a serious interest in the operation of the patent system. In his seminal work in 1969, Nordhaus²⁸ studied the optimality conditions for setting the length and breadth of patents. The unique aspect of patents is that they give the owner an opportunity to possess a legal monopoly over a particular idea or market,

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property rights.

18. Op cit fn 10 at p.9-11.

19. Op cit fn 10 at p.13. **20.** Op cit fn 10 at p.21.

21. Op cit fn 10 at p.49.

22. Op cit fn 16 at p.38.

23. Op cit fn 16 at p.52-64.

24. The most worthy disputes be be most outrageous, and where there is a strong chance of the patentee winning in court. See O cit fn 10 at p.75.

25. Op cit fn 16 at p.65-67

- 26. To understand how best to to understand their purpose. It is what circumstances patents are likely to be infringed and how different proposed schemes for patent protection will affect the potential infringers.
- 27. Lerner, J. 150 Years of Patent Paper 7478.
- 28. Nordhaus, W. D. Invention. Growth and Welfare: A Theoretica Treatment of Technological Change

subject to having two restricting features: First, they are only valid for a fixed time period; second, they exclude direct copying by rivals, but other firms are allowed to produce ideas that may be close to the original. How close a copy is allowed is what is known as the breadth of the patent.

Patents are dichotomous for economists

because their static and dynamic effects are very different. In a static context a patent appears to be an anti-competitive device that prevents the free competition which economists consider to be the best way to organise a market. However, in a dynamic context the legal monopoly aspect of a patent gives a firm the incentive to be innovative. If any firm could immediately copy any invention or process, then firms would have little incentive to innovate because they would face immediate competition. Nevertheless, the patent allows some exemption from competition, which gives them the incentive to produce new goods. It is argued²⁹ that this is good for the economy because it allows new and better products to be brought to consumers and also adds to the stock of knowledge in the economy that provides assistance to other firms trying to innovate. In the same study, Nordhaus showed that the optimal patent would balance these two considerations.³⁰ The best outcome occurs when the static losses at the margin due to a lack of competition are exactly balanced by the marginal gains from innovation due to existence of a patent. In general, if you don't protect innovation well enough, no-one will innovate: protect it too well and second

generation benefits of research will be lost

and the monopoly power will hurt consumers.³¹

One area of economics research has been the impact of the patent system on R&D, or more generally on economic growth. The impact of the patent system has been explained at both the macro and micro economic levels. Looking at the impact of economic growth, Gould and Gruben³² offered evidence that countries with stronger patent protection had experienced higher long-run growth. The theory behind this is that by offering more incentive for firms to innovate, the economy becomes more dynamic. However, this result appeared to be conditional on the country being active in international trade. There is very little incentive to innovate if a firm already has a domestic monopoly in a closed economy. Lee and Mansfield³³ found that US foreign direct investment went to countries that were perceived by firms as having strong IP protection leading to the conclusion that, for poorer countries, a stronger protection of IP may attract foreign investment.

At a micro economic level, Greenhalgh and Longland³⁴ have produced two recent papers that highlight the importance of patents at the level of individual firms. Using data for large production firms in the UK between 1987 and 1994 they found evidence that new patents were associated with a rise in value added within those firms. From their results it would appear that new patents are associated with more efficient production techniques. Similarly, using 1986-1994 data they discovered that new patents were associated with a future rise in employment within firms. One extra patent taken out per

35. Greenhalgh, C. and Longland M. 'Intellectual Property in UK Firms: Creating Intangible Assets and Distributing the Benefits via Wages and Jobs' (2002) forthcoming in Oxford Bulletin of Economics and Statistics at p.16.

36. Jaffe, A. B. 'The US Patent System in Transition: Policy Innovation and the Innovation Process' (2000) 29 Research Polic 531

- **37.** Sakakibara, M. and Branstette L. 'Do Stronger Patents Induce More Innovation? Evidence From the 1988 Japanese Patent Law Reforms' (2001) 32 RAND Journal of Economics 77.
- **38.** Kortum, S and Lerner, J. 'What is Behind the Recent Surge in Patenting?' (1999) 28 Research Policy 1.
- **39.** Kortum, S and Lerner, J. 'Assessing the Contribution of Venture Capital to Innovation,' (2000) 31 RAND Journal of Economics 674.
- **40.** Jaffe, A. B. 'The US Patent System in Transition: Policy Innovation and the Innovation Process' (2000) 29 Research Policy 531.
- **41.** Hall, B. H. and Ziedonis, R. H. 'The Patent Paradox Revisited: An Empirical Study of Patenting in the US Semiconductor Industry, 1979-1995,' (2001) 32 RAND Journal of Economics 101
- **42.** Ibid at p.125.
- **43.** Op cit fn 37.
- **44.** Ibid at p.86
- **45.** Patents create a stronger form of protection, which give the innovator a more powerful monopoly over their ideas by excluding close, as well as, direct copies. On the other hand copyright offers weaker protection in that much closer copying, and development of the ideas contained within the copyright, are allowed.
- **46.** Waterson, M. and Ireland, N. 'An Auction Model of Intellectual Property Protection: Patent Versus Copyright' (1998) 49 Annales D'Economie et de Statistique 247.

year was found to have increased employment in an average firm by around 20 jobs.³⁵ Therefore, not only does productivity appear to benefit from patenting activity, but employees also benefit through the job creation effects.

An interesting series of experiments into the effects of changing the patent laws occurred in the 1980s. During this period, two of the world's leading economies changed their IP legal framework. The US courts became much more protective in the 1980s³⁶ and Japan also strengthened its patent laws in 1988.³⁷ The evidence for the effects this strengthening has had is mixed. Kortum and Lerner³⁸ reported a surge in patenting activity from 1985 onwards. However, they found that R&D activity was unaffected. This implied the same level of R&D was generating more patents. Their explanation for this was that management strategies had improved innovation application. This is consistent with the evidence from Kortum.³⁹ He found that R&D had been focused much more towards outcomes that could be patented, with the driving force being the rise of venture capitalism. Venture capitalists typically want the company to have significant assets before they are prepared to invest in them. It was therefore the need to provide these assets that drove the increase in patenting activity.

In another survey, Jaffe⁴⁰ identified the rise in patenting activity without a matching rise in R&D activity. He considered that the changes in US intellectual property protection might have moved firms away from innovation towards strategic behaviour. Hall and Ziedonis⁴¹ presented evidence for

this in the US semi-conductor industry. In this industry the important factor in the profitability of a firm is time to market. If a firm can get their product in the market place before their rivals they are able to reap the advantages. However, the evidence from the 1980s was that semi-conductor firms were patenting more heavily. The authors attributed this to the firms using patents for strategic purposes.⁴² The patents helped their holders to negotiate with other firms, and also prevented other patent holders from being able to out-bargain them.

If the above results are accepted, stronger patent protection is not necessarily good for the economy. It may lead to a rise in patenting activity, but this could be for strategic rather than innovative reasons. In this respect, Sakakibara and Branstetter⁴³ found little evidence that stronger IP protection had led to more innovation in the Japanese economy although they did note a rise in the number of patent litigation cases.⁴⁴

The Nordhaus model focused on the design of patents, but gives a useful guide to the correct form of protection for intellectual property in respect of ideas and creations.⁴⁵ The distinction between patents and copyrights for protecting intellectual property is an issue that has been addressed by economists.⁴⁶ The general conclusion is that in industries where only a small number of firms are involved in innovation, where R&D costs are high and where innovation brings little potential for further innovation, the goods in question should receive strong protection. As a concrete example, it is often contended by economists that new

- 29. For a good non technical discussion of the issues involved in designing IP protection see Scotchmer, S. 'Standing on the Shoulders of Giants: Cumulative Research & the Patent Law' (1991) 5 Journal of Economic Perspectives
- **30.** For a shortened view of Nordhaus's pioneering work which highlights the major issues, see Nordhaus, W. D. 'The Optimum Life of a Patent: Reply' (1972) 62
 American Economic Review 428
- **31.** Ordover, J. A. 'A Patent System for Both Diffusion and Exclusion' (1991) 5 Journal of Economic Perspectives 43 and Scotchmer, S. 'Standing on the Shoulders of Giants: Cumulative Research and the Patent Law' (1991) 5 Journal of Economic Perspectives 20
- **32.** Gould, D. M. and Gruben, W. C. 'The Role of Intellectual Property Rights in Economic Growth,' (1996) 48 Journal of Development Economics 323.
- **33.** Lee, J. Y. and Mansfield, E. 'Intellectual Property Protection & US Foreign Direct Investment,' (1996) 78 Review of Economics and Statistics 181.
- 34. Greenhalgh, C. and Longland, M. 'Running to Stand Still? Intellectual Property and Value Added in Innovating Firms' (2002), Oxford Intellectual Property Research Centre Working Paper 01/02 and Greenhalgh, C. and Longland, M. 'Intellectual Property in UK Firms: Creating Intangible Assets and Distributing the Benefits via Wages and Jobs' (2002) forthcoming in Oxford Bulletin of Economics and Statistics.

pharmaceutical products should receive strong protection because firms sink large amounts of money into their development, and formulas for new drugs very rarely can be built upon to create further new products.⁴⁷ Therefore, strong protection gives the incentive to innovate while not denying further innovation opportunities.

In contrast, in the case of software, it is contended that the weaker protection of copyright should apply.⁴⁸ This is because a large number of innovating firms are not spending vast amounts of money, but each development gives the opportunity for further advancement. Thus, it is argued⁴⁹ that a firm needs less incentive to innovate because their costs are lower, and the potential spill-overs imply that one firm should be allowed to build on the work of others.

Other authors have shared the above conclusion. Besen and Maskin⁵⁰ noted that patent protection became stronger in the USA in the 1980s,51 and they found that the software industry probably became less innovative as a result of this. Again, it was considered that software was a sequentially innovative industry where one innovation built upon another. Patent protection therefore slowed this process down. The argument adopted by these authors is that looser patent protection would benefit all the firms in the industry because it would allow it to be more innovative and profitable.52 A firm with an innovative software idea it is arqued⁵³ should have this copyrighted, while other firms could then build upon this idea to improve it. The

original firm could subsequently build on the

other firms work to create yet another innovative idea. This process would help create a dynamic industry where all firms learn off all other firms.⁵⁴

Patents and copyrights are not the only type of intellectual property available to firms. Trade marks, which play an important role in markets where consumers are faced with many products, but only want to spend a limited amount of time investigating the quality of them. The reputation built around a trade mark allows the firm to signal to a consumer the quality of the product they are thinking of purchasing. This is particularly important in markets where the quality of the product is not readily observable to the consumer.55 Indeed, Greenhalgh and Longland⁵⁶ have recently demonstrated the importance of trade marks. Using data for large UK production firms from 1986-1994 they found that new trade marks helped on average to increase wages in a firm. Firms with registered trade marks also tended to have higher levels of employment. The same authors using UK data from 1987-1994⁵⁷ have also shown that new trade marks are positively associated with value added in firms. It would seem that from the point of view of a firm a well-managed trade mark offers the opportunity to build a niche in a market that can benefit everyone working for that firm by increasing profitability and wages.

From the above discussion, the protection of intellectual property rights should be designed in such a way as to encourage innovative individuals, while making the benefits of this innovation as widely available as possible.⁵⁸ As demonstrated by

Nordhaus this involves conflicting objectives. The stronger the protection afforded to innovators, the less society is likely to benefit from an innovation. However, if protection is too weak then individuals and firms will not have the incentive to create new ideas because they will not benefit sufficiently from the process.

More recently, economists have become interested in the issue of the enforcement of IP assets.⁵⁹ The standard theory of property rights in economics assumes that they are properly defined and that they can be perfectly enforced.⁶⁰ For a patent, a clearly defined property right implies that it must not be subject to challenge and that it is clear to all parties what behaviour would imply infringement of the patent. The perfect enforcement of the patent implies that any infringement will be noticed and punished. However, it is now acknowledged that there are significant difficulties in practice, especially for SMEs, in the enforcement of their patents.61

- **47.** Ibid at p.259-260.
- **48.** Ibid at p.260.
- **49.** Ibid.
- **50.** Besen, J. and Maskin, E. 'Sequential Innovation, Patents and Imitation' (2000) MIT Economics Working Paper 00-01.
- **51.** Ibid at p.2.
- 52. Ibid at p.20.53. Ibid at p.6-11
- **54.** Ibid.
- **55.** This implies, in areas such as food and drink, or consumer electronics, customers are willing to pay a premium for goods which have a trade marked brand because the reputation of the good informs them of the quality, which cannot be observed otherwise. See Landes, W. M. and Posner, R. A. 'Trade mark Law: An Economic Perspective' (1987) 30, Journal of Law & Economics 265.
- **56.** Greenhalgh, C. and Longland, M. 'Intellectual Property in UK Firms: Creating Intangible Assets and Distributing the Benefits via Wages and Jobs' (2002) forthcoming in Oxford Bulletin of Economics and Statistics.
- **57.** Greenhalgh, C. and Longland, M. 'Running to Stand Still? Intellectual Property and Value Added in Innovating Firms,' (2002), Oxford Intellectual Property Research Centre Working Paper 01/02
- **58.** Op cit fn 28 at pp.37-40.

- **59.** Lanjouw, J. O. and Lerner, J. The Enforcement of Intellectual Property Rights: A Survey of the Empirical Literature' (1998) 49 Annales D'Economie et de Statistique, pp. 223-246 and Lanjouw, J. O. and Schankerman, M. Enforcing Intellectual Property Rights (2001) NBER Working Paper 8656.
- **60.** Coase, R. 'The Problem of Social Cost' (1960) 3 Journal of Law and Economics, pp. 1-44.
- **61.** The Trinity College Dublin survey found that 67% of firms who replied had experienced attempts to copy their patents. Op cit fn 16 at p.32.

3. Enforcement of Intellectual Property Rights

3.1 Economic impact of IP enforcement difficulties

When considering whether to take out a patent, a firm must consider the costs and benefits of doing so. On the cost side, there are the direct renewal fees that must be paid every year to the Patent Office. Added to these are the development costs in the case of a product, to build and market it. However, there is also the risk of legal costs if they are forced into litigation over the patent. All of these costs must be compared with the benefits taking out a patent. It is conceivable that the costs of legal action could be a significant deterrent to firms when considering whether to invest in developing patents and in general other IP assets.

Evidence for the above effect comes from a series of surveys of SMEs in Europe. The study by Trinity College Dublin surveyed 549 EU firms who had taken out either a US or EU patent between 1994 and 1997.64 The only basis for their inclusion was that they had all taken out a patent in Europe or the USA during the relevant period. The results of the survey were not encouraging from an SME point of view. Two-thirds of all firms surveyed had their patented inventions copied and of these firms 21% thought that the copying was very serious for them in terms of financial impact. Of those who thought they had been infringed, 20% went as far as the courts to defend their patents and 11% went to appeal. Significantly, nearly half the firms were fearful of the cost of litigation when planning investment.

