

# Intermediation of Intellectual Property Awareness





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The Council of the Association of Chartered Certified Accountants consider this study to be a worthwhile contribution to discussion but do not necessarily share the views expressed, which are those of the author alone. No responsibility for loss occasioned to any person acting or refraining from acting as a result of any material in this publication can be accepted by the author or publisher. Published by Certified Accountants Educational Trust for the Association of Chartered Certified Accountants, 29 Lincoln's Inn Fields, London WC2A 3EE.

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## Foreword by Robin Webb of the Intellectual Property Office

Every business owns some form of intellectual property – be it an artistic design, shape, technology, process or brand. Big firms tend to know that, but smaller companies are often too preoccupied with the day-to-day running of their business to take stock properly of what they have and the need to protect it. This report highlights an important opportunity for accountants to help to meet this need and enhance their service to their clients in the process.

I have a particular interest in Robert Pitkethly's report. Robert produced a preliminary report which we commissioned: the *UK Intellectual Property Awareness Survey* in 2006 was the largest IP awareness survey to date and gave a benchmark indication of the state of IP awareness in the UK across all sizes of firm and all sectors of industry. Interestingly, although this told us much about what firms knew about IP, its scope did not include how they found out the information. This report ties up that very significant loose end.

I have long held the belief that IP awareness cannot be solely 'peddled' by government agencies and organisations in the IP field. Although in a sense these are, as Robert puts it, the 'experts', these organisations are not able to engage with all the companies that need to know about the value of intellectual assets. Nor are they the source to which SMEs would necessarily turn for professional advice.

Robert suggests that top of the list of 'go to' organisations for smaller companies is the accountant: 'the key professional advisers likely to have the greatest opportunity to act as intermediaries in mediating IP awareness are accountants and solicitors who, as is confirmed by the present research, virtually every firm has encountered at some stage in its life and especially on company formation or when raising further capital'.

IP is a significant issue for an increasing numbers of companies, but many know very little about how to protect or manage it. I believe that accountants who have a basic familiarity with IP will advantage both themselves and their clients. The Intellectual Property Office welcomes this report and hopes that accountants will draw on our resources at [www.ipo.gov.uk](http://www.ipo.gov.uk) to take the opportunity that the report suggests that they have.

Robin Webb,  
**Innovation Director**  
**Intellectual Property Office**

# Foreword by Ian Diamond of the Economic and Social Research Council

The Economic and Social Research Council (ESRC) appreciate the value of new ideas. Without novel insights and approaches, research would not progress and generate knowledge, which in turn can create new business opportunities.

The ESRC is committed to maximising the impact of research, in the public sector, the voluntary sector and the business community. An important aim is to encourage knowledge transfer from researchers to companies, ensuring that new research findings are put to good use.

New insights and new ideas – whether ground breaking inventions, novel manufacturing processes or commercial practices – can give a crucial edge in the competitive business environment. New ideas with real potential are a scarce and precious commodity. Take away their uniqueness, and they lose their edge. Nurturing new ideas is not enough – they also need to be protected.

This becomes even more important in the current circumstances. Surviving as a small business is challenging at the best of times, and even more so in the midst of a recession. Yet, as this report shows, not all companies are aware of the value of their intellectual property, nor how to protect it. Many SMEs are reluctant to invest in IP protection owing to cost, or use advisers without particular IP expertise.

This research, funded by the ESRC and ACCA, builds on previous surveys of IP awareness levels across UK industry and fills an important gap by exploring the ways in which companies gain this awareness. It is my hope that the report can highlight the issue of intellectual property even further and contribute to optimal IP management in small companies. By taking better care of ideas, we take better care of business.

Ian Diamond  
**Chief Executive**  
**Economic and Social Research Council**



# Executive summary

## THE ISSUE

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An earlier survey for the UK Intellectual Property Office (IPO) revealed that micro-firms not only form a significant proportion of UK firms but also have the lowest levels of intellectual property (IP) awareness. This has serious implications for the competitiveness of start-up and micro-companies. Consequently, how SMEs and particularly micro-firms become IP aware is a critical issue in the competitiveness of UK industry.

This report describes the sources from which, and the routes by which, firms, and especially micro- and small firms, acquire IP awareness. It focuses in particular on the role of non-IP-specialist professional advisers such as accountants and other sources of IP advice.

## METHODOLOGY

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The research was qualitative and involved semi-structured interviews, primarily with manufacturing-based micro-firms and SMEs from a range of industry sectors and with sources of expert IP advice as well as professional intermediaries. Sufficient interviews were carried out to enable a reasonably representative picture of the range of IP awareness mediating activity that exists, for micro-firms and SMEs.

## THE REPORT

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This research report reveals how micro-firms and SMEs gain (or do not gain) IP awareness and thus suggests what steps might be taken to help make UK industry more informed about IP. The research also reveals the role that non-specialist advisers, such as accountants and non-IP solicitors, play in mediating and thus increasing IP awareness among micro-firms and SMEs.

## CONCLUSIONS

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The study illuminates an area of the recent UK IP awareness survey which the quantitative data did not explain so clearly; secondly, it provides ideas for potential ways to improve both SME IP awareness and access to expert IP advice, and finally it provides the groundwork for further hypothesis development concerning SMEs' use of intellectual property rights (IPRs).

SMEs can and do make direct connections with sources of expert IP advice. Nonetheless, the reluctance of many SMEs to consider IP efficiently is in large part due not just to lack of effective IP awareness but also to lack of awareness of the *value* of IP combined with the high initial costs of some forms of IP protection.

## INDIRECT LINKS

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In addition to informal indirect links there are a number of intermediaries that play or might play significant roles in raising SMEs' IP awareness.

Solicitors have close links with accountants yet also have good links with patent attorneys, whose work they understand and largely complement. Solicitors thus have a bridging role in the intermediation of IP awareness.

Accountants have relatively close links with solicitors within larger firms but very few direct links with patent attorneys. SME clients of accountants may therefore fail to be put in touch with expert IP advice. In part this may be because of the low level of IP awareness and involvement with IP in most accounting practices. Increasing IP awareness among accountants should help raise SMEs' IP awareness.

Where venture capitalists are involved with SMEs, they may play a crucial role in enforcing higher standards of IP management as part of their efforts to protect their investment.

In the future, the advent of more mixed professional partnerships may give rise to better referral of firms for IP advice.

## AN IP DIVIDE

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Professional advisers to SMEs, and indeed the SMEs they advise, can be divided into high-IP-dependent and low-IP-dependent firms or individuals. The implication of this IP divide is that the high-IP-dependent businesses are largely IP aware and it is only the low-IP-dependent or perceived non-IP-dependent firms where there is concern about IP awareness. The interviews suggest that lack of awareness of IP value may play as significant a role in this as lack of effective awareness of IP itself.

## BARRIERS TO IP AWARENESS

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Barriers to IP awareness lie largely with individuals. Non-IP-specialist solicitors may fail to place sufficient emphasis on IP. Accountants who are also uninformed about IP may give inadequate consideration to IP issues. The current abundance of work for patent attorneys may also form a barrier to the spread of IP awareness in that it reduces the incentive for patent attorneys to market services to local SMEs.

## **POTENTIAL SOLUTIONS**

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Intermediaries and IP experts need to develop greater IP awareness among SMEs and provide easier access to IP advice for them. In doing so the interests, both financial and otherwise, of SMEs, intermediaries and IP experts need to be taken into consideration.

The need to convince SMEs of IP's value is as great as the need to reduce IP costs. Intermediaries also need to have their IP awareness raised and to be convinced that this is in their clients' best interests and therefore theirs as well; IP experts also need persuading that paying attention to SMEs is in their long-term interests as much as those of the SMEs.

Increasing the IP awareness of accountants might be achieved by the addition of IP issues to checklists used to ensure critical issues are not missed when advising clients but this will be unlikely to be really effective unless accompanied by related training leading to understanding of what is being checked.

Ultimately, the problems with IP awareness lie not with the IP aware but with the IP unaware and the unexploited IP resources they may have, and therefore improving overall levels of IP awareness is a critical issue for the competitiveness of UK industry.

# 1. Introduction

## 1.1 BACKGROUND AND RELATION TO OTHER RESEARCH

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This research project is intended to build on a previous research project for the UK Intellectual Property Office, which surveyed current levels of intellectual property (IP) awareness across UK Industry (IPO 2007). The original survey data show that external solicitors, while not always specialists in patent law, are nonetheless a key source of general IP advice for around 50% of all sizes of firm. Other sources of advice are also particularly important for micro-firms (those with fewer than 10 employees). The survey revealed that micro-firms not only form a significant proportion of the UK's population of firms but are also the segment of firms with the lowest levels of IP awareness. This has serious implications for the competitiveness of start-up and micro-companies. Consequently, how SMEs and particularly micro-firms become IP aware is a critical issue in the competitiveness of UK industry.

The UK Intellectual Property Office research was based solely on a quantitative survey which used UK Office of National Statistics data and would be difficult to repeat in the near future because of the restrictions on access to the databases. In subsequent years further IP awareness surveys can, however, be envisaged for comparison with the recently completed benchmark study. In the meantime, as a prelude to such future surveys and as an extension of that just completed, the present research investigated further the sources of and routes by which IP awareness is acquired by SMEs.