The results set out above are largely consistent with another survey of 974 SMEs

in eight European countries in the Chemicals, Pharmaceuticals, Engineering and Other Manufacturing sectors.⁶⁵ This survey found that even in sectors where the potential for patenting would appear to be large, the majority of SMEs had not undertaken any patenting activity. In this case, the reason cited by many firms for not patenting was a lack of confidence in the enforceability of patents.⁶⁶ However, there is also evidence that SMEs avoid areas where there are already many firms patenting, or where large firms patent⁶⁷ in an attempt to reduce the likelihood they will be involved in a dispute.

The Dublin survey also found⁶⁸ that most SMEs thought there were significant biases against foreign firms, especially in the USA, where large firms were allowed to intimidate them. This is because in the USA the case is held before a local court and jury and it was considered that the court would find in favour of the local company, the net effect acting as a barrier to entry for foreign firms. The evidence from SMEs was that the patent system is being under-used, partly due to a lack of knowledge and information about the system, but also due to a lack of confidence in the system.

The potential benefits from making patents more enforceable were explored in the Danish Report which noted that previous surveys had shown that high litigation costs were one factor that led to SMEs undertaking less patenting activity.⁶⁹ Using data for 46000 Danish patents applied for between 1967-1995 the authors of the Danish report attempt to estimate a combined value for Danish patents.⁷⁰ The method adopted to

71. This technique for valuing patents was pioneered by Jean Lanjouw. She found the implicit subsidy from patents in the German computer and machines sector was 12%, while it was 15% in the pharmaceutical sector. See Lanjouw, J. O. 'Patent Protection in the Shadow of Infringement: Simulation Estimates of Patent Value' (1998) 65 Review of Economic Studies, pp.671-710. Using the same method Schankerman found similar results for industries in France. See Schankerman. M. 'How Valuable is Patent Protection? Estimates by Technology Field' (1998) 29 RAND Journal of Economics 77.

72. Op cit fn 10 at pp.37-40.

73. Op cit fn 10 at p.40.

74. Op cit fn 10 at p.42-44.

75. Op cit fn 10 at p.41-49.

76. Lanjouw, J. O. and Schankerman, M. 'Characteristics of Patent Litigation: A Window on Competition ' (2001) 32 RAND Journal of Economics, pp. 129-151 and Lanjouw, J. O. and Schankerman, M. Enforcing Intellectual Property Rights (2001) NBER Working Paper 8656.

paid to the Patent Office by patent holders to maintain the patent. The theory is that if the patent holder considers that it was not worth paying the renewal fee the patent would be allowed to lapse. By observing the rate at which patents are not renewed it was possible to develop a model that retrospectively valued an entire cohort of patents. The values they found from their model would place at today's prices an average Danish patent at a value of 20000 euros. Only 1% of patents they found had a value of over 134000 euros and 50% had a value of less than 8000 euros. The total value of patents owned by Danish firms in Europe in 1997 was extrapolated to be 256 million euros. This compared with R&D expenditure of 2060 euros million in Denmark, so that in theory, patents represent an implicit subsidy to R&D of 12%, which is in line with other studies.⁷¹ The implicit subsidy comes from the ability of patents to exclude others from the benefits of R&D. The majority of the benefits of R&D it was concluded must take other forms such as the ability to be first in the market with a product, or the ability to develop a product that can be trade marked.

achieve this uses the annual renewal fee

A standard economic modelling approach is evidenced in the Danish Report, namely, comparative statics. This changes one variable in an economic model and compares the initial and final outcomes. One of the key assumptions of the initial model adopted is that the minimum cost of a court case to defend a patent in Denmark is 15000 euros. The report then imagines what would happen if there were widespread legal expense insurance for patents in use.⁷² A

deductible of 7000 euros, was assumed which then became the new minimum cost of a lawsuit. Assuming that all other variables are held constant they concluded that this would raise the value of patents held by Danes by approximately 10%.73 The Danish Report concluded that multiple benefits would flow from this change, in particular it was foreseen that more R&D would occur because patents will now represent a greater subsidy to it.74 They also concluded that more patenting activity would increase the public database of knowledge from which non-patent holders acquire information, thereby enhancing productivity in the economy.⁷⁵

In designing a system for enforcing patents effectively it is necessary to understand which types of patents are most likely to face litigation or challenges.

3.1.1 Characteristics associated with the propensity to litigate

The study of which types of patent are most likely to face litigation is a relatively new area of research for economists. Lanjouw and Schankerman in two studies⁷⁶ analysed the characteristics associated with patent litigation. Using data from the USA in respect of 1975-1991 and 1978-1999 they found that patentees were more likely to go to court to protect a patent that was subsequently cited by themselves. A citation is a claim that a new patent directly builds on the ideas contained in an existing patent. If a firm wishes to build on an initial development then they must protect the first stage of this. It appears from the studies that firms were

62. It is necessary to begin paying an annual renewal fee for a patent in the UK 5 years after the initial application was submitted. The fee for the first renewal is £50, and this gradually rises each year during the life of the patent. To renew a patent for its 10th year costs £150, for its 15th year costs £250 and for its 20th and last year it costs £400. Similar schedules apply to other forms of IP assets. Full details of the fees payable for registering Ut designs, patents and trade marks can be obtained via the UK Patent

Office website at www.patent.gov.uk/about/finance/index.htm. This page also contains details of the fees for EU Trade Marks and Patents, and International Patent fees

63. Op cit fn 10 at p.29.

64. Op cit fn 16.

65. Derwent Information
Dismantling the Barriers: A PanEuropean Survey on the use of
Patents and Patent Information by
Small and Medium-sized

66. Ibid at p.10

67. Lanjouw, J. O. and Lerner, J. 'The Enforcement of Intellectual Property Rights: A Survey of the Empirical Literature' (1998) 49 Annales D'Economie et de Statistique, pp. 223-246.

68. Op cit fn 16 at pp.41-42.

69. Op cit fn 10 at p.6.

70. Op cit fn 10 at pp.30-35

going to court to ensure that they could control a wider section of a market and that they were more likely to litigate if other firms citing their patent were in the same technology field.⁷⁷ These challenges were based on the new patent being too close to the previously cited one. In this way, it could be argued, the firm would build a reputation of being prepared to defend their patents from potential competitors.

In the same studies, Lanjouw and

Schankerman found that patents that subsequently received more citations were more likely to face litigation.⁷⁸ This implies that patents that represent significant developments that other firms want to build on are the ones that are most likely to end in court. A possible explanation for this is that patenting firms want to protect their market position if they have invented an important concept. A further finding was that newer, more dynamic industries experience more litigation.⁷⁹ Also, patents in the USA that claim more novel components are more likely to face litigation.80 Meanwhile, those patents that are listed as having broader applications in many technical areas are less likely to face dispute, probably because they are harder to police.81 If a patent is influencing many technical areas it may be that the patentee doesn't understand when infringement is taking place, because they are not directly involved in that market.

A significant finding in the Lanjouw and Schankerman studies is that SME and individual owned patents were more likely to face litigation.⁸² Those firms with a large number of patents are likely to settle more quickly. It may be that firms with many

patents are in a position to trade or bargain with other firms, as they are likely to interact with each other and therefore will learn to co-operate. The effect of patent portfolios was found to be particularly important for SMEs as it was the SMEs with only a small number of patents who faced the highest level of litigation.83

There are significant differences in the characteristics of patents that face litigation from those which don't and this must be taken into account in designing a scheme to protect patents, particularly if the scheme involves legal expense insurance.

3.2 The basic model of pursuit and defence insurance

As discussed the Danish Report concluded that one method for enforcing patent holder rights more effectively was through legal expense insurance.⁸⁴ This gives SMEs the opportunity to defray the legal costs they would otherwise incur in enforcing patents. In a functioning insurance system, if their patent is infringed the insurance company should provide them with the funds necessary to defend it in court. Such protection rights should make the patent more valuable and also deter infringement because other firms will know the patent holder can afford to vigorously pursue the litigation.

To assess the likely functioning and impact of a legal fees insurance scheme for patents it is firstly necessary to analysis the basic economic model of insurance. The key factor in the economic view of insurance is attitude to risk. How an individual responds to the choice between a guaranteed income and a fair gamble determines their attitude to risk.⁸⁵ If the individual prefers a certain income to a gamble with the same expected value they are said to be risk averse. If the individual is indifferent between the two outcomes they are risk neutral.

In general it is assumed that most individuals are risk averse. This means that they would rather have a certain outcome over a gamble with the same expected value. This in turn implies that individuals are willing to pay a premium to achieve greater certainty in their outcomes. However, insurance companies are typically seen as being risk neutral. They are in a position to collect premiums from a large number of individuals, only some of which will place a claim for a payout and in this way they are able to spread risk across a large number of individuals. In the context of patent litigation insurance provided the insurance premium is set correctly the company can offset the cost of patents that do face litigation with the premiums on the patents that aren't litigated.

Insurance is therefore primarily seen as a means for individuals to achieve a greater level of certainty in their outcomes. Individuals pay a premium to the risk neutral insurance company who then compensate them if the insured event occurs.

85. A fair gamble is one where

is the same as the guaranteed

income. Therefore, the individua

quaranteed income of £50, and a

may face a choice between a

£25 or £75, each with a 50%

86. Van Velthoven, B. and Van

87. Hayes, A., Rickman, N. and

Social Welfare' (2001) 72

Tzavara, D. Legal expense

insurance Risk Aversion and

Litigation (2001) Unpublished

88 Kirstein, R. Risk-Neutrality and

University of Saarbrucken Centre

for the Study of Law and

Economics Letters 387.

paper.

Wijck, P. 'Legal Cost Insurance and

3.3 The differences between legal expense insurance and other insurance markets

As stated above, the standard theory of

insurance is concerned with the ability to transfer risk and bring greater certainty of outcomes to risk averse individuals or firms. However, legal expense insurance is perceived in the economic theory as being different. It is not just about attempting to reduce risks, but also about improving bargaining positions in a legal dispute. Van Velthoven and van Wijck⁸⁶ show that a risk neutral agent may benefit from having legal expense insurance in that it makes it more credible that the agent will take a legal dispute to court. Applying standard bargaining theory this should imply that legal expense insurance could be used to extract a better settlement from the defendant. Of course, this has a potential deterrent effect in that insured firms should be infringed less, but it also creates the potential for predatory behaviour on other agents who are without insurance.

Heyes, Rickman, and Tzavara⁸⁷ discuss a similar case with risk averse agents. They again find settlements are likely to be improved as a result of having legal expense insurance, and that the deterrent effect will exist. They also find that cases are more likely to reach court because plaintiffs bargaining positions will harden. Overall, more care will be taken, but there is more chance that a dispute will reach court. The social welfare effects of the insurance are therefore hard to discuss because it can't be forecast if more or less cases will reach court. Kirstein⁸⁸ advances this model by asking what happens if both firms are insured. Whilst insurance aids small firms bargaining position against large ones, if two small firms are in dispute with each other the

77. Lanjouw, J. O. and Schankerman, M. 'Characteristics of Patent Litigation: A Window on Competition ' (2001) 32 RAND

78. Ibid at p.144.

79. Ibid at p.145. The Danish Report cites evidence that, in the US, approximately 1% patents are subject to litigation. However, when only the biotechnology industry in the USA is examined this figure rises to 6% of patents that face lawsuits. See Op cit fn 10 at p.10.

80. Op cit fn 77 at p.144.

81. Ibid at p.145.

82. Lanjouw, J. O. and Schankerman, M. Enforcing Intellectual Property Rights (2001) NBER Working Paper 8656 at p.26

83. Op cit fn 77 at p.145.

84. Op cit fn 10.

18

settlement will be the same as before and, as such, the insurance is a social waste. However, if only one firm has insurance they will be greatly advantaged. To combat this advantage the other firm should also take it for self-defence and it would appear from this that both parties would buy socially wasteful insurance. This is known as a Prisoner's dilemma.⁸⁹

Overall in economic theory legal expense insurance is seen as a bargaining tool that may or may not lead to less court action. There are, however, two other important matters, moral hazard and adverse selection which require consideration.

3.3.1 Theory of moral hazard.

One of the key issues within the model of economics insurance is moral hazard, and this has not been widely addressed in the patent insurance literature. A moral hazard is when an individual or firm with insurance changes their behaviour compared to when they didn't have insurance. Taking car insurance as an example: individuals may take less care to lock their car if they have insurance, thereby exposing the vehicle to a greater risk of theft. This means that there are likely to be more claims made on the insurance company. If the insurance company had set its premiums based on the assumption that care would be taken in locking the car then they are likely to make a loss and potentially go out of business.

In the above scenario, the effect of moral hazard is that claims will increase once a person or firm has insurance, unless steps are taken to negate this effect. The standard solution offer in the economic insurance model is co-insurance. This normally takes

the form of a deductible where the insured person pays the first part of any claim to ensure they take care to avoid having to make a claim. The effect of having deductibles in insurance is that the individual has the incentive to take care even if they have insurance because they must pay part of the claim.

The legal expense insurance for patents has a wide potential for moral hazard problems. These must to be balanced against the potential benefits of insurance in the form of cheaper enforcement of patents and the deterrent effect insurance may have on predatory behaviour. There is the potential for moral hazard to operate on both sides of the insurance market in legal expenses insurance for patent enforcement. It is possible there will be moral hazard from insurance companies, as they will have an incentive to seek loopholes in their contracts to avoid them having to honour their obligations. It is also likely that possessing legal expense insurance would alter the thinking and behaviour of SMEs. The Danish Report proposals consider patent insurance as a defensive measure that protects the legitimate rights of innovative firms. However, a major concern is that companies would use legal expense insurance as an anti-competitive device.

As already noted,⁹⁰ there is evidence that stronger enforcement of patents in the USA in the 1980s led to firms building up their patent holdings as a measure to try and protect themselves against competition. If patents became easier to enforce it is likely that this process could be exacerbated, with firms taking out more and more patents simply as an attempt to reduce the

91. Lanjouw, J. O. and Lerner, J. 'Tilting the Table? The Use of Preliminary Injunctions' (2001) 44 Journal of Law and Economics 573

92. This is to the disadvantage of small firms for whom one option is to fight a court case and go bankrupt if they lose - the effect of an injunction could be to bankrupt the firm now. See Ibid at p.600.