## 1.2 AIMS AND OBJECTIVES

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The aim was to conduct qualitative interview-based research in order to investigate the sources from which and the routes by which firms, and especially micro- and small firms, acquire IP awareness. The research focused in particular on clarifying the role of non-IP specialist professional advisers such as accountants and other sources of advice, in mediating IP awareness to micro-firms. It is also intended to clarify the processes by which firms in general are led to their most authoritative sources of IP advice and thus to increased IP awareness.

## 1.3 RESEARCH METHODOLOGY

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The research was qualitative and based on semi-structured interviews with a stratified random sample of companies from a range of industry sectors and sizes of company, and with sources of expert IP advice, as well as potential professional intermediaries. The focus was largely on micro-firms and SMEs and primarily those in manufacturing industry. While a survey of the size and scope of the recent IPO survey will have to await the next IPO IP-awareness survey, sufficient interviews have been carried out to obtain a reasonably representative picture of the *range* of IP-awareness mediating activity that exists, in particular for micro-firms and SMEs.

## 1.4 PRACTICAL, THEORETICAL AND/OR POLICY IMPLICATIONS

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This report reveals how micro-firms and SMEs gain (or do not gain) IP awareness and thus suggests what steps might be taken to help make UK industry more IP aware. The report also reveals the role that non-specialist advisers such as accountants and non-IP solicitors play in mediating and thus increasing IP awareness among micro-firms and SMEs.

## 2. Literature review

### 2.1 INTRODUCTION

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The most comprehensive recent research on levels of IP awareness among SMEs was that contained in the recent survey of UK industry (IPO 2007). The literature review made in the course of that concludes that study of IP systems has generally neglected the issue of IP awareness and especially its measurement (Pitkethly 2007b). Nevertheless, an attempt was made to update and extend previous literature searches on the subject of IP awareness and in particular on the communication of specialist knowledge among networks of firms, which was felt to be the area of management research that might be most fruitful in terms of relevant theory if not identical subject matter. Prior research on the relationship between SMEs and intellectual property and more general professional advice were also considered.

### 2.2 SMES AND IP AWARENESS

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The recent ACCA study of SME intangible assets (Martin and Hartley 2006) that preceded this research includes discussion of the implications for SMEs' accountants and business advisers. Among the observations in that report are the need for advisers to be able to recognise the value of SME's intangible assets and, crucially, to 'recognise where appropriate specialist advice is needed from patent agents, copyright lawyers and other professionals'.

The survey-based research into UK IP awareness mentioned above included questions dealing with the sources from which firms sought advice. Firms were asked whether they had ever sought advice on IPRs, and if so from whom (Pitkethly 2007a). That survey found that a surprisingly high proportion of larger firms, over 70%, had sought advice about IPRs. For firms with 50–249 employees, however, the proportion dropped to 43%, to 25% for firms with 10–49 employees, and for micro-enterprises with fewer employees the figure was only 20%.

That survey categorised the sources of advice used as coming from one of:

- the UK Intellectual Property Office
- external patent/trade mark attorneys
- in-house patent/trade mark attorneys
- external solicitors
- in-house solicitors
- licensing consultants, or
- 'other' sources, which respondents were asked to specify.

The study found that large companies obtained advice mainly from external patent or trade mark attorneys or external solicitors and to a lesser extent from such staff in-house. SMEs had greater reliance on the patent office than on in-house sources. Micro-enterprises relied predominantly on advice from solicitors, the patent office and external patent and trade mark attorneys and in particular from a range of 'other' sources of advice that other firms tended not to use. The final, 'other', source of advice is the most intriguing and was in part the prompt for this study. If SMEs are to be guided into better use of the IP system then understanding how they become aware of it and gain advice about it is crucial.

The question relating to sources of IP advice included an opportunity for those giving 'other' as the source of their IP advice to detail exactly what the 'other' source was. In the case of those firms that listed 'other' as their only source of advice, the majority were small or micro-firms. Furthermore, when these 'other' sources identified were examined, many were industry associations or Business Link organisations or the like. One firm of auditors was mentioned. In contrast, large firms' 'other' sources of information were exclusively barristers or other legal counsel.

The full range of types of 'other' sources of advice comprised: auditors, trade/industry associations, barristers, in-house lawyers, books, business consultants, Business Link, chambers of commerce, client in-house patent department, company secretary, local government, friends, insurer, professional body (RIBA), Regional Technology Centre, US-based sources, Web forums.

### 2.3 SOCIAL NETWORK ANALYSIS

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The field of social network analysis was reviewed to identify any concepts that might be relevant to the current analysis, even though the intended method of analysis in this study was to be a limited qualitative set of interviews rather than an extended survey.

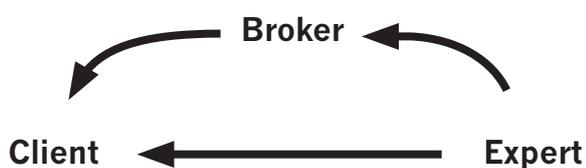
The study of social networks is now a well-developed field in which relational data are used to link members of a social network. The field has been reviewed by a number of authors, including Scott (2000). Without going into detail here, there are a number of concepts within social network analysis which, even if not used in a formal mathematical analysis in the present research, are nonetheless useful in considering the processes involved. The first of these concepts is that of 'structural holes', the second that of 'brokerage'.

Burt first linked 'structural holes' (Burt 1992) with the social structure of competitive arenas and has argued that players with access to networks with what he terms 'structural holes' or gaps in them would enjoy higher returns. In subsequent work, Burt (2004) also links the bridging of such 'structural holes' with the identification of good ideas, and lists four ways in which 'brokers' bridging such holes could arbitrage information. These include:

- communicating interests and difficulties between groups
- transferring or translating best practice
- drawing analogies, and
- synthesis.

The concepts of structural holes in information networks and the idea of brokers who bridge those holes in beneficial ways are extremely useful, even if the present issue of communicating IP awareness across what might be called ‘awareness gaps’ lacks the competitive and arbitrage aspects of Burt’s analysis, though it does involve the crucial issue of information transfer that Burt highlights (Burt 1992). Early in his analysis, Burt specifically mentions the issue of referrals, albeit in a general sense. Informational benefits are also identified as among the advantages of structural holes, along with control benefits, but the focus is on the benefits seen as accruing to the broker rather than to society as a whole, or to the recipient or source of the information rather than the broker of it. In the context of the present research it is, however, particularly useful to consider the role of intermediaries in enabling an information flow to bridge a gap between possessors of information or expertise and those who need access to or awareness of it.

In recently reported research on the benefits, or lack of them, for second-hand or indirect brokerage, where information is passed between groups linked only indirectly to the broker, Burt (2007) claims that the returns to brokerage are greater for direct than indirect contacts and concludes that ‘network data on direct contacts are sufficient to measure brokerage’. There is thus justification for studying only direct brokerage links, where a person or firm acts as an intermediary between an SME and a source of expert IP knowledge, and ignoring cases where an intermediary enables a connection between, for example, an SME known to a contact of the intermediary and an IP expert known to another contact of the intermediary. Burt’s observation that ‘measurement can stop with the network of direct contacts’ is, of course, very useful in simplifying the research problem of IP awareness intermediation. In the present study, the flows of IP awareness considered are simply the triangular case involving either direct information flow from expert (eg patent attorney) to client (eg SME), or indirect flow through a broker or using an introduction from a broker (eg an accountant or solicitor).



The idea that lawyers and other professional service firms acquire business through intermediaries might be said to be commonplace. Nonetheless, in a study of US lawyers, Carlin (1962) specifically describes such referring intermediaries as ‘brokers’ who might be from a number of different categories, including other lawyers.

The concept of mediation and brokerage within networks of transactions is an idea that has also been studied by Gould and Fernandez (1989). They identify five formal types or roles of brokerage mediation structure. They use Marsden’s definition (1982) of brokerage as that ‘by which intermediary actors facilitate transactions between other actors lacking access to or trust in one another’. They also mention that such brokerage does not need to result in commission or direct brokerage benefits. The five types identified include coordinator, itinerant broker, gatekeeper, representative and liaison types. The final one, liaison brokerage, is of most interest as it is defined as the case where the broker is an outsider to both the other parties. Agents in the publishing and entertainment businesses are cited as examples. The pivotal role of liaison individuals in intra-firm networks has been identified by Weiss and Jacobsen (1955). Nonetheless, in studying IP awareness it is primarily inter-organisational links that are of interest, and in the case of links between SMEs and IP experts there are many such liaison forms of broker that might be involved.

Of course, the role of broker is also one that has been explored in the context of innovation, where knowledge sharing across networks may be part of the process of generating innovations, as reported by Hargadon and Sutton (1997). They again note the benefits of identifying structural holes in such networks, except that the benefits in the case of innovation are new technical innovations. In effect, this is a special case of the ‘good ideas’ identified by Burt (2004).

In deriving measures for brokerage, Gould and Fernandez (1989) also reinforce Burt’s conclusion (2007) that the vast majority of brokerage involves a single intermediary rather than a chain of intermediaries. More complex paths involving series of intermediaries will exist but the clear conclusion from Burt and Gould and Fernandez’s work is that there is little to be lost by concentrating on single intermediaries. This was the approach taken during the present research, especially since to date no evidence has been found for more complex intermediary chains.