93. This again is to the disadvantage of small firms because the case finds its way court much more quickly and fol longer. See Ibid at pp.600-601

94. Ibid at pp.594-600.

95. Op cit fn 16 at p.34.

96. However, caution should be

jurisdictions to ensure like-for-like comparative measurements. UK 'utility patents' in foreign individual countries, such as Germany, Japan, Korea and known as 'petty patents'). The utility model patent is designed for modest improvements to inventions that do not merit the cost of a full patent application and are useful where the lifespa of the product is shorter than the time it takes to obtain a full substantively examined by the Deutsches Patent- und Markena (German Patent and Trade mark Office) and questions as to their legal challenges brought by others http://www.dpma.de/eng.

bargaining positions. There are also other examples of how the legal protection of patents may be used in an anti-competitive manner. Lanjouw and Lerner⁹¹ discuss the use of interim injunctions as a means by which large firms attempt to dominate small ones. The argument is that an interim injunction, for example, will force the defendant to stop producing while the court case is on going. This has two effects: On the one hand it stops firms who would not be able to pay if they lose at the end of the case from continuing to produce,92 whilst on the other hand it generally raises the costs of litigation.93 The evidence is that big firms put smaller firms into an inferior position by using interim injunctions to force them to stop producing now.94 This process could increase if legal expense insurance became more widespread because it is likely that obtaining insurance will be easier for larger firms than small ones. The effects of this are that larger firms will be in an even stronger position to prey on small firms and this will further reduce innovative activity.

competition they face and improve their

The economic effects of legal expense insurance on whether cases go to court are ambiguous. The key prediction is that less infringement will occur, but more cases where infringement has occurred will be heard in court. This is supported by evidence from Germany⁹⁵ where taking a patent dispute to court is much cheaper than in the rest of Europe. The evidence is that German SMEs are far more likely to have been involved in a court action over patents.⁹⁶ Thus, it would seem that by making court action cheaper it is likely that insurance will

lead to more court cases and less private settlements of disputes, which is a waste of resources.

There is already evidence that patents lead to strategic behaviour that is to the detriment of competition. On the plus side, insurance may deter infringement and increase innovative activity because patents are more enforceable. However, on the negative side, if legal expense insurance becomes more widely available it is likely that firms will find ways to use it in an aggressive manner to reduce competition, rather than defensively to protect their IP rights.

3.3.2 Theory of adverse selection

A further factor in considering models of insurance is adverse selection. The key point that underlies this concept is that the person or firm most likely to buy insurance is the one who is most likely to need it. Thus, if an insurance firm offers a flat rate premium to all individuals they are likely to bankrupt themselves. The insurance would predominately be purchased by high-risk individuals who would be most likely to make a claim. To combat this problem, the insurance company needs a way of ensuring that they can distinguish between low and high-risk customers. In a market such as health care this can be done by health checks and studies of family histories that allow high and low risk individuals to be distinguished. This allows the insurance company to charge a high price to high-risk individuals and a lower price to low risk individuals. The consequences of this are, of course, that high-risk individuals who most need health care will find that it is expensive or even unobtainable.

89. The Prisoner's Dilemma is a classic result in game theory. It is indicative of a situation where all parties are better off if they cooperate with each other, but the nature of the game forces all players to behave unco-operatively leading to the worst outcome

90. Kortum, S and Lerner, J. 'Assessing the Contribution of Venture Capital to Innovation (2000) 31 RAND Journal of Economics 674.

> Applying the standard theoretical problem of adverse selection to the market for legal expense insurance for the patents insurance market would imply that a company offering a flat rate premium would attract patents which are most likely to face litigation. This is a problem that is recognised in the Danish Report proposals.⁹⁷ The Report notes that if the premium is set too low then the insurance company is likely to make a loss, whilst if it is set too high then firms will not be attracted to it.98

> In settling the scope of legal expense insurance for the patents market, it will be necessary to identify how vulnerable a patent responsibility for higher risk patents which private insurance companies don't want to

is to challenge in order to calculate how high an insurance premium should be charged. As discussed, this process has already begun, notably, patents taken out in biotechnology or by very small firms or individuals should face a higher premium than other patents. This ability to distinguish between patents based on observable characteristics should make it possible for firms to create a profitable market for legal expense insurance. However, it does create the same type of problems that were discussed for health insurance. The firms that most need insurance are very small SMEs, and those that are operating in highly litigious areas. Yet, it is these firms that will be forced to pay the highest premiums for insurance, and therefore will be the ones least likely to purchase it. This is the reason that the Danish 98. The difficulty in calculating the Report proposals recognise that there will be a continuing role for State involvement in the legal expense insurance market. The private sector is likely to offer insurance to firms who are seeking to defend low risk patents. The State would then be forced to accept

accept.99

3.4 The role of IP insurance

There are significant difficulties in the Danish Report. The first difficulty relates to how insurance for legal expenses fits in with the propensity of SMEs to enforce their patents. The evidence from the Trinity College Dublin Report is that SMEs don't just consider the monetary costs of going to court when considering whether to defend a patent. In particular, factors such as time and inconvenience of preparing for a court case were also considered to be important and SMEs would much rather settle a dispute out of court. A further difficulty with the Danish Report is that it does not come down in favour of any particular insurance scheme, which is a flaw because when designing any insurance scheme consideration must be given to how the participant's behaviour will be altered by the scheme. The key concepts here are adverse selection and moral hazard. The Danish Report only acknowledges the importance of adverse selection and to this end favours public subsidies for insuring patents that are in risky areas such as biotechnology. One likely consequence of a subsidised legal expense insurance scheme would be an increase in aggressive patenting. This occurs where firms take out patents that are designed to obstruct competitors and strengthen their own bargaining positions. This type of patenting was widely documented in the USA in the 1980s as a result of a strengthening of the patent legislation.¹⁰⁰ The net result could be that firms would use patents are strategic devices, rather than as a means of protecting generally important and innovative inventions. Furthermore, the uptake of legal expense insurance for patents is likely to be asymmetric in that it is something which

101. Op cit fn 16 **102.** Ibid.

103. WIPO offer a voluntary disputes, but has experienced a rapid uptake in domain name disputes. This type of dispute is unlikely to be valuable enough t See Ibid at pp.62-64.

104. The major advantage of this scheme is that it offers a framework for dispute resolution amongst members that avoids need for court action. It should potential for legal action.

105. On cit fn 16 at n 64

106. The PDU would have availal expense insurance see ibid at

107. The Trinity College Dublin Report recognises that in most will not want to go to arbitrati obtain the outcome they wish for members of the PDU. In is then from the combined power of the PDU will force larger firms to acc in a position to financially domin smaller firms. See Ibid at pp.52-5

108. The questionnaire asked fire "If the Voluntary Patent Pool referred to in the enclosed was i existence now, would you join it The questionnaire contained a case for, Litigation Insurance, compulsory arbitration with legal aid, a voluntary patent pool and and software. The description however are only one paragraph long and do not discuss in detail the costs to the firm. Therefore, responses may be taken as indicative of the attitude of firms they would join such a system if i were available. Ibid at pp.23-25.

109. 52% of respondents said they PDU. Ibid at p.35.

larger firms would find it easier to pay the premiums than smaller firms. One current problem with the patent system is that large firms can intimidate small firms because the larger firms have more access to legal resources. If it is larger firms who take out patent insurance, the same problem is likely to ensue.

The approach adopted in the Trinity College Dublin Report¹⁰¹ was different. This report was based on a survey of EU firms who had taken out either a US or EU patent between 1994 and 1997. The sample is therefore intentionally biased towards those firms who had experience of the patent system. The survey found that many firms were affected by infringement of their patents. The key problem facing patent holders was their inability to enforce their rights, even when they discovered that infringement was taking place. The evidence from SMEs was that they would rather settle disputes out of court because they found litigation to be costly, time-consuming and inefficient. It is for this reason that the proposals put forward by the Danish Report for legal expense insurance were rejected because they were perceived not to address the central needs of SMEs and were likely to require a large and continued public subsidy.¹⁰²

The Trinity College Dublin Report champions a patent defence union (PDU). This would be a voluntary organisation of SMEs who would contribute a fee each year. Any infringement dispute between members of the PDU would be settled by compulsory arbitration, thereby taking advantage of the facilities offered by WIPO.¹⁰³ A dispute between a member and non-member would be met with an offer of arbitration, which would not be compulsory. If

arbitration were refused, the PDU in theory would have the funds to fight a limited number of cases in the courts and this should act as a deterrent against infringement by large firms. To this end, it is not necessary for every case of infringement to be pursued to the courts because if only a limited number of cases were pursued, large firms would still perceive it as a deterrent to predatory behaviour. 104

The estimated costs of becoming a member of the PDU was put at a modest figure of 500 euros per year.¹⁰⁵ By making dispute resolution quicker and easier, this would be likely to reduce the incentive for aggressive patenting where the aim is to force time and monetary cost upon rival companies in an anti-competitive act. The scheme would also require only a one-off subsidy to launch it and it should then become self-financing which is a more favourable outcome compared to the legal expense insurance case. 106 However, one significant weakness of the PDU is the reliance on voluntary arbitration.¹⁰⁷ Another difficulty is the self-imposed limitation of the Report, which was confined to those firms with experience of patenting activity. The issue of IP enforcement is equally relevant to those firms who do not patent, but may have an interest in other intellectual property rights. In addition whilst the PDU scheme was estimated to require 18,000 members across Europe in order for it to become functional the survey merely posed a hypothetical question as to how many firms would be interested in joining such a scheme.¹⁰⁸ Whilst there was clearly interest in the scheme¹⁰⁹ there is no evidence of widespread support among the SME community for such a scheme.

97. The Danish Report discusses the failure of an insurance scher scheme that allowed them to patent was infringed. Of these 56 22 were granted support for their cases. The high volume of claims The insurance company recognis that they had attracted high-risk knowledge base to be able to nerform a precise risk assessmer premium to be set. Op cit fn 10 at

patents is discussed at length in the Danish Report. Op cit fn 10 at

99. Ibid at p.21.

100. See laffe A B 'The US Patent System in Transition: Policy Innovation and the Innovation 'What is Behind the Recent Surge

4. Legal Expense Insurance and Legal Context in England and Wales

- 110. Wachman R "LFL Market
- 111. Mayers, D. and Smith, C. W. Markets" (1981) 54 The Journa of Business, Issue 3, p.407.
- **112.** M. Wilson "Complaints
- **113.** See paragraph 4.2 helow
- **114.** This assumes that effective are available for intellectual relevant and in 2000 the ABI calculated that the "non-moto commercial" legal expense insurance market in the UK property insurance are no longe £29,432,000 in gross earned notified for that year. £12,207,000 worth of claims was incurred. When compared with the figures for 1990 an interesting trend can be been a slight reduction in the 1990 as compared to reduction has taken place in the number of claims notified (13,326 in 1990 as compared to 8,209 in 2000) and an increase premiums (£13,548,000 in 1990 as compared to £29,432,000 in 2000). In short, whilst the insurance premiums can be seen figures between 1990-2000, it the claims incurred in the early premium. Indeed, in 1992 the claims incurred rose to corresponding with an increase £15,956,000 to £21,600,000 the following year. This in turn has led to a general decrease in the

achieved an all time high in

4.1 Access to justice

It is the cornerstone of the British justice system to protect rights by promoting access to justice. To this end, it may be contended that legal expense insurance is a tool by which such access may be secured, because insurance may be seen to provide an equalisation of legal resources thereby facilitating access to justice for those previously denied due to cost. Conversely, it could be argued that legal expense insurance will serve only to increase litigiousness, which will stifle, rather than enhance access to justice. The reason for this is that when not financially restricted, individuals may be more inclined to challenge or defend, for example, intellectual property rights. Indeed, such a phenomenon can be seen in the early 1990's when comprehensive legal expense insurance was first made available. As Wachman¹¹⁰ has pointed out: "The upshot was a flood of expensive court actions by people the insurers branded as litigious by nature. Many smaller players collapsed, while most of their larger rivals stopped writing stand-alone LEI business."

Due to the effects of moral hazard and adverse selection, insurance companies recognise that the incentives of policyholders change once insurance is purchased.¹¹¹ Such behaviour would undoubtedly lead to an increase in insurance premiums, prejudicing perhaps the availability of legal expense insurance by placing it beyond the grasp of the SME. However, as demonstrated by Wilson,¹¹² policyholders of contemporary legal expense insurance will be unable to pursue outlandish claims, as a legal expenses policy will not fund an action that does not have a reasonable chance of success.¹¹³ Furthermore, competition amongst insurance companies may give policyholders the ability to negotiate for favourable terms, that is, legal expense insurance contracts will maximise policyholders' expected utility whilst providing insurance services at minimum cost. 114 In this situation, insurance premiums may not rise beyond the grasp of the SME.¹¹⁵

be posed: has the inflated insurance premium reduced the expenses, thereby accounting for the decrease in the number of claims notified? If such were the case, then legal expense facilitating access to justice

115. Compare Reves. I. A. "Patents and Insurance: Who Will Boston University Journal of

In a survey of risk managers and suppliers of insurance conducted by AIRMIC in 1998, 116 of a list of 10 risks provided, 50% of those questioned put reputation and intellectual property as their primary risk concern. Analysing the survey responses in more depth, 42% of risk managers put reputation¹¹⁷ and intellectual property as their primary risk concern, whilst 68% of insurance and risk service suppliers nominated it as their primary concern for their company. Given the growing importance of intellectual property to the British economy, legal expense insurance has at least the potential to prove to be a popular mechanism by which intellectual property rights are enforced.

4.2 Equalisation of legal resources

The distribution of legal resources can affect the outcomes of legal disputes, 118 because the greater the legal resources available to a party, the more likely they will be to win at trial. It is self-evident that the quality and quantity of legal assistance can greatly impact upon the persuasiveness of a case. The greater the financial resources available, more investigative work can be undertaken and greater specialisation of legal talent can be purchased.

Where resources are limited, a party may be forced into accepting an inadequate out-ofcourt settlement or succumb to a claim which is devoid of any valid legal defence. In this context, even the "prospect" of unequal resources may affect the resolution (or nonresolution) of a dispute before the issue has even reached the Court. The reason for this is that where a party is unable to afford legal assistance, they may chose not to pursue a matter or raise any defence to a claim. 119 Where a claim or defence is valid, such nonaction could be construed as a travesty of justice. It is in such a setting that legal expense insurance may be seen to be a harbinger of justice because as we have discussed, the notion of legal insurance is to facilitate an equalisation of legal resources. Despite this, legal expense insurance must not be seen to be the panacea of the justice system because as Wertheimer has pointed out:

> "... it is one thing to argue that each individual has 'a right to the best defence that money can buy' when he is up against the state. It is quite another to argue that each person has a right to the best legal protection that money can buy when winning unjustly would deprive another citizen of that to which he has a right."120

For this reason Wertheimer interprets the equalisation of legal resources not as a means of expanding the resources available to the less favoured, but as a means of restricting those available to the more favoured.

A standard term in all legal expense insurance contracts is the obligation placed upon the insured to notify the insurer of any circumstances likely to lead to a claim. This has been known to cause insurers to raise premiums by a factor of more than ten. 121 Given such action, an SME will be compromised in its relationship with a wealthy insurance company. Thus, as opposed to closing the gap, legal expense insurance may only serve to widen the financial ravine between the small business and a large corporation.

25

- 116. Unsworth, E. "Policy Covers
- **117.** It should be noted that whilst some insurers specifically exclude liability for wilful or knowing infringement indemnit endorsements to insurance with the European Commission's proposed Directive to bolster the fight against piracy and counterfeiting. See m/internal market/en/intprop, news/index.htm for details.
- 118. Wertheimer, A. "The Affairs Issue 4, p.303.
- **119.** Ibid at p.304.
- **120.** Ibid at p.313.
- 121. Serieant A "Intellectual Chartered Institute of Patent Agents Journal, Issue 11, p.989.

4.2.1 Choice of representation

Whilst the legal expenses policy appertains to the legal expenses incurred by the insured, it must be questioned whether the insured is free to nominate a legal representative of their choice, or whether the nomination of the lawyer rests upon the insurer. In terms of nominating practice, this is known as either "open panel" nomination or "closed panel" nomination respectively. 122 By virtue of Rule 1 of the Solicitor's Practice Rules 1990 and the Solicitors' Introduction and Referral Code 1990, a party has the right to instruct a solicitor of his choice. However, the contract of insurance may well stipulate that an approved legal representative must be utilised, but under the Insurance Companies (Legal Expense Insurance) Regulations 1990, the clients freedom of choice may not be restricted "where, under legal expense insurance, the insured has recourse to a lawyer to defend, represent, or serve his or her interest in any enquiry or proceedings".

Research undertaken by the Consumers' Association and the Law Society¹²³ has shown that most policies do in fact give the insured the right to choose his or her own solicitor, although the insurance company reserves the right to refuse the person or firm chosen. Even so, legal expense insurance is usually limited to a prescribed amount.124 Consequently, the policyholder's primary concern is not the quality of legal services purchased, but to ensure that the legal expenses incurred do not exceed the prescribed amount. Conversely, the insurer does have such an incentive, as the quality of legal services provided will affect the chance of success and thus the likelihood of recouping legal costs. It would appear that if the insurer directly retains the lawyer, conflict between the insurer and the insured as to the correct investment in legal services is reduced.

4.3 Regulation

To date, legal expense insurance has enjoyed a relatively unregulated existence within the British insurance market. A plethora of legislation and case law exists to govern insurance practices in general, but little comment has been expressly passed upon the functioning of legal expense insurance. Thus, whilst the Financial Services and Markets Act 2000. Part II of the Access to Justice Act 1999, the Access to Justice (Membership Organisation) Regulations 2000¹²⁵ and the Insurance Companies (Legal Expense Insurance) Regulations 1990¹²⁶ provide legislative guidance as to the lawful operation of legal expense insurance, these provisions do not form a comprehensive set of guidelines by which legal expenses policies must operate.

As stated in the explanatory notes to the Financial Services and Markets Act 2000, 127 the Act provides "the framework within which a single regulator for the financial services industry, the Financial Services Authority ('the Authority'), will operate. It equips the Authority with a full range of statutory powers and creates the Financial Services and Markets Tribunal ('the Tribunal'). The Act also establishes the framework for single ombudsman and compensation schemes to provide further protection for consumers". The Access to Justice (Membership Organisation) Regulations

128. Op cit 126.

129. In his historic Report, Commissioner Garfield stated that publicity is an effective tool of regulation, often occasioning best practice without the need for recourse to the law. See Annual Report of the Commissioner of Corporations (1906) p4.

Clearly, publicity may be accorded on an informal ad-hoc basis, or via government investigations and independent audits by professional accountants. As contended by Anderson, publicity can be seen to be one of the three objectives of insurance legislation. In the USA, for example, legislation was utilised so as to ensure that the business activities of the insurance company were open to scrutiny ensuring the solvency of the insurance company and equity Indeed, given the prolific nature o legislation was a much-needed tool so as to facilitate equity and justice and prevent fraudulent "Insurance" (1907) 1 The American Political Science Review, Issue 4, p.608,

In applying the regulatory

given to where responsibility for the execution of regulatory duties should fall, that is, should the state, an independent body, or the the procedures and practices of legal expense insurance? White has contended that the Law perform regulatory duties, as the is to provide access to legal services. See White, R. "Legal, Justice Quarterly 245. At first sight, such a suggestion would appear to be in the interests of justice, for be an independent body free from commercial loyalties. However, in time, the legal profession will itself become an agent of the insurance market, giving rise to a conflict of interest because, given the perceived benefits of legal expense insurance, it is inevitable that members of the legal recommend its purchase to their client base. In so doing the

have acquired an interest in the insurance market and its freedom from commercial ties will thereby seem tenuous. It is for these reasons that some have argued that the execution of regulatory duties is a necessary function of the State, further contending that wherever and whenever the State is unable to secure safe and economical insurance from private companies through effective supervision, it has a duty to provide such insurance through its own direct agency. See Robinson, M. H. "Government Regulation of Insurance Companies" (1906) Proceedings of the American Political Science Association, Vol 3, Issue Third Annual Meeting p.80.

2000 as they apply to legal expense concern the insurance contracts, recoverability of the insurance premium alone. In contrast, the Insurance Companies (Legal Expense Insurance) Regulations 1990 provide a more comprehensive guide as to procedure and practice. As stated in the Explanatory Notes to the Regulations, 128 "the Regulations impose requirements on legal expenses insurers carrying on legal expense insurance, designed primarily to avoid possible conflict of interests. In particular such insurers must adopt one of the three arrangements set out in regulation 5 and must, subject to certain exceptions, offer the insured a free choice of lawyer to represent his interests in any enquiry or proceedings or whenever any actual conflict of interests arises (regulation 6)." However, in themselves, these Regulations fail to provide a comprehensive set of legal requirements.

The notion of "regulation" has attracted much debate amongst academics and business professionals alike as to whether or not there should be regulation to comprehensively govern the operation of legal expense insurance. Evidence would seem to suggest that a laissez-faire approach to insurance practices can only lead to undesirable consequences. For example, in the context of the American insurance the Armstrong Committee discovered numerous incidences of "fraudulent" and "selfish" management and went on to conclude that far-reaching regulation was required. In Europe, this invites scrutiny as to what form regulation should take. 129

- **122.** "Question of Ethics" Gazette 27 July 2000.
- **123.** "Legal Expense Insurance in the UK" a report by Consumers' Association & the Law Society, Jar 1991
- **124.** Mayers, D. and Smith, C. W. "Contractual Provisions, Organisational Structure and Conflict Control in Insurance Markets" (1981) 54 Journal of Business Law 407.
- **125.** Access to Justice (Membership Organisation) Regulations 2000 UK SI 2000 / 693, which govern Section 30 arrangements under the Access to Justice Act 1999.
- **126.** Insurance Companies (Legal Expense Insurance) Regulations 1990 UK SI 1990 / 1159
- **127.** Financial Services and Markets Act 2000 UK ST 2000.

The nature of regulation can be on a "slidingscale". In this regard, Robinson has contended¹³⁰ that insurance conducted by large organisations requires more regulation than that by smaller ones and moreover that short-term insurance demands less regulation than longer term insurance. Furthermore, the mechanisms by which insurance premiums are valued should also receive regulatory attention, together with consideration given as to whether there should be an upper limit on the premium that may be charged and the amount of insurance that may be undertaken in any one risk. As will become clear, the definition of contractual terms and standard provisions contained in legal expense insurance contracts may also require regulatory attention.

4.3.1 Contractual provisions

As demonstrated by Mayers and Smith, 131 "insurance contracts separate asset control from risk bearing, with payoffs contingent on designated events". At first sight, such a contract may seem to be simplistic in nature. However, the difficulty with insurance contracts is that when the probability of events depends upon the behaviour of the insured, "incentive conflicts" arise, that is, the policyholder has an incentive to cheat in submitting claims under a legal expense insurance policy and the insurer has an associated incentive to monitor.

The typical mechanisms, by which the conflicts referred to above are controlled, are by the organisational structure of the insurance company and the terms incorporated in the insurance contract. It is standard practice that in order to reduce the incidence of frivolous claims under a legal expenses policy, the policy will only meet the financial liabilities of the insured where there is a "real chance of success". In determining this prospect, it is not necessarily the duty of the policyholder to establish the likelihood of success because where an insurer feels disinclined to grant an indemnity, it is the insurer who must establish that reasonable prospects do not exist.¹³² For the most part, the decisions of the insurance company as to the insured's "reasonable chance of success" will no doubt be appropriate. However, whilst insurers may appoint their own representatives to advise on the merits, they are under no obligation to take their advice and, as Serjeant has pointed out, "insurers can always find an excuse to evade their responsibilities."133

any time as litigation proceeds. Indeed, difficulties may arise where the insurer concludes that there is little chance of once proceedings success have commenced. 134 There is an obvious danger that this provision may be utilised by insurance companies so as to affect the lawsuit in a way that benefits themselves and the opposition party alone. As Reyes¹³⁵ has pointed out, the insurer has an interest in minimising litigation expenses, especially where they can expect only a limited profit from protracted litigation. To this end, the insurer may pressure the insured into accepting a settlement offer. Worse still, the insurer may ally with the opposition party so as to secure a premature settlement to the insured's detriment. The means by which such pressure may be applied is the utilisation of the "reasonable chance of success" clause. However, in accepting an out of court settlement, the consequences may be dire for the insured. As the Danish Report¹³⁶ points out, unless otherwise agreed with the insurer, there may be no compensation for cases settled out of court.

It is important to note that the principle of

"reasonable chance of success" applies not

only when a claim is first made, but also at

The exact contractual terms in the sense of coverage of legal expense insurance needs also to be scrutinised. In the USA for example, a significant number of claims made against the policy have been rejected as being outside the scope of the contract. In short, the strict definition of contractual terms has been used by insurance companies so as to limit their coverage. Thus, Reyes¹³⁷ has contended that some policy exclusions

may drive potential infringers of patents to use defensive tactics, so as to take a case outside the policy coverage in anticipation that the insurer will take the opportunity to deny coverage. For example, an alleged infringer may claim that their activities commenced before the policy period and unless the insured can produce evidence to the contrary, 138 there is a danger that the insurer will refuse coverage. In such a circumstance, the insured's only hope is that the financial benefit (damage award) in pursuing the case is of such significance so as to encourage the insurer to persist with the

Difficulties may arise where the terms of insurance policy are rudimentary in respect of drafting so as to render litigation as to the scope of the terms inevitable. 139 As exemplified by Reyes, where a contract fails to define even simple terms, it is likely that there will be conflict between the insurer and the insured as to interpretation of these terms. Not only will this lead to a sense of bad faith between the parties, but also wastage in resources as the parties attempt to resolve the dispute. An example of such a term would be the use of a simple fraction under the provision for pro rata coverage. Even if disputes were not to arise out of the technical construction of contractual provisions, the contractual limit placed upon the amount to which the policy will fund legal expenses incurred can also have dire consequences.140

29

- 130. Robinson, M. H. ibid at p.80
- **131.** Mayers, D. and Smith, C. W. "Contractual Provisions, Organisational Structure and Conflict Control in Insurance Markets" (1981) 54 Journal of
- **132.** Wilson, M. "Complaints Against Insurance Companies (10)" (1999) 143 Solicitors Journal No. 7, p. 165
- **133.** Serjeant, A. "Intellectual Property Patinova'99" (1999) 28 Chartered Institute of Patent Agents Journal, Issue 11, p.989.

134. Ibid.

135. Reyes, J. A. "Patents and Insurance: Who Will Pay for Infringement?" (1998) 4 Boston University Journal of Science & Technology Law 6.

136. Op cit fn 10.

137. Reyes, J. A. "Patents and Insurance: Who Will Pay for Infringement?" (1998) 4 Boston University Journal of Science & Technology Law 6.

138. And this may not always be possible, even where such an assertion is incorrect

139. Op cit fn 137.

140. Thus, in Daniel Joseph
Murphy (2) Christine Anne
Murphy v (1) Young & Co's
Brewery Plc (2) Sun Alliance &
London Insurance Plc [1997] 1
WLR 1591 the limit of cover had
been exhausted and the insurer
contested their liability to meet
specific expenses incurred during
proceedings. Such contractual
difficulties led Serjeant to conclude
that: "From experience, it is my
opinion that no honest person
could advise a patentee to take
out such a policy". See Serjeant
A. "Intellectual Property Patinova
'99" (1999) 28 Chartered Institute
of Patent Agents Journal, Issue 11

policy against the risk of incurring a liability 143. The way in which recovery will operate is subject to rules of court. Section 30 of the 1999 Act covers all after the event policies. Such a principle was upheld in Paul Anthony specified) to meet liabilities which Club Ltd141 where a claimant was entitled to costs of other parties. Regulation Regulations 2000 specifies bodies this purpose. Regulation 3 specifie did not take out the policy at the outset of arrangements must satisfy. Under proceedings. As to what is considered to be a amount may be included in costs payable to a member of such a having to meet those liabilities of Section 30(3) of that Act further must not exceed a sum determine not recoverable under s.29.143 Regulations 2000 specifies that sum as the likely cost to the member or

The difficulty with insurance covering intellectual property assets is that large companies are virtually self-insured. 144 This serves to limit legal expense insurance to SMEs, some of which will be unable to meet the expense. Moreover, specific legal expense insurance is an unproven product. As with all new products a period of gestation will be needed before any measurable effect may be seen.¹⁴⁵

Moreover, whilst the Trinity College Dublin Report¹⁴⁶ showed that 14% of respondents had legal expense insurance, only 2% made a claim upon the policy. When asked if insurance would deter a potential infringer, more than half the number of respondents were doubtful, with only 5% stating that it would. In light of this finding, we shall now consider further the phenomenon of intellectual property insurance as a potential mechanism for supporting SMEs in legal disputes involving the enforcement or defence of their intellectual property rights in England and Wales.

4.3.2 The insurance premium

The insurance premium paid under a legal

expense insurance policy is recoverable at trial. Section 29 of the Access to Justice Act 1999 allows the court to include in any costs order, any premium paid for an insurance in those proceedings. The recovery of the insurance premium is not limited to policies backing conditional fee agreements, but Ashworth v Peterborough United Football be reimbursed for the premium he paid for an after-the-event legal expense insurance policy even though the premium was around two-thirds of the expected damages and he "premium" for the purposes of s.29, it was held in the Claims Direct cases¹⁴² that the court shall seek to examine whether the sum paid to an insurer was exclusively for an insurance policy, or whether insurance was only a part of the package purchased. Any benefits that are not insurance-related are

5. The Empirical Survey

5.1 Methodology

5.1.1 The identification of critical issues

In order to establish a practical and theoretical framework for intellectual property legal insurance, an empirical study was considered to be appropriate. The central themes identified for such an empirical survey were: First, the nature and characteristics of SMEs which hold IP assets; second, whether IP assets, if any, have been infringed; third, the consequences by way of litigation or otherwise of such an infringement; fourth, the phenomenon of insurance as a mechanism to assist in the enforcement or defence of IP assets. The survey conducted builds upon the previous work undertaken at Trinity College Dublin¹⁴⁷ and also the Danish Patent Office.¹⁴⁸ However, the scope of this study is wider to include patents, copyright, industrial design rights and trade marks, as distinct from only patents, 149 taking into account the nature of IP assets and also that of IP legal insurance held by SMEs in England and Wales.

5.1.2 The quantitative approach and the drafting of the questionnaire

A quantitative approach was employed so as to generate data that could be invigilated via statistical analysis. So as to facilitate this, a multiple choice questionnaire was drafted that addressed the critical issues identified. In practice, the questionnaire took on a spider-web formation, 150 that is, the questionnaire was composed of 28 questions, which were sub-divided into distinct categories: Questions appertaining to the nature of the respondent organisation; questions concerned with the intellectual property assets of the respondent; questions related to the infringement of those assets; questions appertaining to intellectual property insurance; and general issue questions.