The present report is not intended to be a data-driven quantitative assessment of the social networks that mediate the provision of expert IP advice to SMEs; nonetheless, the ideas behind studies of social networking are useful. The research has also revealed the crucial role of personal and business networking in putting SMEs in touch with appropriate expert advice. Furthermore, the results of the interviews also support the thesis that the single three-part network of direct contacts and single broker-mediated links is a reasonable description of the intermediation process.

## 2.4 PROFESSIONAL MARKETING

Marketing for professional firms is an area of management that has been the subject of a number of works aimed at practitioners. Such works (Kotler and Bloom 1984; Wilson 1984) identify a number of key stages in the establishment of a relationship between a client and a firm. The first stage that Wilson (1984) highlights is the search process of identifying the firm by the client. Wilson cites a 1977 study (Brand and Suntook 1977) which gives the predominant sources of referrals as friends or business associates. Wilson also identifies the sometimes one-way and sometimes two-way flow of referrals from intermediaries to others.

Glückler and Armbrüster (2003) emphasise 'networked reputation' as an important element in client referrals. Albeit in the context of marketing consulting services, Glückler and Armbrüster comment that studies by BDU (1991) and Strambach (1995) also show that at the time of their research the most important information sources for consulting firms were colleagues/business partners, followed by references from other firms. They also mention Enke and Geigenmüller (2001) as showing that client referrals '[are] the single most important way of establishing contacts between potential clients and consultants' for German consulting firms. The present report also shows that client referrals are a crucial element in putting firms in touch with IP experts.

## 2.5 SMES AND PROFESSIONAL ADVICE

The study of the role of professional intermediaries in mediating IP awareness to SMEs in the UK begs the question of what general sources of professional advice are in fact used by SMEs. This concerns professional advice not just regarding IP, which the present report considers, but also regarding other topics where professional advice may be needed by a firm. This is simply because the sources of expert advice that are consulted most by SMEs may potentially have a role to play in intermediating the more specialist IP advice, if advisers on more general topics are able to act as intermediaries and put firms in touch with the more specialist IP advisers.

Fortunately, a research report also funded by ACCA but relating to banking relationships includes some recent data on just this issue (Berry 2006). This study, in common with the previous IP awareness survey and the current research, concentrates on UK SME and micro-firms. Berry (2006) has a slightly broader industry coverage than the present qualitative research, which has focused on manufacturing industry. Nonetheless, the study included a question asking 'who advises SMEs?'. The 535 responses showed that overall, and with relatively little variation between companies by size (save for a decline in reliance on family advice as firm size increased), the most common sources of advice used by companies are as shown in Table 2.1.

Table 2.1: Advisers used

	%
Accountants	91.7
Solicitors	79.8
Banks or financial institutions	69.7
Business colleagues	68.8
Government or public agencies	51.4
Friends or family	40.4

Source: Berry 2006.

The implication of these data is that the key professional advisers likely to have the greatest opportunity to act as intermediaries in mediating IP awareness are accountants and solicitors who, as is confirmed by the present research, virtually every firm has encountered at some stage in its life and especially on company formation or when raising further capital.

## 2.6 SMES AND INTELLECTUAL PROPERTY

SMEs and intellectual property have been the subject of two major series of studies in recent years. The first was that involved in the ESRC IP initiative, which used a number of research projects to address the relationship between SMEs and intellectual property (Blackburn 2003).

Several papers in this collection of work make points of particular note in the context of the present research. In one, Kitching and Blackburn (2003), in common with recent work related to the Community Innovation Survey (CIS) (DTI 2006), report the importance to some SMEs and other firms of speed to market as a means of appropriation – something noted by at least one interviewee in the present research.

This aspect of informal, or what the CIS calls 'strategic', protection methods, essentially non-IP or non-patent-related protection methods used to protect the intellectual assets of SMEs, is something that several of the ESRC IP studies on SMEs comment on. Kitching and Blackburn (2003) divide the practices of SMEs into 'Do nothing', 'Informal protection practices', 'Non-registrable legal rights', and 'Registrable IPRs'. The use of the last two does involve the need for some IP awareness even if the former tends to involve less cost than the latter. For IP-unaware SMEs, the two categories of 'Do nothing' and 'Informal' or 'strategic' protection practices, such as exploiting lead times and know-how, are the first and least costly options and consequently of great interest to SMEs with limited resources. Kitching and Blackburn (2003) note the preference for informal over formal methods of protection – just as do the CIS surveys and earlier research such as that by Levin et al. (1987).

It is also worth noting that Kitching and Blackburn's data (2003) show that use of both informal and formal rights increases with the innovativeness of the firm concerned, which suggests that awareness may be something that is as important as regards *methods* of protection as it is in itself. The earlier survey research linked to this research (Pitkethly 2007a) also shows that use of both informal and formal rights increases with firm size but with a similar preference for informal over formal methods of protection to that noted by Kitching and Blackburn.

The issue is, however, one that differs to some extent by industry sector. In the same series of research projects as Kitching and Blackburn (2003), Thomas (2003) reports that, for biotechnology SMEs, patents and trade secrets were the most important means of protection even if lead time, rapid technology development and effective marketing were also effective. Tang also shows that, in a study of SMEs in the electronic publishing industry, every single firm studied used legal means of IP protection in the form of copyright protection, even if none used patents (Tang 2003). Furthermore, where informal means of IP protection are more common these often occur in combination with formal means and, although cost may be a driving consideration in the use of informal means, it is often not always clear that the use of formal means is avoided just because of cost. Tang (2003), for example, mentions SMEs in the electronic publishing industry as being, with one exception, unaware of the possibility of software-related patents. The conclusion that is therefore suggested by both the prior research on SMEs' use of IP protection and the current research is that awareness of the importance of IP protection is a critical aspect of IP awareness, whichever form that protection takes. The issue of informal means of IP protection by SMEs is, however, one that could usefully be studied further beyond the necessarily limited consideration of it here.

Kitching and Blackburn's study (2003) also draws a useful distinction between 'highly innovative', 'moderately innovative' and 'non-innovative businesses'. This distinction between firms that may be based around IP, those that occasionally involve IP and those that for most purposes hardly ever deal with it is reflected in the present report, which as will be seen notes two divides. The first is between usually hi-tech-venture-based/often venture-capital funded SMEs, and other SMEs. The second is between use of IP that is primarily low-tech and centred on protecting reputation, the visual presentation of goods or 'trade dress' and possibly more general copyright issues (low IP-dependent) and that which involves primarily technically based IP, such as patents and related know-how (high IP-dependent).

Another related study (Matthews et al. 2003) notes sources of learning about IP within organisations, including learning from others, and learning from the past experience of company employees (possibly experience in former employment). Although that research was based on large research-intensive companies, the idea of learning from other sources is something that the present research

also reveals, though in the case of SMEs the range of sources of advice is necessarily different from those relevant to a large company where, in some cases, all that is needed may be available in-house.

Finally and more recently there has been a major benchmarking review of work on SMEs and IP carried out by the Austrian Institute for SME Research (KMU Forschung) in Vienna (Radauer et al. 2007). This study very comprehensively reviews SME support services in the field of IP and in particular IP awareness-raising initiatives. It does not, however, concentrate on or deal directly with the sources of professional advice used by SMEs or how the SMEs might have been put in touch with such sources of advice. This is because the report focuses on national and regional support rather than on private professional sector support and advice sources. As the report states, 'As private service offerings have not been scrutinized within the scope of this study, little can be said on the performance of offerings which are not publicly funded'. Nonetheless, the report does note that: 'It has emerged strongly, though, that patent attorneys play an important role in IPR service provision for SMEs'.

## 2.7 FURTHER SOURCES

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The literature search has not revealed any substantial work in the area of IP awareness intermediation and in that sense the present report fills a significant gap in the literature. It has shown, however, that the concentration of the interview programme on the four groups of patent attorneys, solicitors, accountants and the SMEs themselves is justified. The only question it perhaps raises is about the possibility of future research using more quantitative data on the questions this qualitative research seeks to study and on expanding the detail of the study into a broader range of sectors which would fill the gaps that the present, relatively limited, research will inevitably still leave unexplored.

### 3. Research method

#### 3.1 INTERVIEW CATEGORIES

The original IPO Awareness survey studied a representative sample of the entire UK company population. This was done by using a stratified random sample drawn from the Office for National Statistics' Inter-Departmental Business Register (IDBR) and stratified by SIC code group (into 17 industry divisions similar to those used in the UK Community Innovation Survey (CIS)), and by size band (0–9, 10–49, 50–249, 250+) and using a weighted sampling scheme, owing to the highly skewed distribution of company sizes in the UK. Twenty thousand questionnaires were sent out and the sample of 1709 firms that responded easily enabled us to make statements about UK firms as a whole to +/- 3% accuracy with 95% confidence or better. The survey was confined to SIC codes 1, 2, 5 and 10 to 93, which thus covered all sectors of economic activity apart from private household activity.

This research was not, however, intended to survey the entire UK company population but rather to investigate the ways in which companies come to gain IP awareness and in particular to identify the intermediaries involved in those processes. The initial aim, therefore, was not to gain a statistically representative view of all IP awareness-raising processes in which firms in the UK are involved. Instead, the more economical aim was to use short telephone interviews to identify key and especially effective routes by which UK SMEs gain IP awareness, and to identify actual and potential intermediaries in those processes.

In order to do this, contacts and interviews with clients, brokers and experts (as identified in the preceding discussion) could be employed. In the context of IP awareness, the clients, brokers and experts were originally envisaged to comprise those listed in Table 3.1.

The research by Berry outlined in section 2.5 above (Berry 2006) suggests that the key types of broker and intermediary used by SMEs are accountants and solicitors. The author therefore decided to concentrate on interviewing them, rather than banks. In the event, the interviews indirectly revealed a fair amount about the role of venture capitalists and financiers and these indirect data, combined with the results of previous research on the attitudes of venture capitalists to IP (Pitkethly 2006), have helped clarify their roles as intermediaries.

It is in theory possible to identify professional advisers of SMEs, such as accountants, from the SMEs' published accounts, and one can identify the TM or patent attorneys used by any firm that has a published patent application or TM registration. In this research, however, firms acting as intermediaries were not identified by this method but by identifying firms operating in the same geographic area as the SMEs to be interviewed.

That said, in conversation with experts and brokers, even where one has identified a connection with a particular SME, the constraints of client confidentiality restricted the discussion of the particular routes to IP awareness to generalities. In the case of experts and professional intermediaries it was only possible to discuss the general incidence of contacts or referrals that occurred. This was, nonetheless, extremely useful in understanding the processes and parties involved.

Because of the size of the SMEs in the sample, the expert interviews concentrated on solicitors and patent attorneys in private practice. There was necessarily a potential overlap in the case of solicitors, who might at the same time be both intermediaries and a source of expertise. This might occur in the same firm through internal referral of

**Table 3.1. Clients, brokers and experts**

Clients	Brokers/intermediaries	Experts
(UK-based SMEs in selected SIC codes)	<p><b>Identifiable:</b></p> <ul style="list-style-type: none"> <li>• Accountants</li> <li>• Solicitors</li> <li>• Banks</li> <li>• Venture capitalists</li> <li>• Business angels</li> </ul> <p><b>Unidentifiable:</b></p> <ul style="list-style-type: none"> <li>• Business associates</li> <li>• Friends</li> <li>• Family</li> <li>• Personal contacts</li> </ul>	<p><b>Identifiable:</b></p> <ul style="list-style-type: none"> <li>• UK IPO</li> <li>• External</li> <li>• Patent/TM attorneys</li> <li>• IP Solicitors</li> <li>• Licensing consultants</li> <li>• In-house</li> </ul> <p><b>Unidentifiable:</b></p> <ul style="list-style-type: none"> <li>• Other sources</li> </ul>

work; for example, from a solicitor dealing with company formation to another partner dealing with IP work. In general this overlap was dealt with by identifying two categories of firms. The first comprised those with a general, what might be called, 'High Street' practice, which included 'commercial' work but did not specifically mention IP advice. These were interviewed primarily as intermediaries, though in a few cases some admitted to some knowledge of IP. The other category comprised expert IP solicitors, identified as partners in firms, who were specifically identified as being particularly involved in giving IP advice. Solicitors were identified using Yellow Pages, while the firms' websites were used to distinguish between intermediary and IP expert firms.

The other category of experts interviewed comprised patent attorneys and trade mark attorneys in private practice. These were identified using a combination of personal contacts of the author and the Chartered Institute of Patent Attorneys' membership directory. Only those in private practice were interviewed and the size of firms involved ranged from sole practitioners to partners in some of the largest UK partnerships. In one case, a partner from a firm of TM attorneys was interviewed.

## 3.2 INTERVIEWEE SELECTION

### 3.2.1 Original aims

The original intention for the research was to interview only SMEs and with a target of about 40 spread across a range of industry sectors, with the aim of covering much the same ground as the original questionnaire survey on IP awareness.

In the case of SMEs, at the time of conducting the earlier IP awareness survey it was felt that it might be useful in future to combine some of the 17 industry divisions into broader sectors that would simplify statements about differences by sector. For the purposes of this research this was done by first splitting the 17 groups into three sectors: 'Manufacturing and Construction', 'Services and Distribution', and 'Other' businesses (Table 3.2); and then considering firms within each of these sectors as either high-technology or low/no technology businesses. Each of these six segments comprise the following SIC codes and number of firms (according to the number of firms in the IDBR at 10 December 2005). An initial target number of 40 interviews were distributed among the various sectors with the aim not of producing a representative sample but of capturing as wide a set of examples of practice as possible.

**Table 3.2: Original interview target**

		SIC	No. of firms	Interviews
<b>Low or no-tech</b>				
Manufacturing and construction	Construction	45	221,125	2
	Agriculture	1, 2, 5	141,965	2
Services and distribution	Retail and wholesale trade	50–52	382,005	2
	Hotels and restaurants	55	124,370	2
	Financial services	65–67	24,370	2
	Education, health, social and sport services	80, 85, 90–93	216,860	2
	Other services	70, 71	111,755	2
<b>High-tech</b>				
Manufacturing and construction	Manufacturing	15–37	152,480	12
Services and distribution	Transport and communications	60–64	81,345	4
	Computer-related services	72	102,000	4
	R&D services	73	2,735	4
	Other business activities	74	394,835	2

The initial plan was to select companies for interview using the FAME database, which replicates the Companies House records. Companies within each given set of SIC codes and having 0–9, 10–49 or 50–250 employees were to be identified. Where possible, a range of sizes of company were to be targeted within each of the four major segments but concentrating on firms with 0–9 or 10–49 employees.

### 3.2.2 Actual interview programme

Initial interviews with patent attorneys showed, however, that a more productive strategy was likely to be to try to interview members of all three groups of experts, intermediaries and SMEs. This necessarily meant that there had to be a reduction in the number of interviews of SMEs to fit within the time constraints.

As mentioned above, sources of IP experts and intermediaries were readily identified from easily available public sources. In the case of SMEs, the FAME company database was used to identify companies within the definition of micro-firms and SMEs (0–9 and 10–49 and 50–249 employees). Given the limitations on time, it was decided to confine the industry sectors covered to those involving manufacturing and construction (including agriculture) and excluding services and distribution companies (Table 3.3). The interviews were therefore targeted using SIC (2003) numbers.

**Table 3.3: Interviews**

	<b>Interviews</b>
Intermediary solicitors	3
Solicitors	9
<b>Intermediaries</b>	<b>12</b>
IP expert solicitors	6
Patent attorneys	14
<b>IP experts</b>	<b>20</b>
Construction (SIC 45)	1
Agriculture (SIC 1, 2, 5)	1
Manufacturing (SIC 15–37)	12
R&D (SIC 73)	1
<b>SMEs</b>	<b>15</b>
<b>Total Interviews</b>	<b>47</b>

One additional firm was interviewed in category SIC (2003) 73, though this was a nanotechnology spin-out company which was setting up manufacturing and not involved only in research associated with SIC (2003) 73. It was also found that the construction company interviewed was involved in manufacturing equipment for use in construction and the agriculture company was also involved in recycling-related business that involved

manufacturing. The general nature of the SMEs interviewed can therefore be said to be within manufacturing generally, but with a very wide variety of high- and low-tech business and scale of operations. A list of SME companies interviewed, identified only by general descriptions of their business, is given in Appendix A.

It should be noted that the companies selected were chosen primarily from within the Oxfordshire area as this made it easier to be sure that the intermediaries did relate to the SMEs concerned even if this could not be made specific. In a few cases, SMEs and intermediaries interviewed did mention firms of IP solicitors and patent attorneys that had also been interviewed, thus confirming that the intermediaries, SMEs and experts were all broadly related to each other.

At the conclusion of the present set of interviews, 47 individuals had been interviewed but there were still a number of SMEs, in particular, that could have been interviewed if more time had been available. It may be possible to extend the interview programme to increase the number of interviews in the current sectors to 20 and/or to cover other SIC codes more comprehensively, as originally planned, though the latter would take longer. The impression made by all the interviews, however, was that given the variety of companies encountered, even within the more limited range of firms interviewed, the general messages emerging would be unlikely to change greatly with an increase in the number of SME interviews.

The group of 15 companies interviewed included 12 with 0–49 and 3 with 49–100 employees, thus achieving the aim of concentrating on firms with 0–49 employee. As it is not possible to predict response rates with any certainty, if more companies are interviewed the only way to ensure maintaining this emphasis would be to keep attempting to interview companies of the appropriate size until set quotas for each size have been achieved.

### 3.3 RESPONSE RATES

Table 3.4 shows the percentage of initial telephone contacts made with companies that resulted in interviews. There were a number of companies identified for which it was not possible to identify individuals to telephone. Also, even for those firms where potential interviewees were identified along with a means of contacting them, it sometimes took up to five or six calls to speak to the individual concerned. On average, 25% of actual calls resulted in interviews.

**Table 3.4: Response rates**

	<b>%</b>
Experts	80.0
Intermediaries	33.3
SMEs	44.1
<b>Total interviews</b>	<b>49.5</b>

## 4. Interviews

### 4.1 INTERVIEWEES

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In the IP awareness survey the questionnaires were addressed to 'The managing director/patents/licensing manager'. In the present research, client interviews with companies were addressed initially to the named contact listed in the FAME database. This was usually the CEO or MD or very occasionally CTO (chief technology officer) or company secretary.