Clearly, the respondent would not in all cases be able to answer every question contained in the questionnaire, for example, if they did not hold intellectual property, then there could be no issue of the infringement of nonexistent assets. Thus, the response to the questionnaire was determined by the answer to the previous question - creating a spiderweb effect. The questions and multiple choice answers were put before a panel of academics, lawyers and business advisers for comment and approval as a means of quality assurance before the piloting process began.

5.1.3 The use of information technology

It was decided to use information technology as opposed to conducting a postal or telephone survey for two main reasons: First, due to the spider-web construction of the questionnaire, it was determined that the use of information technology would be employed so as to help simplify the task for the respondent; second, it was deemed that e-mail was an effective means of reaching a large target audience. Thus, an electronic questionnaire was created utilising Microsoft Access. Visual Basic programming was inserted into the questionnaire so as to automate the selection of questions to be answered by the respondent and an automated e-mail facility was included so as to automatically e-mail the results upon the completion of the questionnaire.

31

147. Op cit fn 16. 148. On cit fn 10. **149.** Op cit fn 9. 150. See Appendix 1

those companies surveyed by technology professionals were surveyed) stated that their companiés did not have any formal or informal strategy to protect their ntellectual property assets. See

Information Week, 3 November 2002, p74. **146.** Op cit fn 16.

141. LTL 4/7/2002

142. LTL 29/7/2002

applies where a body of a

description to be specified in regulations undertakes (in

accordance with arrangement

members of the body or other

of The Access to Justice

the conditions that the

which are for the time being

section 30(2) of the Access to

Justice Act 1999, an additional

by the body against the risk of

the member or other person.

Regulation 4 of The Access to

other person of the premium of an insurance policy against the risk in

144. Bergsman, S. "Protecting Your

AIRMIC study may demonstrate the importance of intellectual property

to businesses, nearly four in five of

145. Furthermore, whilst the

5.1.4 The pilot study

The electronic questionnaire was piloted on Technium® Swansea firms. 151 The questions and multiple-choice answers were found to be satisfactory by the respondents. However, a suggestion was made that the questions appertaining to the number of employees and annual turnover remain blank so as to enable the respondent to insert the actual figures, as opposed to the offering of a block of categories to be selected. These slight amendments were made in the final version of the questionnaire and were the only amendments to be made to its structure.

The pilot study did exemplify that due to the vast numbers of platforms utilised across England and Wales, not every respondent was able to open the questionnaire in Microsoft Access. In addition, due to the Visual Basic Programming contained in the questionnaire, a limited number of e-mail servers would reject the attachment in the belief that it contained binary code (virus infected). So as to combat this, a version of the questionnaire was created in both Microsoft Access and Microsoft Word to accommodate 1995 versions onwards.

151. Based on a Research & Development "incubator" concept, Technium releases the potential of the best in public and private sector innovation with leading specialist academic expertise. Technium creates a direct channel to Centres of Excellence in Wales for new and fledgling enterprises, high-tech spin-outs and knowledge based-companies seeking research collaboration. See www.technium.co.uk

152. The solicitors were those as identified in the Legal 500. Patent agents were identified via membership of the Chartered Institute of Patent Agents and Trade Mark Attorneys were those identified via membership of the Chartered Institute of Trade Mark Attorneys

5.1.5 Sampling methods

As the answers of IP professionals and SMEs were to be compared for statistical relevance, an in-house database containing contact details for intellectual property lawyers, trade mark attorneys and patent agents was utilised. This database contained the contact details of those professionals in the United Kingdom deemed to be of significant reputation in their field. 152

It was decided that for this research project, two distinct SME sectors would be targeted. The first sector was the membership of IP Wales. This target base consisted of Welsh SMEs who had signed up to a business support initiative concerned with helping businesses protect their ideas. By their nature, these respondents had expressed an interest in intellectual property. The second SME target audience was a random sample of English SMEs. To this end, databases were purchased from both Dun & Bradstreet and Kompass, enabling the random selection of English SMEs across the industrial sectors. The benefits of such a dual-approach to the SME target base are three-fold: Firstly, it would provide an unbiased snap shot of the awareness of intellectual property in England; secondly, it would facilitate the statistical comparison of answers between firms that were by their selection interested in IP, as opposed to those whose awareness and interest was unknown; thirdly, it would demonstrate any regional differences between those businesses located in England and those in Wales.

As can be seen in Table 1 below, 11,700 questionnaires were sent out via e-mail using the sampling method described above.

Table 1

Target	Nos sent to:
IP professionals	700
English SMEs	10,000
Welsh SMEs – IP Wales members	1,000

153. In terms of the statistical hierarchy, frequencies fall into the category of "descriptive statistics". That is, they are utilised so as to describe the occurrence of a variable, as opposed to testing the statistical significance of it. Frequencies were calculated on all variables contained in the questionnaire. With few exceptions (due to the minimal number of respondents who purported to have made a claim under an intellectual property insurance scheme, frequencies concerned with the claim making process have not been reported), all frequencies calculated were of interest and have been presented in diagrammatic form

154. Cross-tabulations are also deemed to be descriptive statistics. Their use is comparative, in that they demonstrate the occurrence of a variable within particular sectors. In this instance, cross-tabulations facilitate the comparison of the views of legal professionals as against the beliefs of the SME. As with frequencies, cross-tabulations do not purport to test the statistical significance of a variable. They are of reflective or "descriptive" use alone. Cross-tabulations were calculated on those variables, which according to frequency analysis, were of interest and benefit

155. Unlike frequencies and crosstabulations, t-tests do seek to test the statistical significance of a variable. There are many forms of T-Test that may be performed, but due to the nature of the data generated by the empirical research, the independent sample t-test was employed. T-tests were calculated only on those variables, which from frequency and crosstabulation analysis indicated a statistical difference between the legal professional sector and the SME. Those t-tests that were relevant at the 10% level of probability or lower have been reported.

5.1.6 The use of the statistical package for social sciences (SPSS)

so as to invigilate the data collated, the responses to the questionnaire were codified and input into SPSS for analysis. The programming in Microsoft Access automatically codified the responses and hence they were input directly into SPSS. However, those responses collated by Microsoft Word required manual coding. So as to ensure that errors had not been generated which would nullify the results, a rigid checking of manually input data was undertaken. Due to the format of the data generated, the statistical tests undertaken were Frequencies, 153 Cross-tabulations 154 and Independent Sample T-Tests. 155

5.2 Results

For ease of reference the results of the empirical research have been categorised into distinct groupings, namely, variables concerned with the nature of the respondents to the questionnaire, variables relating to the intellectual property assets held by respondents, variables appertaining to infringement, data concerning intellectual property insurance, and variables concerned with general intellectual property issues.

5.2.1 Response rates

As can be seen from Table 2 below, the study achieved approximately a 10% response rate – 985 responses were received in total from the 11,700 questionnaires sent.

Of those 985 responses, 571 respondents stated that they were not in possession of intellectual property and hence felt unable to answer the questionnaire.

240 respondents returned an answer that they were not interested in intellectual property and hence would not be completing the questionnaire.

174 respondents did complete the questionnaire.

Table 2

Number of respondents	Action of respondent	Test as to IP assets held
571	Have no IP assets	1.5% of random test sample had registered UK trade marks
240	Not interested in IP	33% of random test sample had registered UK trade marks
174	Completed questionnaire	

However, of those 811 respondents returning answers of nil intellectual property or no interest, checks were conducted upon a random sample to ascertain whether they were in possession of a registered trade mark. As can be seen from the table above, of those proclaiming nil intellectual property, 1.5% of the random test sample possessed a registered trade mark. Of those stating that they had no interest in intellectual property, 33% of the random test sample was in possession of a registered trade mark.

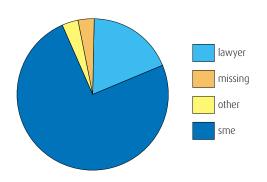
5.2.2 The nature of respondents

Respondents to the questionnaire were asked to provide information appertaining to the nature of their organisation. From this information, their "employment group" was determined – that is, utilising the industrial sector and number of employees stated by the respondents to reflect their organisation, did the respondent fall into the category of an SME, IP professional (categorised as lawyer), or "other"?

As exemplified by Figure 1a, it can be seen that a significant majority of respondents to the study consisted of SMEs. Indeed, the SME sector accounted for 77% of the response rate, with IP professionals accounting for 19% and "other" consisting of 4%.

Figure 1a

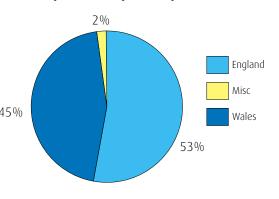
Employment Group



As elucidated by Figure 1b, of those SME respondents, 45% were Welsh SMEs and 53% were English SMEs. 2% of respondents fell into the category of "other". 156

Figure 1b

SME Respondents by Country



34 possession of a registered trade mark.

^{156.} These were professionals who practiced in England and Wales but were located in Scotland

Figure 2
Industrial Sector

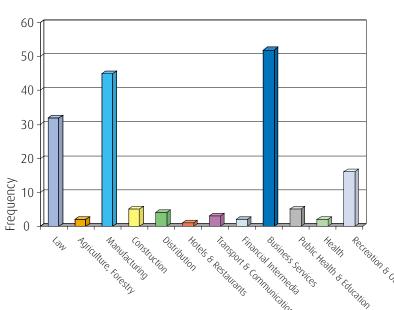


Figure 2 above exemplifies the industrial sectors of the respondents to the questionnaire. It can be seen that Business Services, Manufacturing and Law account for the largest industrial sectors of respondents, constituting 31%, 27% and 19% respectively. Recreation and Other Services accounted for 9% of the respondents, with all other industrial sectors constituting between 0.6% and 4%.

Given the importance of the tourist sector to the British economy, the responses of the Hotels and Restaurants sector was disappointingly low.

Respondents to the questionnaire were then asked whether their organisation was active in research and development and how much of the business' turnover was spent on research and development activities.

As shown by Figure 3a, 54% of respondents stated that their organisation was active in research and development.

Figure 3a Research & Development

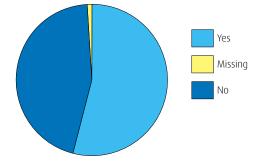


Figure 3b
Industrial Sector

- Research & Development Crosstabulation

		Research	ո & Dev	
Count		Yes	No	Total
	Law	5	27	32
Sector	Agriculture, Forestry & Fishing	2		2
	Manufacturing	39	6	45
	Construction	1	5	6
	Distribution		4	4
	Hotels & Restaurants		1	1
	Transport & Communications	2	1	3
	Financial Intermediaries	1	1	2
	Business Services	28	24	52
	Public Admin & Education	4	1	5
	Health	1	1	2
	Recreation & Other Services	9	6	15
Total		92	77	169

As demonstrated by Figure 3b, of those organisations purporting to be active in research and development, the Manufacturing and Business Services sectors can be seen to account for a large percentage

of the research and development activity. The Recreation and Other Services sector can also be seen to be R&D active. However, it should be noted that whilst contributing towards R&D activity, approximately only half the Business Services and Recreation and Other Services sectors reported that they were engaged in such. Conversely, whilst accounting for a significant proportion of the response rate, the legal sector can be seen to engage in little research and development output.

This difference between the SME sector and the legal profession in the pursuance of research and development can be seen to be of statistical significance. For as exemplified by Figure 3c, when calculating an Independent Sample T-Test, a statistical significance was found at the better than 1% level of probability for group belonged to 157 and their participation in research and development activities.

Figure 3c

	Employment Group	N	Mean	Std Deviation	Std. Error Mean
Research	Lawyer	32	1.84	.37	6.52E-02
& Dev	SME	130	1.38	.49	4.27E-02

157. That is, whether the respondent was an SME or IP professional

Independent samples test

		Levene		t-test fo	or Equality of	Means				
		for Equ of Varia	of Variances						95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Research & Dev	Equal variances assumed	45.373	.000	5.076	160	.000	.47	9.20E-02	.29	.65
	Equal variances not assumed			5.990	60.556	.000	.47	7.79E-02	.31	.62

Figure 4a
Turnover spent on research & development

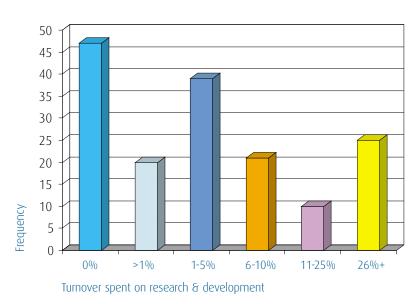


Figure 4b
Industrial sector turnover spent on research & development crosstabulation

As to the amount of an organisation's turnover that was expended on research and development activities, Figure 4a elucidates that 29% of respondents stated that 0% of their turnover was expended on R&D. However, 24% stated that between 1-5% was expended, with 15% of respondents accounting for 26%+ of expenditure on R&D. 13% reported an expenditure of between 6-10% of their turnover and 12% relayed an expenditure of less than 1% on research and development activities.

Figure 4b can be seen to provide sectorial evidence as to the expenditure incurred in research and development activity.

It can be seen that both the Manufacturing and Business Services sectors incur the most expenditure on R&D activity, followed by Recreation and Other Services. Significantly, all three sectors can be seen to include a large percentage expending at the 26%+level of annual turnover.

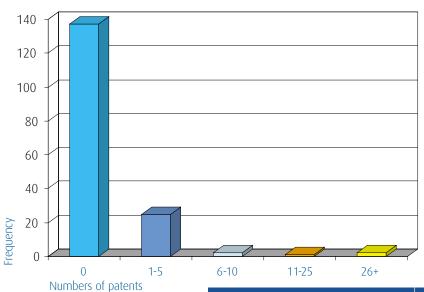
		Turn	over Sper	nt on Rese	earch & De	velopmen	t	
Count		0%	>1%	1-5%	6-10%	11-25%	26%+	Total
Industrial	Law	19	5	7				31
sector	Agriculture, Forestry & Fishing			1			1	2
	Manufacturing	1	4	15	9	6	8	43
	Construction	2	3				1	6
	Distribution	2	2					4
	Hotels & Restaurants	1						1
	Transport & Communications	2					1	3
	Financial Intermediaries		1				1	2
	Business Services	13	4	14	7	4	7	49
	Public Admin & Education	1	1	1	1		1	5
	Health	1					1	2
	Recreation & Other Services	5		1	4		4	14
Total		47	20	39	21	10	25	162

5.2.3 Intellectual property assets held by respondents

Respondents to the questionnaire were asked to state the number of patents, trade marks, copyrights and designs held by their organisation.

From figures 5 – 8 it can be determined that in order of preference, the most commonly held IP right was that of the copyright, with the least held asset being that of the patent.

Figure 5a Numbers of patents



Patents

It can be seen from figure 5a that the majority of respondents (82%) reported that their organisation did not hold any patents.

Only 15% stated that they held between 1-5 patents, with 26+ patents and 6-10 patents accounting for little over 1% of the respondents.

As to the industrial sectors pursuing patent rights, the Manufacturing Sector can be seen to dominate patenting activity, with the Legal Sector, Distribution, Hotels and Restaurants, Financial Intermediaries and Health reportedly holding none.

See Figure 5b.

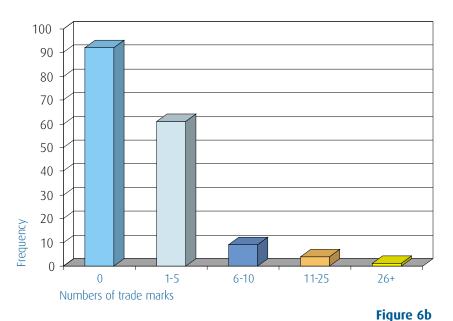
Figure 5b
Industrial sector number
of patents crosstabulation

Number of patents 6-10 26%+ 0 1-5 11-25 Total Count Industrial Law 32 32 sector Agriculture, Forestry & Fishing 1 1 2 Manufacturing 24 17 45 2 Construction 5 Distribution 4 Hotels & Restaurants Transport & Communications 2 Financial Intermediaries 2 2 **Business Services** 48 2 50 Public Admin & Education 3 1 5 2 Health 2 Recreation & Other Services 13 15 2 Total 137 25 167

Trade marks

From Figure 6a it can be seen that 55% stated that they were not in possession of a trade mark. However, 37% reportedly held between 1-5 trade marks, with 5% claiming ownership to 6-10 trade marks.

Figure 6a Numbers of trade marks



Industrial sector numbers of trade marks
crosstabulation

As to the industrial sectors pursuing trade mark rights, it can be seen from Figure 6b that Manufacturing, Business Services and Law can be seen to dominate trade marking activity, with a significant majority of respondents from each sector purporting to hold between 1-5 trade marks. Interestingly, whilst a significant proportion of the legal sector also reportedly held between 11-25 trade marks, those engaged in Construction reportedly held none.

When comparing the trade marking activity of IP practitioners against the SME community in its entirety, a trend can be seen to emerge that is of statistical significance. For as elucidated by Figure 6c, a significant T-Test was found at the 1% level of probability for an Independent Sample T-Test between the industrial group belonged to and the ownership of trade marks. Upon analysis of Figure 6b, it can be seen that the IP practitioner is more likely to hold trade marks than an SME.

			Numb	er of trac	lo marks		
Count		0	1-5	6-10	11-25	26%+	Total
Industrial	Law	12	14	2	4		32
sector	Agriculture, Forestry & Fishing	1	1				2
	Manufacturing	23	19	2		1	45
	Construction	6					6
	Distribution	2	2				4
	Hotels & Restaurants		1				1
	Transport & Communications	2	1				3
	Financial Intermediaries		2				2
	Business Services	32	16	2			50
	Public Admin & Education	3	1	1			5
	Health		2				2
	Recreation & Other Services	11	2	2			15
Total		92	61	9	4	1	167

Figure 6c Group Statistics

	Employment Group	N	Mean	Std Deviation	Std. Error Mean
Nos of	Lawyer	32	1.94	.98	.17
trade marks	SME	128	1.45	.60	5.30E-02

Independent samples test

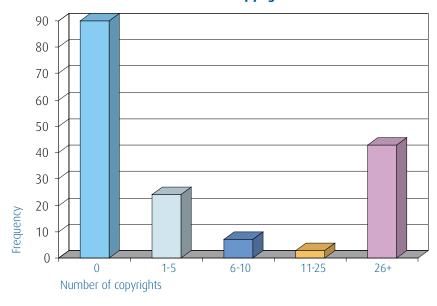
		Levene's Test		or Equality of	Means				
	for Equality of Variances				Sig.	Mean	Std. Error	95% Confidence Interval of the Difference	
	F	Sig.	t	t df	(2-tailed)	Difference	Difference	Lower	Upper
Nos of Equal variances trade marks assumed	4.644	.003	3.543	158	.001	.48	.14	.21	.75
Equal variances not assumed			2.669	36.982	.011	.48	.18	.12	.85

Copyright

Unlike the other intellectual property assets, the difference between the numbers of respondents claiming that they do not hold any copyright, as compared to those claiming 26+ copyrights is more pronounced. For as elucidated by Figure 7a, whereas 54% of the respondents declared their organisation to be devoid of copyright, 26% of respondents claimed to hold over 26+ copyrights.

Figure 7a

Number of copyrights



As to those sectors claiming copyright ownership, it can be seen from Figure 7b that the legal sector dominates copyrighting activity. Interestingly, over half the Manufacturing sector and half of the Business Services sector reportedly held no copyright. The Construction, Distribution, Hotels and Restaurants, Transport and Communications, Financial Intermediaries and Health sectors were reportedly devoid of any copyright.

This difference in the composition of copyright ownership can be seen to be of statistical relevance at the better than 1% level of probability (see Figure 7c). Thus, when combining Figures 7b and 7c it can be seen that the IP practitioner is more likely to lay claim to copyright ownership than SMEs.

Figure 7b
Industrial sector
number of
copyright
crosstabulation

		ITOITIC	ci oi cop	yriging		
	0	1-5	6-10	11-25	26%+	Total
Law	9	2		1	20	32
Agriculture, Forestry & Fishing	1				1	2
Manufacturing	29	10	1	1	4	45
Construction	5				1	6
Distribution	4					4
Hotels & Restaurants	1					1
Transport & Communications	3					3
Financial Intermediaries	2					2
Business Services	25	10	5	1	9	50
Public Admin & Education	2				3	5
Health	2					2
Recreation & Other Services	7	2	1		5	15
	90	24	7	3	43	167
	Agriculture, Forestry & Fishing Manufacturing Construction Distribution Hotels & Restaurants Transport & Communications Financial Intermediaries Business Services Public Admin & Education Health	Law 9 Agriculture, Forestry & Fishing 1 Manufacturing 29 Construction 5 Distribution 4 Hotels & Restaurants 1 Transport & Communications 3 Financial Intermediaries 2 Business Services 25 Public Admin & Education 2 Health 2 Recreation & Other Services 7	Law 9 2 Agriculture, Forestry & Fishing 1 Manufacturing 29 10 Construction 5 Distribution 4 Hotels & Restaurants 1 Transport & Communications 3 Financial Intermediaries 2 Business Services 25 10 Public Admin & Education 2 Health 2 Recreation & Other Services 7 2	Law 9 2 Agriculture, Forestry & Fishing 1 Manufacturing 29 10 1 Construction 5 Distribution 4 Hotels & Restaurants 1 Transport & Communications 3 Financial Intermediaries 2 Business Services 25 10 5 Public Admin & Education 2 Health 2 Recreation & Other Services 7 2 1	Law 9 2 1 Agriculture, Forestry & Fishing 1	Law 9 2 1 20 Agriculture, Forestry & Fishing 1 1 20 Manufacturing 29 10 1 1 4 Construction 5 1 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Figure 7c
Group statistics

	Employment Group	N	Mean	Std Deviation	Std. Error Mean
Nos of	Lawyer	32	3.66	1.84	.33
copyrights	SME	128	1.86	1.39	.12

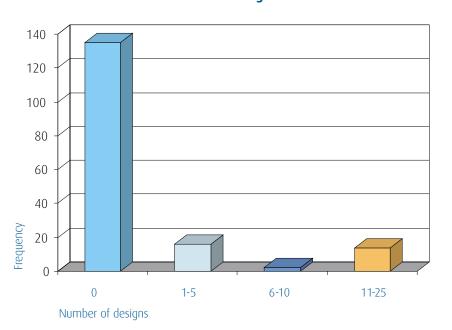
Independent samples test

		Levene's Test		t-test fo	or Equality of	Means						
		for Equality of Variances									95% Confidence Interval of the	
						Sig.	Mean	Std. Error	Differen			
		F Sig.	t	df	(2-tailed)	Difference	Difference	Lower	Upper			
Nos of copyrights	Equal variances assumed	14.404	.000	6.102	158	.000	1.80	0.29	1.22	2.38		
	Equal variances not assumed			5.162	40.256	.000	1.80	.35	1.09	2.50		

Industrial design rights

As to the number of industrial design rights held by respondents, 80% of respondents declared their organisation to be devoid of any industrial designs. However, 11% of respondents claimed ownership to between 1-5 industrial designs, with 8% reporting ownership of 11-25 industrial designs. See Figure 8a.

Figure 8a
Number of designs



March 2003 **Intellectual Property & Legal Expense Insurance**

It can be seen from Figure 8b that the most active industrial sectors in industrial design activity were Manufacturing and Business Services. The sectors Agriculture, Forestry and Fishing, Distribution, Hotels & Restaurants, Transport and Communication and Financial Intermediaries were reportedly devoid of industrial designs in their entirety.

Figure 8b **Industrial sector** number of designs crosstabulation

Number of Designs 11-25 Count 0 1-5 Total 29 2 32 Industrial Law sector Agriculture, Forestry 2 & Fishing 2 32 45 Manufacturing 3 6 Construction 4 Distribution 4 Hotels & Restaurants 1 3 Transport & Communications 3 Financial Intermediaries 2 2 **Business Services** 43 50 4 3 5 Public Admin & Education 3 2 2 Health 15 Recreation & Other Services 11 1 3 Total 135 16 2 14 167

When comparing the industrial design activity of IP practitioners as against the SME community in its entirety, a trend can be seen to emerge that is of statistical significance. For as elucidated by Figure 8c, a significant T-Test was found at the 5% level of probability for an Independent Sample T-Test between the industrial group belonged to and the ownership of industrial designs. Upon analysis of Figure 8b, it can be seen that despite featuring in industrial design

> ownership, the IP Practitioner is statistically less likely to hold an industrial design than an SME.

> > Std. Error Mean

.10

8.12E-02

.57

.92

Figure 8c **Employment Group** Ν Mean **Std Deviation Group statistics** 32 Nos of Lawyer 1.16 designs 128 SME 1.41

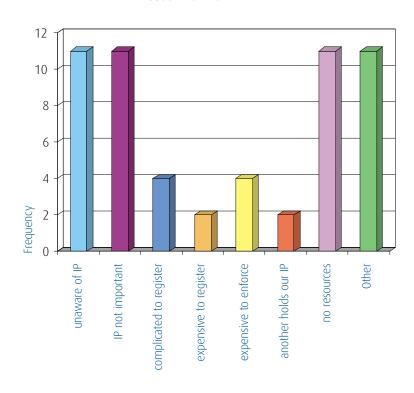
Independent samples test

		Levene		t-test for Equality of Means							
		for Equalographics for the second sec							95% Confidence Interval of the		
						Sig. Mean	Mean	Std. Error	Difference		
		F	Sig.	t	df	(2-tailed)	Difference	Difference	Lower	Upper	
Nos of designs	Equal variances assumed	9.233	.003	-1.514	158	.132	26	.17	59	7.85E-02	
	Equal variances not assumed			-1.984	75.750	.051	26	.13	52	1.02E-03	

5.2.4 Reasons for not owning intellectual property

Those respondents who reportedly did not hold any intellectual property assets were asked to elucidate their reasoning. As demonstrated by Figure 9, the most commonly reported reasons for a lack of intellectual property assets were the respondent's unawareness of intellectual property, the non-importance / relevance of Intellectual Property to the respondent's business, a lack of resources and other, each accounting for 20% of the non-IP holding respondents accordingly.

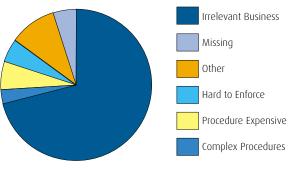
Figure 9 Reason for no IP



Those respondents who did report an interest in trade marks, copyright or industrial designs but not patents, were asked to recount their reasons for the lack of patent ownership.

As exemplified by Figure 10, the most common reason stated was that the patent was not relevant to their line of business (71%). Alternative reasons included "other", problems of expense and enforceability were selected by 13%, 7% and 6% respectively.

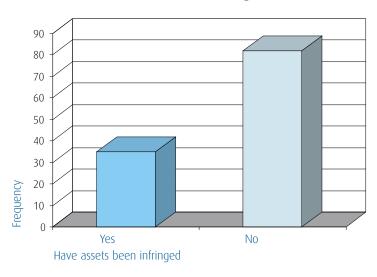
Figure 10 Reason for no patents



5.2.5 Infringement of intellectual property assets

Those respondents who purportedly held an intellectual property asset were asked whether they had experienced an infringement of that asset.

Figure 11
Have assets been infringed?



As demonstrated by Figure 11, 71% of IP asset owning respondents stated that they were not aware of any infringement of their right.

Those respondents who did report an act of infringement were asked to recount their experiences.

Figure 12 Impact of infringement

46

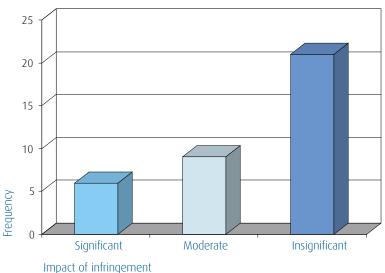
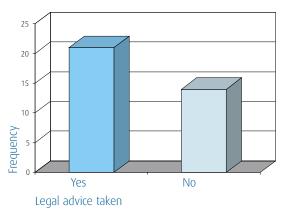


Figure 12 provides information as to how the infringement was perceived by the respondent. It can be seen that 57% of those who had experienced an infringement of their IP rights reported it to have an insignificant effect upon their business. 26% and 17% reported a moderate and significant effect accordingly.

Those who had experienced an infringement of their intellectual property assets were also asked whether they had sought legal advice in connection with the infringement.

As elucidated by Figure 13, the majority of respondents (60%) did seek advice, with 40% stating that they did not.

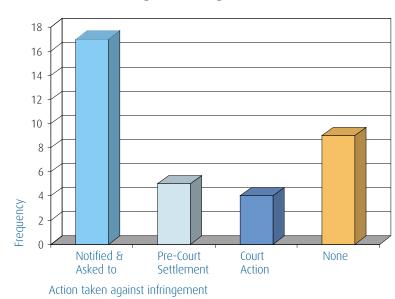
Figure 13 Legal advice taken



As to the action taken against the infringement, 47% of respondents stated that they notified the infringer of their action and requested that they desist. 26.5% did not take action, with just below 15% reaching a pre-court settlement and just under 12% utilising court action. See Figure 14.

Figure 14

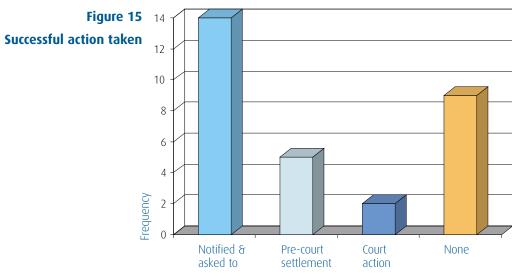
Action taken against infringement



Those respondents who had taken action against the infringement of their rights (as identified by Figure 14) were asked which action they deemed to be the most effective in combating an infringement. Just below 47% of respondents stated the notification and requesting desistance option to be the most successful action employed. 30% stated that they did not believe any action to be effective, with fewer than 17% and just below 7% selecting pre-court settlement and court action respectively. See figure 15.