In all cases an email address for the individual was identified from the company website or from a combination of the company website and Google. The potential interviewees were then sent an email saying that they would be contacted by phone in a few days. An email address was given to enable them to contact the interviewer if necessary and suggest an alternative interviewee or refuse to be interviewed. Only one or two people took the opportunity to refuse to be telephoned. The main problem with contacts was identifying when they were just politely refusing to be interviewed when 'out' or 'on the phone'. Despite the apparent pressures on all those interviewed, a significant number were helpful and generous, even if brief, in their responses.

In the case of expert interviews, the experts initially interviewed were patent attorneys and personal contacts of the interviewer, and these were simply rung direct without any introductory letter, which considerably speeded up the process of gaining interviews. The success of this is indicated by the 90% response rate for patent attorney interviews. The response rate of expert IP solicitors was only 50%, largely because most were unavailable, being on holiday until 11 August.

In all cases, interviewees were told that:

- a written note would be made of the interview
- neither they nor their firm would be identified in any publication resulting from the research – in effect following the Chatham House Rule
- if they wished, they would be emailed a copy of a report on the research and its conclusions, when complete.

No objections were made to this approach by anyone interviewed.

### 4.2 INTERVIEW OUTLINES AND QUESTIONS

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The interviews were semi-structured interviews in which the structured part of the interview tried to establish the routes by which each interviewee's firm had become IP aware. The interview outlines used for the telephone interviews are listed in Appendix B. The questions listed acted as a framework for the interviews and could be adapted slightly to suit the interviewee where necessary. In particular, those who had had very little contact with IP and who had only grudgingly agreed to give an interview were asked a much shorter range of questions. In the case of interviewees who were prepared to spend more time and had more experience of seeking, giving or referring to IP advice, the questions were supplemented with questions intended to check themes that had emerged from earlier interviews.

## 5. IP experts

### 5.1 PATENT AND TRADE MARK ATTORNEYS

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The initial interviews were conducted with patent attorneys under the assumption that this would be the quickest way to understand what was going on (or not going on) between patent attorneys, other IP experts such as IP solicitors, the SME clients that needed IP advice (whether or not they were seeking it), and finally the intermediaries such as accountants and non-IP-specialist solicitors who might introduce these clients to the IP experts.

The principle behind this approach was the same as that used when studying wildlife by waiting by waterholes. The advantage is that it enables study of the immediate links to sources of IP advice and of the interest of those sources in the availability of that advice, but it does not replace the need to study the processes involved from the viewpoints of the recipients of advice and the those intermediating it.

The patent attorney profession is not dissimilar to other industries or collections of companies or professional advisers, in that there is a skewed distribution of firm sizes. Though the profession as a whole is relatively small (there are currently about 1700 registered patent attorneys) those working in private practice do so in practices that range from individuals to medium-sized partnerships and a few very large partnerships with multiple offices. The range of work carried out by these firms can be broadly divided into that relating to drafting, first filing and general advice work for UK-based firms, and agency or 'convention' filing work involving prosecuting UK or, usually, European applications corresponding to applications first filed abroad by overseas-based client firms, whether by patent attorneys in private practice or by overseas firms' IP departments. The volume of work deriving from a long-standing relationship with a large overseas company, whether an innovating company or a substantial firm of attorneys, can be substantial and lucrative. In comparison, work in private practice derived from local firms will tend to come only from those firms that have yet to develop sufficient IP-related work to justify employing an in-house IP attorney, and will therefore be low in volume for all but those companies on the verge of taking the work in-house. It is a commonplace of all professional businesses that sales to existing clients are the cheapest form of practice development and there are therefore financial incentives for patent attorneys to concentrate on agency work as opposed to local work for SMEs. That said, there will always be a limited amount of such work and most of the smallest practices or individual sole practitioners would be unable to take on substantial amounts of it.

Therefore, within the patent attorney profession there are a variety of forms of practice, with a tendency for small clients to be associated with small practices or sole practitioners. In this respect, the situation might be expected to mimic the situation in other professions, where smaller SME clients will tend to employ smaller practices to deal with day-to-day legal and accounting issues. As the interviews below reveal, however, the situation with patent attorneys, although similar, is a little more complex than this might suggest.

The main findings from the interviews with patent attorneys and one firm of trade mark attorneys are summarised below. In the following sections issues that the interviews revealed are discussed with the help of illustrative quotations. All interviews were conducted on the basis of anonymity and consequently any information that might identify interviewees has been disguised. Subsequent sections deal similarly with findings from other experts, intermediaries and SMEs before overall findings from the three areas are summarised in the Conclusions, Chapter 8.

#### 5.1.1 Management's prior IP experience influences where firms seek IP advice

The managers of SMEs may have been brought into the firm from outside and have extensive industry experience in larger firms; they may be founder managers; or they may be the founder's offspring. Whatever their backgrounds, their past experience of dealing with IP issues is critical in determining how the firm will deal with the issues. As one patent attorney put it:

*I would say that the number one factor is actually the directors of the firm and what their prior experience of IP is. If you've got someone who's been in a few firms and maybe...worked with other directors in other firms and seen IP create a lot of value through registering TMs early and being in a strong position later on, or getting patents filed and being in a strong position later on and making a lot of money – then you will have people who are very aware. (PA15)*

The implications of this are that the promotion of an IP culture and an appreciation of the value of IP and its role in creating and capturing value for companies should naturally spread through companies once managers have acquired relevant experience, and conversely there is a risk that negative or neutral views of the benefits of IP will also persist in firms.

#### 5.1.2 Venture capitalists can be crucial in getting SMEs to contact IP experts

There is research (Pitkethly 2006) showing that venture capitalists (VCs) value the possession of IPRs by firms in which they are considering investing. The same can be said of 'business angels' who, as individuals with experience of successfully developing SMEs, may themselves invest in firms even earlier than will most VCs. This is something to which VCs have alerted patent attorneys when instructing them to carry out due diligence work on the IPRs owned by a particular firm.

*We have just acquired a new client and what happened is that there's been a little buy out of the business and the venture capital people who were funding that buyout were already known to this firm and asked us to do the due diligence work and that's led on to us becoming patent agents to the bought-out bit. (PA8)*

*VCs: awareness among them is high, [as it is] for business angels. (PA10)*

*A venture capitalist has been asked to invest in company X, has had a look at company X's patent portfolio and seen that it's in trouble but that its [patent portfolio is] essential for any investment to take place – calls me in to try and improve the position – I will be working for the small company but I'm brought in by the investor. (PA4)*

*The start-ups tend to be well-catered for because venture capital now clearly looks for start-ups to have some form of IP associated with them so some of the drive for it comes from the VCs themselves. (PA11)*

This search by VCs and business angels for investment opportunities that are supported by a good IP position has had two key effects. First, as shown by the quotes above, VCs act as a means of introducing IP experts and, usually, patent attorneys to SMEs. Secondly, there is a sense that the reluctance of VCs to invest at very early or 'seed-corn finance' stages of a company's life, and a preference for investing in slightly later or mezzanine stages, may lead to a delay in the push for SMEs to strengthen their IP position and being provided with the funds to do so.

*I think the gap is that the SMEs that have been going for a few years and been started up as a one-man-band [by someone who is] putting their own money in, not money from outside, and so it trundles along for a few years before thinking about IP as an issue; but as soon as someone else's money is involved then IP becomes something that's there from day one. (PA11)*

Even the small scale of initial investment required to preserve IPRs is problematic for SMEs (see SME interviews in Chapter 7 below). Arguably, the solution may be for VCs to get involved earlier, on a smaller scale – such as is the case for university technology licensing offices (TLOs) – simply in order to protect the IPRs that might be defended if sufficient funds were available earlier on.

### **5.1.3 There is very little incentive for patent attorneys to market themselves to SMEs**

Owing to the current growth in the importance of IP and the consequent increase in patent work both at home and abroad, patent attorneys find it relatively easy to gain work. It may be difficult to find sufficient qualified attorneys to do SMEs' work. Several patent attorneys commented on this.

*Although one never likes to turn work away we're all terribly busy – I don't think any patent agents are really, really on the ball, out generating new work, because the work is coming to you. I mean I find it's like standing underneath a waterfall – it just pours onto you. (PA8)*

*We're in the fortunate position and indeed I suspect that most of the profession is [in] that there's far more work than there are people capable of doing it. (PA5)*

*There's masses of work around. You don't have to go out and hunt it, which is a remarkably fortunate situation. (PA5)*

The implication of this is that only a few patent attorneys, who are perhaps looking further ahead, are prepared to make the effort to connect with SMEs in any significant way. This interest in SMEs may also be a little more pronounced outside London, where with smaller practices' work is likely to be more locally based. A further effect is that 'convention' work from overseas, even if potentially less interesting intellectually and with less likelihood of contact with the inventor or any need to exercise drafting skills, will probably be much more interesting financially, both in value and volume. An IP solicitor commented that:

*The work that any SME can give to a patent attorney is going to be small beer compared with what they can get elsewhere. (IPS22)*

If patent attorneys are operating near capacity it is therefore not too surprising if they fail to try to develop IP awareness among potential SME clients. How this situation might be changed needs further study and is discussed briefly in Chapter 8.