All respondents to the questionnaire were asked their opinions on the infringement of another's intellectual property rights.

As exemplified in Figure 16a, when asked whether they were concerned about infringing another's assets, 62% of respondents stated that they were and 38% stated that they were not.



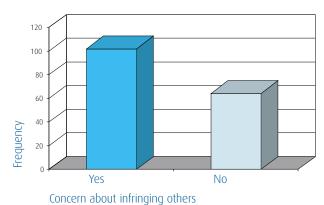
under 12% utilising court action. See Figure

14.

Notified & Pre-court Court action
Successful action taken

Impact of infringement

Figure 16a
Concerned about infringing others



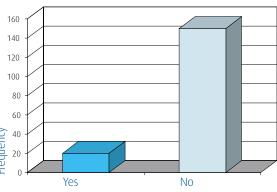
From Figure 16b it can be seen that whilst IP practitioners were equally concerned as unconcerned with the prospect of infringing another's intellectual property asset, approximately two-thirds of the SME community did report concern. Thus, there is a greater concern amongst the SME sector as to the infringement of another's asset.

Figure 16b
Employment group concerned about infringing others crosstabulation

		Concerne infringin		
Count		yes	no	Total
Employment	lawyer	15	16	31
group	SME	83	46	129
	other	4	2	6
Total		102	64	166

When asked whether they had intentionally or unintentionally infringed another's intellectual property rights, 91% of respondents reported that they had not, with only 9% stating to the contrary. See Figure 17.

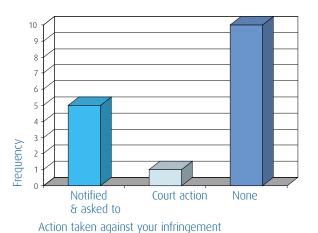
Figure 17
Have you infringed another's assets?



Have you infringed another's assets?

Dissimilar to the action taken by respondents against the infringement of their own assets (Figure 14), Figure 18 demonstrates that where respondents had admitted to the infringement of another's rights, 63% reported that no action was taken against them. Only 31% of respondents were notified of their action and requested to desist with 6% having court action taken against them.

Figure 18
Action taken against your infringement



awareness of enforcement insurance

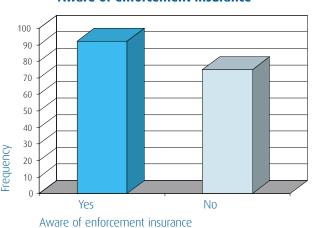
5.2.6 Intellectual property insurance:

All respondents to the questionnaire were asked about their awareness of intellectual property insurance.

As demonstrated by Figure 19a, 57% of respondents stated that they were aware of enforcement insurance. 43% were not.

Figure 19a

Aware of enforcement insurance



Of those respondents reporting an awareness of enforcement insurance, it can be seen from Figure 19b that whilst the IP practitioners were aware of such, a significant majority of the SME community were not.

Figure 19b
Employment group aware of
enforcement insurance crosstabulation

		Aware of -ment in	f enforce- surance	
Count		yes	no	Total
Employment	lawyer	29	3	32
group	SME	59	70	129
	other	4	2	6
Total		92	75	167

Indeed, such a difference in the awareness of enforcement insurance can be seen to hold statistical significance. For as elucidated by Figure 19c, when calculating an Independent Sample T-Test, a statistical significance was found at the better than 1% level of probability for group belonged to and their awareness of intellectual property enforcement insurance.

Figure 19c
Group statistics

			Circop sto		
	Employment Group	N	Mean	Std Deviation	Std. Error Mean
Aware of	Lawyer	32	1.09	.30	5.24E-02
enforcement insurance	SME	129	1.54	.50	4.40E-02

Independent samples test

		evene's Test or Equality										
	of Varian				Sia.	Mean	Std. Error	95% Co Interva Differer				
	F	Sig.	t	df	Sig. (2-tailed)	Difference	Difference	Lower Upper				
Aware of Equal variances enforcement assumed insurance	214.261	.000	-4.863	159	.000	45	9.23E-02	63	27			
Equal variances not assumed			-6.562	80.607	.000	45	6.84E-02	59	31			

5.2.7 Intellectual property insurance: awareness of infringement insurance for intellectual property

In contrast to Figure 19a above, the awareness of intellectual property infringement insurance was less than that for enforcement insurance. 49% of respondents stated that they were aware of infringement insurance, with 51% stating that they were not. See figure 20a.

Figure 20a

Aware of infringement insurance

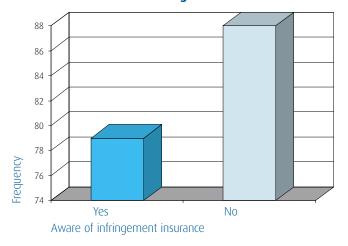


Figure 20c Group statistics

	Employment Group	N	Mean	Std Deviation	Std. Error Mean
Aware of	Lawyer	32	1.22	.42	7.42E-02
infringement insurance	SME	129	1.61	.49	4.31E-02

Independent samples test

		evene's Test or Equality										
	of Variances								onfidence			
					Sig.	Mean	Mean Std. Error		Interval of the Difference			
	F	Sig.	t	df (2-tail	(2-tailed)	Difference	Difference	Lower	Upper			
Aware of Equal variances infringement assumed insurance	21.979	.000	-4.184	159	.000	39	9.41E-02	58	21			
Equal variances not assumed			-4.586	53.887	.000	39	8.58E-02	57	22			

Figure 20b

Employment group aware of infringement insurance crosstabulation

		Aware of -ment in	f infringe- surance	
Count		yes	no	Total
Employment	lawyer	25	7	32
group	SME	50	79	129
	other	4	2	6
Total		79	88	167

Indeed, it can be seen from Figure 20b that a greater incidence of unawareness of infringement insurance was reported in both the legal and SME sectors, than had been reported for enforcement insurance.

The levels of awareness of IP practitioners and the SME community still maintained a statistical difference. For as elucidated by Figure 20c, when calculating an Independent Sample T-Test, a statistical significance was found at the better than 1% level of probability for group belonged to and their awareness of intellectual property enforcement insurance. Thus, the IP practitioner was statistically more likely to have an awareness of infringement insurance than the SME.

5.2.8 Intellectual property insurance: awareness of legal expense insurance

As elucidated by Figure 21a below, in contrast to the awareness surrounding enforcement and infringement insurance polices, the significant difference between those who were aware of legal expense insurance and those who were not was greater. Indeed, whilst 62% of respondents reported an awareness of legal expense insurance for intellectual property, only 38% did not.

Figure 21a

Aware of legal expense insurance

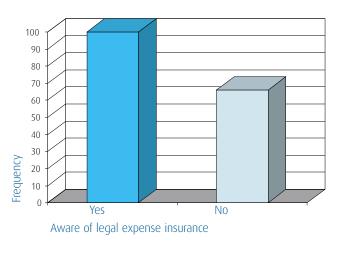


Figure 21b

Employment group aware of legal expenses insurance crosstabulation

			Aware of legal expense insurance				
Count		yes	no	Total			
Employment	lawyer	28	3	31			
group	SME	68	61	129			
	other	4	2	6			
Total		100	66	166			

It can be seen from Figure 21b that in addition to an awareness of legal expense insurance for intellectual property amongst IP practitioners, there was also a greater awareness of such insurance in the SME community – over half reported an awareness of such.

However, despite the increased awareness reflected in the SME community, there still remained a statistical difference between the level of awareness in the practitioner and SME sectors. For as elucidated by Figure 21c, when calculating an Independent Sample T-Test, a statistical significance was found at the better than 1% level of probability for group belonged to and their awareness of intellectual property legal expense insurance. Thus, IP practitioners are statistically more likely to have an awareness of legal expense insurance than the SME.

F	igure 21c
Group	statistics

	Employment Group	N	Mean	Std Deviation	Std. Error Mean
Aware of legal	Lawyer	31	1.10	.30	5.40E-02
expense insurance	SME	129	1.47	.50	4.41E-02

Independent samples test

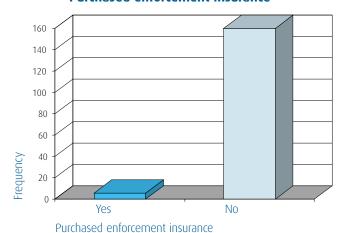
	Levene's Test for Equality of Variances		t-test for Equality of Means							
									95% Confidence Interval of the	
						Sig. Mean	Mean	Std. Error	Difference	
		F	Sig.	t	df	(2-tailed)	Difference	Difference	Lower	Upper
Aware of legal	Equal variances assumed	222.843	.000	-4.003	158	.000	38	9.40E-02	56	19
expense insurance	Equal variances not assumed			-5.394	75.589	.000	38	6.97E-02	51	24

5.2.9 Purchasing of intellectual property insurance

Having determined their awareness surrounding the availability of intellectual property insurance, respondents were then asked to state whether they had purchased such insurance policies.

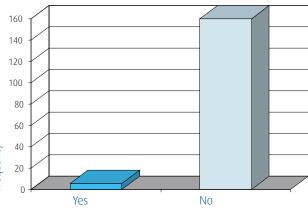
As can be seen by figures 22, 23 and 24, the vast majority of respondents reported that they had not purchased enforcement, infringement or legal expense insurance for intellectual property assets.

Figure 22
Purchased enforcement insurance



As exemplified by Figures 22 and 23, 96% of respondents had reportedly not purchased either intellectual property enforcement or infringement insurance.

Figure 23
Purchased infringement insurance



Purchased infringement insurance

It can be seen in Figure 24a that whilst the majority of respondents had not purchased legal expense insurance to protect their IP assets, those who had purchased it were greater in number than those who had purchased enforcement and infringement insurance. Indeed, whilst 88% reportedly had not purchased legal expense insurance, 12% stated to the contrary.

Figure 24a Purchased legal expense insurance



As elucidated by Figure 24b, 20% of IP practitioners had reportedly purchased legal expense insurance for intellectual property, with 9% of SMEs reportedly doing the same.

Figure 24b
Employment group purchased legal
expenses insurance crosstabulation

		Purchase expense		
Count		yes	no	Total
Employment group	lawyer	6	24	30
	SME	12	118	130
	other	1	5	6
Total		19	147	166

However, as exemplified by Figure 24c, despite the general increase in the purchasing of legal expense insurance, a statistical difference can be seen in the purchasing habits of IP practitioners and the SME. For upon the calculation of an Independent Sample T-Test of group belonged to and the purchase of such insurance, a statistical significance at the 1% level of probability was found.

Upon examination of Figure 24b, it can be seen that the IP practitioner was statistically more likely to have purchased legal expense insurance than the SME.

Figure 24c
Group statistics

	Employment Group	N	Mean	Std Deviation	Std. Error Mean
Purchased legal	Lawyer	30	1.80	.41	7.43E-02
expense insurance	SME	130	1.91	.29	2.55E-02

Independent samples test

Levene's Test				t-test for Equality of Means								
for Equality of Variances								95% Confidence Interval of the				
					Sig. df (2-t	Sia.	Mean	Std. Error	Difference			
	F Si		Sig.	Sig. t		(2-tailed)	Difference	Difference	Lower	Upper		
Purchased legal	Equal variances assumed	9.976	.002	-1.687	158	.094	11	6.38E-02	23	1.84E-02		
expense insurance	Equal variances not assumed			-1.371	36.117	.179	11	7.85E-02	27	5.16E-02		

Figure 25a Reasons for no IP purchase

Reason for no IP purchase

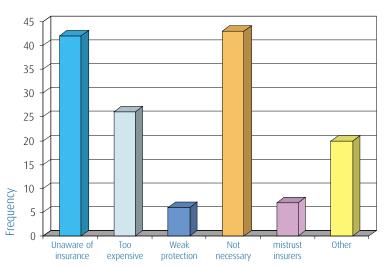


Figure 25b
Industrial sector reason for no
IP insurance crosstabulation

Reason for no IP Insurance Count Doesn't provide unaware of Insurance Don't trust question availability of not relevant insurance companies other Total expensive necessary Industrial Law 21 2 30 6 sector Agriculture, Forestry & Fishing 2 10 45 Manufacturing 6 12 5 11 Construction Distribution 4 Hotels & Restaurants 2 Transport & Communications Financial Intermediaries 1 5 51 **Business Services** 18 7 3 5 4 Public Admin & Education 2 5 2 Health 2 Recreation & Other Services 2 2 3 15 20 Total 22 42 26 43

5.2.10 Reasons for not purchasing intellectual property insurance

Those respondents who had not purchased any form of intellectual property insurance were asked to recount their reasons for such.

As exemplified in Figure 25a below, the main reasons stated were that insurance was not necessary (29%), a lack of awareness of the availability of insurance (28%), expense (20%) and other (13.5%).

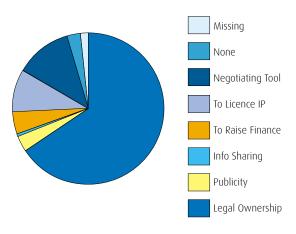
It can be seen from Figure 25b that the main reason advocated by the Legal and Distribution sectors for the non-purchase of intellectual property insurance was that it was not necessary. The Manufacturing and Business Services sectors were reportedly unaware of the availability of insurance or deemed it to be too expensive. The Construction industry was by and large, also unaware of the availability of insurance.

5.2.11 General intellectual property issues

All respondents to the questionnaire were asked their views as to "general" intellectual property issues.

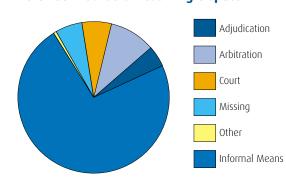
As demonstrated by Figure 26, when asked the main purpose of an intellectual property asset, 67% of respondents stated that it was to give legal ownership.158

Figure 26
Main purpose of IP assets



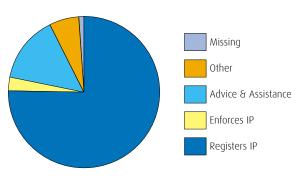
When asked their preferred method of resolving an intellectual property dispute, 77% stated that their preferred means was to do so informally. Arbitration, Court action and adjudication gained favour respectively. See figure 27.

Figure 27
Preferred method of resolving dispute



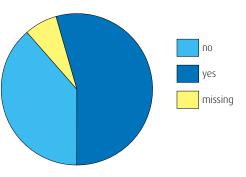
As to the main purpose of the UK Patent Office, as elucidated by Figure 28, 76% stated that it was to register intellectual property assets, with 14.5% believing it to be that of providing advice and assistance when registering intellectual property assets.

Figure 28
Purpose of UK Patent Office



Respondents were then asked whether they believed that the UK Patent Office should become more proactive in the resolution of intellectual property disputes. As exemplified by Figure 29a, only a small majority (54.5%) answered that it should.

Figure 29a
Patent Office to be more proactive in resolving disputes



158. The purpose behind this question was to elicit the motivation behind respondents taking out IP assets

From Figure 29b it may be seen that those advocating a greater involvement of the Patent Office in the resolution of disputes, were largely from the SME community. IP Practitioners in their majority refuted such a notion.

Figure 29b
Employment group Patent Office to be more proactive in resolving disputes crosstabulation

		Patent 0 more pro resolving			
Count		yes	no	Total	
Employment group	lawyer	6	26	32	
	SME	79	43	122	
	other	3	2	5	
Total		88	71	159	

Interestingly, such a difference in opinion can be seen to hold statistical significance. For as elucidated by Figure 29c, upon the calculation of an Independent Sample T-Test, a statistical significance at the better than 1% level of probability was found between IP practitioners and the SME community.

A statistical comparison of the answers of English and Welsh SMEs was undertaken utilising T-Tests. No significant differences could be found.

Figure 29c Group statistics

	Employment Group	N	Mean	Std Deviation	Std. Error Mean
Patent Office to be more proactive in resolving disputes	Lawyer	32 132	1.81 1.35	.40	7.01E-02 4.34E-02

Independent samples test

	Levene's Test		t-test for Equality of Means							
	for Equality of Variances F Sig.					Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
		Sig.	t		Lower				Upper	
Patent Office Equal variances to be more assumed proactive in	20.506	.000	4.992	152	.000	.46	9.21E-02	.28	.64	
resolving disputes Equal variances not assumed			5.579	57.205	.000	.46	8.25E-02	.29	.63	

159. Such a finding is upheld by the results of the British Gas survey into intellectual property assets. According to the research, fifty-nine per cent of SMEs work on ideas for new products at least once a month and are hence R&D active. See British Gas "Time 4 Survey" August.One

5.3 Discussion

5.3.1 The representative awareness of intellectual property

Perhaps the most telling element uncovered by the survey is the level of lack of general awareness surrounding the sphere of intellectual property. As can be seen from Table 2, 82% of respondents (811 individuals) to the research stated that they were either not in possession of an intellectual property asset, or held no interest in such. Even so, it should be noted that 1.5% of the random test sample proclaiming nil intellectual property and 33% of the random test sample proclaiming no interest in IP, were in possession of a registered trade mark. An inference that may be drawn from this is that trade marks are not perceived by SMEs to be intellectual property.

5.3.2 The nature of respondents and intellectual property

It can be seen from the results of the questionnaire that those businesses falling into the Manufacturing, Business Services and Recreation and Other Service Sectors claimed to be typically research and development active. Indeed, all three industrial sectors reported a large expenditure of annual turnover upon R&D activity, with a significant proportion expending at the 26%+ level of annual turnover (Figure 4b).159

A link can be seen between the level of research and development activity and the

nature of intellectual property assets held. As shown by Figure 5b, the most active research and development sector - Manufacturing also dominated the patenting activity of respondents. The Manufacturing and Business Services Sectors also dominated industrial design right activity (Figure 8b) and both sectors featured significantly in trade mark ownership (Figure 6b). By comparison, copyright ownership was of less significance to such industrial sectors. For whilst half the Business Services Sector reported copyright ownership, less than half the Manufacturing Sector observed such (Figure 7b). Conversely, IP Practitioners reported little expenditure upon research and development activity, yet featured significantly with regard to copyright ownership (Figure 7b) and trade mark rights (Figure 6b). Indeed, as exemplified by Figure 6c, intellectual property practitioners were statistically more likely to hold a trade mark than the SME.

It would appear that there is a relationship between the industrial sector of a business, its research and development activities and the nature of intellectual property assets held. Given IP practitioners' awareness of the law of intellectual property, it is unsurprising that this sector featured significantly in the ownership of copyright and trade marks. Due to its nature, the IP practitioner sector has little need for the pursuance of patents or industrial design rights and hence featured very little in such activities. Turning to the non-legal sector, there would appear to be a link between expenditure upon research and development and the ownership of "registered" intellectual

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property rights, namely patents and industrial design rights. Conversely, little recognition is given by such sectors to "unregistered" intellectual property rights nor to trade marks that might be held.

The pursuit of registered rights by such R&D active industrial sectors appears to be motivated by the shield and sword theory. As one respondent in the manufacturing sector commented:

"On the basis of glass house living, the standard response is to generate lots of patents (rocks) that can be hurled back in a MAD type defence. So this is one motivation for patenting that is rarely discussed."

However, it must be noted that whilst there is over-whelming evidence to support such a theory, the responses to the questionnaire also indicated a general lack of awareness of intellectual property rights. This was the case even in those industrial sectors reputed to be research and development active. For whilst dominating much of the reported intellectual property activity, only half the manufacturing sector reported any patent ownership¹⁶⁰ and under 50% of manufacturing and business services firms reported ownership of trade marks and industrial design rights. Indeed, the lack of awareness was one of the main reasons recounted by respondents for the reported non-ownership of intellectual property rights, together with its unimportance, a lack of resources and other (Figure 9).

5.3.3 Infringement

It can be seen by Figure 11 that very little infringement of intellectual property was reported by respondents to the questionnaire and that where infringement had taken place, its effect was deemed to be insignificant (Figure 12). It is contended that two variables may account for such a phenomenon. Firstly, it may be the case that by and large, intellectual property assets are subjected to very few acts of infringement. Alternatively, the phenomenon could be a by-product of the lack of awareness surrounding intellectual property rights and their importance. As one such respondent to the questionnaire stated:

"I write software for a living but have never understood about copyright and patents and things, so I was interested in the survey. I get ripped off a lot."

Indeed, qualitative research has uncovered that even where SMEs have an awareness of intellectual property, they do not understand the mechanics of such. The example of a children's illustrator¹⁶¹ was a case in point. For whilst aware of the notion of copyright, the children's illustrator was unaware of the practical steps to be taken to protect that right from infringement. As a consequence, many breaches ensued and still the SME was unaware of how to pursue such infringements.

5.3.4 Infringement and dispute resolution

It would seem that intellectual property disputes arising out of an infringement have yet to become subjected to the culture of litigation. As exemplified by Figure 14, when questioned as to their response to an infringement of an asset, 47% of respondents stated that they notified the infringer of their action and requested they desist. Indeed, such an informal approach to dispute resolution can be seen to be effective. Respondents who had suffered an infringement and had taken action, were questioned as to the most successful action in preventing further breaches. As elucidated in Figure 15, 47% reported the notification and requesting desistence approach to be the most effective in disposing of a dispute.

In a significant number of cases (26.5%) no action was taken against the infringement of an asset (Figure 14). Such a figure may be accounted for by a lack of understanding as to the value of intellectual property and the mechanics by which breaches of such may be countered. Also, the potential cost in enforcing a right through court may prove prohibitive in taking action even in the first instance.

5.3.5 Intellectual property insurance

A lack of awareness of intellectual property insurance amongst the SME sphere is apparent. As can be seen by Figures 19b, 19c and 20b, 20c, whilst the IP practitioner sector was aware of enforcement insurance and infringement insurance for intellectual property, the majority of SMEs were not. Moreover, even though a greater number of SMEs reported an awareness of legal expense insurance for intellectual property, a statistical difference at the better than 1% level of probability was still maintained (Figure 21c). Thus, IP practitioners are statistically more likely to have an awareness of intellectual property insurance than SMEs.

Such a finding is clearly in keeping with the lack of awareness surrounding intellectual property in general and is a key factor, together with expense, in the non-purchase of specific intellectual property insurance products amongst SMEs (Figure 25b). Interestingly, it was also advocated amongst the SME community that intellectual property insurance was "unnecessary". Indeed, one respondent to the research explained the reasoning behind such a notion:

"The law is quite clear on IP rights and can be handled through the courts without the use of expensive lawyers/insurance".

160. Such findings are supported by the British Gas survey ibid. According to the results of the research, three quarters of SMEs do not patent their products, the suggested reason being that three quarters of SMEs are unfamiliar with the rules of patenting.

161. A member of IP Wales whose situation was relayed to an IP Wales Field Officer during the course of an interview.

However, as exemplified by one intellectual property professional, insurance does have its benefits for the SME:

"...give you a little insight into my own experiences of clients using IP insurance. I stress that the experience is not great. However, my perception is that the existence of insurance, provided it is of a reasonable amount, can be effective in settling some disputes. Where a company has limited financial resources, insurance does seem to help in bringing some realism into a dispute. A party is less likely to take a matter to court purely because they think that the other side will not be able to afford litigation and so cave in."

Thus, intellectual property insurance may be seen to be a means of preventing tactical disputes. The same respondent also stated:

"That scenario does not hold when the dispute is serious and the amount at stake large. It also does not hold when the opponent can afford to put the insured party to so much expense that they use up all their insurance and are then unable to continue. Although I have no experience of the US, the cost of US litigation is so high that there is a perception that insurance is unlikely to be of much value as the amount needed is prohibitively expensive."

It would seem that, whilst affording SMEs protection in the general resolution of a dispute, where such is particularly contentious or the opponent is financially secure and determined to seek tactical advantage, intellectual property insurance is of little value.

Clearly, the limitations referred to above exacerbate the reluctance of the SME to pursue any such mechanism of enforcement of a right and as elucidated by another intellectual property professional:

"I was an enthusiastic supporter for IP insurance when first proposed. Some clients took out such insurance but were very disappointed by the lack of support when they really needed it. At that time I consulted professional colleagues who all had experienced similar problems. My current view is that IP insurance is a waste of money except as indicating financial backing to sue an uninformed infringer.

In the IP world there are several organisations that offer to promote inventions for a fee (more often a series of fees) - they all appear to be quite useless, their only interest appearing to be the fees they receive. I currently believe that IP insurers are of the same ilk.

I therefore recommend that your survey should take the greatest care in assessing the efficacy of IP insurance and particularly the number of actions that the various insurers have successfully supported compared with the number of premiums they have taken, and particularly the proportion of their clients that have been disappointed."

Concerns as to the quality of intellectual property insurance do not rest solely with expense and the insured sum under such cover. Qualitative research has revealed the requirement for "third party analysis" of an infringement to be of hindrance also. Indeed, as was reported by one SME, when seeking to make a claim, before the insurer would meet any legal expenses, it required an analysis of the alleged breach to be undertaken by a third party so as to prove an infringement had occurred. The difficulty for the SME lay in the fact that the article committing the breach was a prototype product that was not available on the common market. Thus, the securing of the offending article for the purposes of third party analysis was particularly difficult. Moreover, if upon examination of the article by the third party it were found not to constitute a breach of intellectual property, the insurer would not meet the costs of that examination.

It appears that when deciding whether to take action against a potential breach of one's right utilising an insurance policy, one must take two factors into account: Is the offending article available for third party analysis?¹⁶² Can the business afford to meet the cost of examination should the test fail?¹⁶³ Given these factors, it is not difficult to understand the low purchase rate / utilisation of intellectual property insurance by the SME.

Low purchasing rates are not peculiar to the SME alone. Even amongst the IP practitioner sector, few examples of the purchasing of intellectual property insurance could be found. Indeed, the main reason advocated

for such was that intellectual property insurance was "unnecessary" (Figure 25b). However, as can be seen by Figure 24b and 24c, a statistical difference was found at the 1% level of probability for the purchasing of legal expense insurance and group belonged to, that is, IP practitioners were more likely to purchase legal expense insurance for intellectual property, than SMEs. It may be that this difference in the purchasing habits of "general" insurance can be understood by the knowledge amongst members of the legal profession of the expense incurred in an intellectual property dispute.

5.3.5 Insurance and the economic theories of moral hazard & adverse selection

In view of the purchasing rates, the economic theories of moral hazard and adverse selection can be seen to be of little practical effect with regards to intellectual property insurance. Cost has placed such insurance beyond the grasp of the SME and this together with the propensity of the practitioner and SME sectors to resolve their disputes informally, has meant that little adverse effect has been had on the natural behaviour of parties and the purchasing of insurance.

5.3.7 The Main purpose of an IP asset

A significant finding uncovered by this survey was that illustrated by Figure 26. Given a number of options, 67% stated that the main purpose of an intellectual property asset was that of conferring legal ownership. Indeed, very little recognition was given to the

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162. If the offending article is a prototype and not available on the common market, then this may preclude the use of insurance at the outset by virtue of failing to satisfy third party analysis.

163. Insurers will be unlikely to meet the costs of conducting the third party analysis where the test as to breach fails.

notion that intellectual property is a potential means of raising capital, nor that an intellectual property right may facilitate licensing deals.¹⁶⁴

5.3.8 Preferred means of resolving an IP dispute

As demonstrated by Figure 27, 77% of respondents stated that their preferred means of resolving an intellectual property dispute was to do so informally. Such an approach to dispute resolution may be a product of the misevaluation of intellectual property rights. Perhaps it is this informal approach to matters of dispute resolution that caused many respondents to return a verdict that insurance for intellectual property was "unnecessary" because if it is the industry standard to resolve a dispute through informal mediation, then the expense of intellectual property insurance becomes at least questionable.

5.4 Concluding remarks

The level of awareness of intellectual property rights in England and Wales is very low. It is not surprising therefore, that SMEs are also unaware of the availability of IP legal expense insurance as a potential mechanism for enforcing or defending their IP rights. Even where there is awareness, legal expense insurance is not perceived in meeting the needs of the SMEs. The underlying assumption of such insurance is that disputes involving intellectual property assets will lead to litigation. This study has shown that this is not necessarily the case. Indeed, many disputants who seek recourse in enforcing or defending their IP rights fail to avail themselves of intellectual property insurance, citing such factors as cost, exclusion clauses and procedural requirements.

access to justice is promoted because insurance may be seen to provide an equalisation of legal resources, thereby facilitating access to justice for those potentially previously denied due to cost. Where resources are limited, a party may be forced into accepting an inadequate out-ofcourt settlement or succumb to a claim which is devoid of any valid legal defence. In such a setting, the legal expense insurance may be seen to be a harbinger of justice in facilitating the equalisation of legal resources. However, a standard term in all legal expense insurance contracts is the obligation placed upon the insured to notify the insurer of any circumstances likely to lead to a claim. This has been known to cause insurers to raise premiums significantly and, in this situation, an SME could be compromised in terms of its dealings with a wealthy insurance company. Thus, as opposed to closing the gap, legal expense insurance may only serve to widen the financial ravine between the small business and a large corporation. This brings into focus the need for effective regulation of the provisions of the insurance contract.

Legal expense insurance is a tool by which

Whilst there is evidence that SMEs experience infringement of their intellectual property assets, it is only in a relatively small number of cases that litigation is involved. 165 Indeed, the pre-disposition of the SME in England and Wales is to resolve such disputes informally. Ultimately, this brings into focus the appropriateness or otherwise of the different dispute resolution mechanisms available for resolving effectively these disputes. 166

^{165.} Insurance may be relevant in the commodification of IP assets. This will be the subject of a further IP Wales study.

^{166.} This will be the subject of a further study by IP Wales.

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