It is worth noting, of course, that the interviews were conducted in summer 2008. The downturn in business conditions in the six months since then has, according to several patent attorneys, reduced these reported high levels of work. This may make pursuing SME work more attractive but at the same time might make it more difficult to obtain as the SMEs themselves will also have been affected by the downturn.

### **5.1.4 Patent attorneys' marketing activity primarily relates to overseas firms**

As mentioned above, the value and volume of overseas work is likely to make it far more attractive to patent attorneys in private practice than is work for local SMEs. A further factor is that work for overseas firms or patent attorneys invariably involves having to work only with other patent attorneys, either in-house in large firms or in private practice. The mutual understanding that those involved can assume makes the work considerably easier than the task of managing the expectations of a local SME. In contrast to the overseas client, the local SME is likely to be unduly concerned about the bills and in continual need of explanations of basic IP law.

*There is a lot of work about but we do a fair amount of trying to get more. But inevitably that is targeted where it's going [to] come from best and SMEs are not the place for that targeting. To target SMEs for work is a very hard road because there's a lot of going round needed... basically I've got to meet an awful lot of people before I find even one which has a bright idea. Whereas if I go off to try and see half a dozen Japanese attorneys it's a lot more productive. (PA2)*

*If you want...a straightforward life without too many challenges and conflicts and potentially making a lot of money, the SME IP sector is not one which is of any interest to you at all...getting client satisfaction from the large operation / professional client, etc. is just so much easier. (PA5)*

*The risk with SMEs is that you put a lot of time into them and they're often not the best type of clients to have. (PA10)*

An IP solicitor commented that patent attorneys' marketing efforts are somewhat limited, contrasting the marketing ability of trade mark attorneys with that of patent attorneys: 'I have to say...I think TM attorneys are very good at marketing and networking with other business professionals and I don't see much of that coming from patent attorneys' (IPS22).

The attitude of patent attorneys might be likened to that of carnivores around a waterhole. Given a choice they would probably prefer freshly prepared steak on a plate to having to expend too much energy running around catching smaller mammals. Again, what, if anything, might be done to change and make patent attorneys pay more attention to SMEs will be discussed in Chapter 8.

### **5.1.5 Some firms of patent attorneys do try to develop a reliable local SME practice**

Some firms may nonetheless be interested in developing SME clients, especially sole practitioner and smaller firms outside London, which may not have the resources to cope with large volumes and types of work from overseas clients. There are, however, some partners even in some larger firms who do not totally neglect SMEs. There are several reasons for this. First, there is the risk that overseas work may be subject to competition from other attorneys and therefore some SME work will act as a form of insurance policy. Secondly, SMEs can be seen as an investment by patent attorneys, rather as VCs might view them, providing that the patent attorneys are capable of dealing with the larger volumes of work that might follow successful growth of an SME.

*It'll only take a small change in the law to quite seriously damage the agency work, and though that's not on the cards it's always a possibility, so we've always taken the view here that we should ensure that we've got a good strong domestic practice. We're about 50:50 split.... We'd be much more profitable ignoring SMEs completely and just doing agency work. (PA9)*

*I think that SMEs are one of the most important targets we should have since I foresee major competition in the future for foreign-deriving work, and I feel that it's important to have close links to the small companies because the small ones grow larger, whereas the large ones have their own patent departments. (PA4)*

The implication of this more farsighted interest in SMEs is that they have the potential to grow into sizeable companies, which are just the type of company in which VCs and university TLOs are also interested. They tend not to include the more numerous average SMEs, which have rather less dramatic expectations regarding growth – even if they should and could be more ambitious if their IP were managed better.

### **5.1.6 Referrals of work to patent attorneys generally come from a wide variety of sources – except accountants**

The interviews with patent attorneys revealed a wide variety of sources of referred work, including existing contacts who had encountered the firm while in a previous job; solicitors (though mainly of non-trade-mark and technical patents work); direct public sources, such as Yellow Pages; and professional bodies such as the Chartered Institute of Patent Attorneys (CIPA) or, in the case of trade mark attorneys, the Institute of Trade Mark Attorneys (ITMA). One trade mark attorney, for example, said that:

*We get quite a lot of work from people we've done work for before, or solicitors or chamber of commerce...Last year, 55% of new work came from referrals [from] other professionals and over 27% is existing clients, the rest is things like ITMA, Yellow Pages...and the website. (TA16)*

Nonetheless, virtually all interviewees said that very little, if any, work was sent to them by accountants.

*For whatever reason they don't refer a lot of work our way. I think it's perhaps that accountants don't think in legal terms. (PA9)*

*We get very little from accountants, which we're all slightly surprised about, but we do talk to accountants. (PA9)*

*Well, I don't think I've ever had an accountant send me anything. (PA6)*

*Have we ever had a referral from an accountant? I can probably not think of any...And yet [with] any business above the trivial there'll be an accountant involved. (PA2)*

*We have very little business from accountants, by the way. (PA4)*

*When service marks came out we picked up one or two accountants as clients but I don't think any of their clients have come our way. (PA12)*

*I can remember years ago I started going to the local chamber of commerce, which is run by the accountants, and it was a complete waste of time because they didn't want to know about IP and were doing their own thing – so no, accountants are not a source at all as far as I'm concerned. (PA7)*

At the same time, many interviewees remarked that in theory accountants should be a very good source of referrals of business since they would be involved with every business and almost inevitably at the start of any new business. A further aspect was that, unlike solicitors, who can to a certain extent do the same work as patent attorneys (even if they tend to do little other than some trade mark work in practice), accountants had no conflict of interest with patent attorneys because their work does not overlap.

*Accountants are ideal in a sense in that they are a very large profession, a very widespread profession, every business has got to have one somewhere and they haven't got anything to lose compared to solicitors. I do think the accountants can be enormously helpful here, and of course there is a bigger boost coming up on this which is the issue of reporting intangibles, [which] is still very live. (PA5)*

*I think more of a link between the accountancy profession and the chartered institute [of patent attorneys] would be an extremely important thing. (PA3)*

*I think the solicitors are going to have completely false expectations – on the other hand, the accountants could be natural allies because we're all in the business of trying to improve the organisation so I think we have a natural affinity for accountants though we very rarely speak to them. (PA3)*

The problem is that it is very probably precisely the existence of overlap in their areas of work, and therefore mutual understanding of what each is best able to do, that results in most work referred to patent attorneys from other professionals coming from solicitors rather than accountants.

*By far the most common route is for them to contact their solicitor and then they will say you don't need to talk to us you need a patent attorney. As high as 90% of them arrive like that. (PA11)*

*We do get calls from solicitors – that's probably the most frequent source. (PA12)*

Nonetheless, the question remains as to how the unexploited opportunity for accountants to refer work to patent attorneys might be developed. As will be seen from the interviews with the accountants, although direct accountant-to-patent attorney referrals are rare they may sometimes occur through solicitors. This shows to some extent that the single-intermediary model suggested by the literature review may in this instance be inadequate and that there is really a two-stage intermediary process. The explanation may be that accountants and solicitors' work overlaps, especially in company formation, and solicitors and patent attorneys' work overlaps, especially as regards trade marks, but accountants and patent attorneys' work does not overlap, with the result that accountants tend to refer work to patent attorneys only indirectly and primarily through solicitors.

### **5.1.7 Patent attorneys rarely use formal referral tracking systems**

The majority of patent attorneys interviewed had no formal method of tracking referrals, though some did and a few had informal notes on file of the source of work. This seeming indifference to sources of work might be related to its abundance, on the basis that if one's problem is capacity to do the work available then marketing, and referral tracking as part of that, may seem a waste of time and money in the short term. That said, within the patent

profession as a whole reciprocity between patent attorneys across national boundaries has been very important in the past, even if less so today, and it is effectively no longer the case within Europe.

*Yes we do [track referrals] and from those statistics, [of the] work that has come from intermediaries, the solicitors are 90%-plus of the route for referral. (PA11)*

### **5.1.8 Personal contacts and networking are more important than formal advertising**

A very common theme in interviews with patent attorneys who did work for SMEs was the role of personal and business contacts and networks in the referral of work to the firm. This appeared to be a more common source of work than advertisements or Yellow Pages, although these did appear to play a small role.

*I would say the predominant route by which SMEs find us is that of personal recommendation...one likes to think of it as recommendation but it may of course not be, may just be existence that they're advised about...I think that the number of times one secures anything from... advertising...is essentially very small. (PA5)*

*[It] depends on the individual patent attorney and who our contacts are...I have a partner who gets lots of referrals from solicitors; for me, most of the referrals come from either tech transfer offices or venture capitalists or basically friends of friends. (PA4)*

*Most of the referrals I get are as a result of people who are heavily involved with IP and understand its importance but would think twice before advising themselves, so for instance venture capital funds look at how the IP [is] presented to them and say perhaps you could do better or a TTO [Technology Transfer Office will say] well you're not one of our clients but perhaps go and see so and so. (PA4)*

*Most of my work comes from recommendation from someone I already work for. (PA4)*

Again, in the case of patent attorneys who adopt a passive approach to marketing in the face of an abundance of work, there is every likelihood that any new work that does arrive will do so because someone they already know has told the potential new client where to find them, rather than because the patent attorney has set out to find the new client. In a world with less work to go around it is quite likely that the patent attorneys would be a lot more active in searching it out, but even that would also involve a significant degree of networking.

### **5.1.9 IP awareness is something that investors promote**

As mentioned earlier, VCs play a significant role in promoting IP awareness. The most public instances of this depend on the incentive that seeking finance provides for SMEs to meet VCs' expectations regarding IP ownership. 'Dragon's Den' panellists, questioning hopeful participants about their patent and IP position, also have a role to play in raising the importance of IP in the eyes of innovative SMEs.

*The one key point is that if it's new technology the small businesses need investment – so one of the most effective places to put the advice would be with the investors... believe me the little companies really sit up and take notice when it's the potential investor that tells them to look into it properly. It hits them where it hurts. (PA4)*

This role in promoting IP awareness generally is in addition to the role of VCs in referring SMEs to patent attorneys, and the potential problems that delayed investment and consequent resource limitations on pursuing IP protection might involve.

#### **5.1.10 The cost of IP protection leads firms to postpone dealing with the issue and contributes to an unwillingness to be more aware of the issues involved**

A final aspect noted by patent attorneys is a direct consequence of the resource limitations many SMEs face. In theory, if an SME has a valuable piece of IP clearly capable of generating significant value from multiple technical and geographical markets then it should be immediately possible to raise the investment and thus resources necessary to extract that value. In reality, limitations in terms of uncertainty surrounding the innovation or the staff or in terms of the risks that the SME's owners can take on may limit its growth and even its ability to invest in protecting its IP. This may result in the inefficient exploitation of the micro-firm or SME's initial innovations or failure to exploit them at all. A key factor in this transition from being a micro-firm to becoming an SME is the immediate cost of obtaining IP protection and whether there are any perceived immediate benefits (or, on the contrary, a lack of them). SMEs can be discouraged from bothering with IP advice and protection by high costs, particularly the professional fees involved, rather than any initial official fees, coupled with apparent lack of immediate benefits. Patent attorneys encounter this not so much in the terms just outlined but in SME managers' objections to the high costs of IP protection and the low immediate returns involved, both of which make SMEs reluctant to get involved with IP unless the incentive of VC investment or the arrival of a clearly successful innovation renders the expense obviously worthwhile.

*The trouble is that a lot of SMEs don't realise that IP's important – it can be extremely difficult to get through to them. And a lot of the ones which are aware of IP, believe that they've got things sewn up already. (PA4)*

*The difficulties with SMEs [are] always that the people who are there are having to juggle a huge number of jobs and actually getting them to turn up [for IP seminars] is difficult. We always have a greater number of acceptances than people who turn up on the day. (PA11)*

*We have very small clients and they just don't have the money for it... someone looks at the portfolio and says, 'well that's just no good, you're covering a third of what they are doing' but it's just because we're being told not to spend that amount of money. (PA12)*

*The message does come back from start-ups that they'll do it when they're bigger. (TA16)*

Good IP protection is never going to be cheap but there must be benefits to be gained in public policy terms by ensuring that a greater proportion of good and potentially successful innovations are efficiently exploited, despite the problems of lack of resources to do so in the early stages of the company's life.

#### **5.1.11 Conclusions**

The overall conclusion from these interviews with patent and trade mark attorneys is that the main sources of referrals to them seem to be CIPA offices and a range of sometimes serendipitous contacts, Web pages and Yellow Pages, supplemented by some professional intermediaries.

For these professional intermediaries, the three criteria are access to client SMEs, IP awareness of the intermediary brokers and, finally, their competitive positioning relative to the patent attorneys.

Solicitors have good IP awareness owing to their legal training, but as sources of IP expertise they overlap and thus compete with patent attorneys to a certain extent, especially in the area of trade marks, and this restricts their role in referring work to patent attorneys.

Accountants have probably the best access to client SMEs but seem to have the least IP awareness, though this may need further investigation. The result is that despite excellent access to SMEs they rarely act as intermediaries in putting SMEs in contact with IP experts.

Because of either an excess of work or at least the availability of more remunerative agency work, patent attorneys do not seem to put much effort into direct marketing to SMEs. This emphasises the need for effort to be put into improving the ability of intermediaries to raise IP awareness and the opportunity that accountants, in particular, have to act as such as intermediaries if their IP awareness can be raised, to the benefit of their clients and thus indirectly themselves.

## **5.2 IP SOLICITORS**

The role of solicitors in mediating IP awareness depends in large part on the extent of the IP awareness and consequent practice of the solicitor concerned. The degree of IP awareness of solicitors is likely to form a continuum ranging from the almost totally unaware to the expert who specialises solely in IP-related practice. For the purposes of this research the continuum was divided in two and a sharper distinction made between IP-specialist solicitors and non-IP-specialist solicitors ('IP' and 'non-IP' solicitors). IP solicitors were defined as those firms with a specific IP department or that listed any of their partners as specialising in IP law. Non-IP solicitors were defined as firms having a commercial department or partner but no one person or department specialising in IP law. The result of this was that the non-IP solicitors interviewed still had a degree of IP awareness, albeit lower than that of the IP solicitors, while the IP solicitors were all IP experts.

The distinction between IP and non-IP solicitors in some senses mirrors the divide that will be referred to again (in section 5.2.7 below) between high-IP-dependent and low-IP-dependent businesses, though the two dimensions are not necessarily coterminous.

It was found to be considerably easier to interview IP solicitors than non-IP solicitors. This must be attributable to the quite understandable lack of interest by non-IP solicitors in a specialised topic in which they do not specialise themselves. This mirrors a general problem with studying IP awareness: it is a lot easier to collect information about IP awareness from the IP aware than from the IP unaware, even though it is the latter group that is probably of greater interest. Nonetheless, interviews from both varieties of solicitor provided useful insights.

### **5.2.1 IP solicitors form a bridge linking accountants to IP practice**

As mentioned in the discussion of the views of patent attorneys in section 5.1 above, IP solicitors can in theory carry out many of the roles of a patent attorney. In practice the role of IP solicitors tends to exclude technically related patent filing and prosecution work, especially drafting new applications. It may also exclude trade mark work, though being non-technical this is something some larger firms will take on in the interests of providing a broader service to clients. At the same time, although patent attorneys have increased rights of audience and ability to take on a litigation role compared with the past, litigation and advising on legal agreements such as licences still tends to be the preserve of specialised IP solicitors. The end result of this is that although there is competition between them in theory (and occasionally in practice), IP solicitors and patent attorneys' roles are mutually understood and complementary. IP solicitors are therefore generally willing to refer patents work to patent attorneys, and sometimes trade mark registration work as well. Conversely, any serious litigation or major legal agreements involving IP will inevitably involve specialist IP solicitors who may be consulted at the behest of the firm's patent attorney, if the firm's usual solicitor is a non-IP solicitor.

*Very common[ly] they [SMEs] may come from banks when their banks have recommended them to us; they may be coming from the university as a start-up...as well or by word of mouth, sometimes, from patent attorneys because we have a wider service than the patent and trade mark attorneys do, and some of them are existing clients who decide to go off and form new ventures that they come back [to] us with. Most common is usually recommendation from other professionals. (IPS22)*

*We tend to be closer to accountants than patent and TM attorneys would be anyway, ie I sometimes wonder whether what comes to us is not specialist enough for a patent attorney to be dealing with – because certainly a lot of what I would class as IP work I can't imagine a patent attorney would deal with – eg website-related things. (IPS26)*

As mentioned, although the above links between IP solicitors and patent attorneys are relatively easily established, those between patent attorneys and accountants are not. Even though some IP solicitors reported that little work was referred to them by accountants (perhaps for the same reasons that links to patent attorneys are low), there is nonetheless referral of business from accountants to IP solicitors, often internally by the other parts of the same solicitor's firm.

*I can't recall personally any cold referral of work with IP from an accountant. (IPS21)*

*We have lots of dealings with accountants; we network with them frequently [and] our corporate team liaise with them constantly; and the same goes for banks and VCs and fund holders, and so we're probably a bit more pro-active in the market place in that regard. (IPS22)*

The end result of all this is that firms with a specialist IP department as well as more general legal functions can act as bridges between accountants and patent attorneys.

### **5.2.2 IP solicitors may compete with patent attorneys over some but not all IP work**

As mentioned in section 5.2.1 above IP solicitors can carry out some of the roles of a patent attorney, especially regarding trade marks. Many IP solicitors will, however, avoid such work in the interests of receiving referrals of more general work, even though others may develop just such business in the interests of providing a one-stop shop for clients.

*We wouldn't do any patent work other than litigation. We do do trade mark and design registration. We have some clients who have existing relationships with their patent and trade mark [TM] attorneys and they want to keep their trade mark portfolio with them. With many clients they say, 'well why can't you file the TM applications' and it was client demand that led to the formation of the trade mark unit – keeps the work under one roof. (IPS22)*

*Depends on nature of the practice – we wouldn't do registrations or applications for trade marks let alone patents – whereas other practices would. (IPS26)*

*We don't compete on filing patent applications and they do a bit of litigation; the area we compete in mostly is trade marks. We do everything that they do and more because we do litigation.... There are some firms who don't do registration work because they want to maintain that relationship with patent attorneys and would help with referrals – if we weren't doing TM registration we would have a lot of scope for referrals. But we'd be reluctant to give that work up. We quite often have the need to recommend patent attorneys, maybe once or twice a month. A lot of clients think we do that type of work but in practice very few firms of solicitors do. (IPS9)*

The outcome of comments such as these is that the activities of patent attorneys and IP solicitors are, in general, complementary rather than competing and as a

result enable cross-referral of work, which might be more difficult (though still not impossible) if direct competition were involved more often.

### 5.2.3 IP solicitors have varying levels of IP-related skills

As mentioned above, IP solicitors and patent attorneys' main skills are complementary, but this emphasises that even where IP solicitors are involved there may be a hesitation on the part of the expert IP solicitor to offer a full range of services when patent attorneys can provide some of them much more easily:

*We have monkeyed about with registration [of trade marks] but quite frankly...our policy now is to refer anything of that type out, partly for selfish reasons and partly because they're much more used to doing it than we are. (IPS21)*

### 5.2.4 IP solicitors may understand and consequently refer work to patent attorneys

The advantage of internally referring to an IP solicitor within the firm IP work that may have been taken on by a firm of solicitors as part of some more general work, is that once on the desk of the IP solicitor the exact nature of the work and who is best suited to do it will be immediately appreciated. If necessary, the work will then be passed to the best person to carry it out. This may not happen if the SME concerned is IP unaware and only reveals the need for the specialist IP work to an adviser who is also IP unaware and not working directly with anyone who is IP aware. One IP solicitor suggested that one problem with IP advice was getting managers to realise that they needed it:

*it's one of those things that people don't consider until they're told to consider it. That's why I think most of our stuff comes in from other professionals because other professionals realise. Whereas it's unusual for someone to spontaneously think of it. (IPS26)*

This emphasises the fact that IP awareness comprises not just knowledge of the existence of IPRs but an appreciation of when advice about them is needed from experts.

### 5.2.5 IP solicitors depend greatly on business and social networking for referrals of work

Like the patent attorneys, IP solicitors also frequently mentioned the importance of business and social networking in providing leads to new business and opportunities to advise on IPRs. This might be a referral within a specifically business network or a more social network introduction, or a combination of the two.

*That was a fairly classic case of someone saying you need to be advised on this and then it landed on the doorstep here...it was their friend in the pub! Their friend in the pub also happens to be a professional contact; but they came on the advice of someone who knew what they were talking about in a professional sense, but they weren't an accountancy referral. (IPS26)*

### 5.2.6 Costs of IP-related work also affect IP solicitors' relations with SMEs

For SMEs, costs are an issue with any professional adviser and not just patent attorneys. IP solicitors therefore also frequently mentioned the effect that costs had on SMEs' decision making about IP protection. A common comment was that the time when IP protection should be put in place for future benefit was invariably the time when an SME's resources were lowest and most stretched. This was something that IP solicitors found had a parallel with some of the work that might be done on company formation to ensure the smooth running of the company in the future, but that was often not done when it should have been, owing to lack of resources.

*It's a conundrum, isn't it, that the only point at which to put in place a good shareholders' agreement is at the outset when you can't afford it, and when you can afford it it's too late; and similarly with covenants restricting employees.... Often the need for these is only seen [too late] – we do try to bring all that to people's attention. [However,] our practice doesn't really have [a] significant amount of work from hi-tech startups and so the answers we're giving are from experience with established trading companies rather than new ventures. (IPS21)*

*If they are in the technology area then obviously you are going to look at IP patents, [and] trade mark registrations, and all you do is provide a list of people that you've got relationships with that you trust [and] that you would think would offer a good service – the truth is they generally don't have an awful lot of money to spend at that point. (IPS21)*

Another aspect of the influence of costs was that IP solicitors (and patent attorneys) often found it difficult to get SMEs to focus not just on the costs but on the potential benefits and future value of IP protection.

*I suspect that it's not so much their awareness of it as they fail to appreciate its value – when you have an SME and you see somebody saying to you – you need to go and spend X thousands of pounds achieving this – the immediate answer is why? What's the immediate benefit? Well actually there isn't an immediate benefit – there will be an enormous benefit 18 months–two years down the line when big investors are looking to give you your second-round funding, for example, but frequently people look at it and say we can deal with that later. (IPS26)*

*I can think of another client who actually...they knew that they needed their technology to be up and together for their second-round funding to work, with the result that they set about their technology right from the beginning. They knew that the technology was going to be the thing that brought the investors in – so they set about sorting that package out right at the beginning. Whereas a lot of times people just want to get on with running the business and making the business work; they tend to assume that IP is something they can sort out later. (IPS26)*

As will be seen from the later interviews with SMEs (Chapter 7) there are a certain proportion of SMEs for whom IP is thought of as an unnecessary distraction from more pressing issues. Needless to say, interviewing such companies is not easy, though this was achieved, as the subsequent interviews prove.

### **5.2.7 IP solicitors represent one aspect of the professional divide between high-IP-dependent and low-IP-dependent businesses**

The incidence of SMEs for whom IP is a needless complication or distraction emphasises that there is a divide between what might be called high-IP-dependent and low-IP-dependent businesses. The former comprise those SMEs and their advisers who have had frequent contact with IP issues, involve technology-based business, and VC or other private equity funding. The latter, on the other hand, comprise SMEs and their advisers who have had little or no experience of IP-related issues and, rightly or wrongly, perceive their business as having little if anything to do with IP issues. The latter may concede that the use of trade marks and websites may involve some IP considerations, but rarely more than that. The former inhabit an environment where all the parties are IP aware and most of them are IP experts, sometimes even including the SME concerned.

An example of a high-IP-dependent business would be a company set up specifically as a technology development and licensing business, which employed its own IP expert staff and had involved patent attorneys and IP solicitors right from the start. An example of a low-IP-dependent business would be a solicitor who admitted not knowing and not wanting to know anything about IP and an SME for whom IP was seen as an expensive irrelevance. Some of these are among the SMEs interviewed later but the following comments from IP solicitors illustrate the existence of the divide from their point of view.

*It is true that...although they will happily recommend us to do all sorts of things they probably perceive that IP isn't a problem – if they can't see it then it doesn't exist!* (IPS21)

*There are some that know a lot about it and some that know absolutely nothing, and I suppose by the nature of what we do we tend to talk to the ones that know a lot and not the others.* (IPS26)

*When we're referring clients out to accountants there are certain firms who we hope are pretty good at the sort of start-up technology end of things and there are others... IP is one of those patches of work where people recognise they don't have the ability to do it and it's safer to give it to someone else.* (IPS26)

One firm of IP solicitors mentioned a rare example of a firm of accountants specialising in what might be called IP-dependent business to the extent that their professional staff were all given training in IP, in some cases by IP solicitors in firms with which they were associated (one of

the accounting firms interviewed referred to a similar course and this may be the same firm).

*I've tended to work with the same accountants I've known for a long time; they do know about IP and do understand the issues. What we're finding, though, is that those accountants are dealing with technology companies and one firm approached a partner a few months ago and said: 'I understand what IP is but my partners don't and the teams don't: could you come and teach us about it [so] we know what to look out for with our clients?'. We're getting more requests to do that now. So it's unfair to say they wouldn't understand what IP is.* (IPS22)

A few of what might be called 'IP accountants' do, therefore, understand IP issues very well.

## 6. Intermediaries

### 6.1 NON-IP SPECIALIST SOLICITORS

The distinction between IP solicitors and non-IP solicitors, who are listed as dealing with commercial or business work but not as IP specialists or part of an IP department, has already been described. The main issue with non-IP solicitors is that since the majority have little interest in IP-related matters the response rate for their interviews was lower than that for the study's IP experts. Nonetheless, the interviews that were carried out were sufficiently varied to illustrate a number of different points.

#### 6.1.1 Non-IP specialist solicitors are limited in the advice they can give

Though it may seem obvious, the limitations of non-IP specialist solicitors combined with the generally lower cost of firms' access to them, either on formation or in the course of day-to-day business, mean that they can and do act as a referral channel to IP solicitors or even patent attorneys. This is acknowledged by at least one of the non-IP specialists themselves.

*There comes a point where one needs to introduce them to other solicitors. (S1)*

*There are differences between the large firm which comprises some very excellent specialist lawyers and the more run-of-the-mill high street firms such as this one – it was brought home to me when dealing with a company or business sale, when the other party is represented by one of the big city firms or big regional firms and I will find I'm dealing with six or seven different specialists on different aspects of the transaction. (S1)*

*I'm reasonably confident on providing IP advice. On the other hand, if a client asked me to explain anything about [how] a computer works then I would run a mile. If they come in and ask that sort of thing then, yes, I act as an intermediary and I'm fortunate to have fairly prominent IP firms amongst my clients and would refer them to one of those. (S1)*

It is fair to state that the quotations above came from a firm which, though relatively small and non-specialised, had acted for several technology-based companies that had grown so substantially as to need referring to larger city-based solicitors, not just for IP-based work but also for other specialised or major work.

#### 6.1.2 Non-IP-specialist solicitors network with specialist solicitors or patent attorneys

When it comes to referring IP-related work, even non-IP solicitors are able to identify IP-related work and refer it to an appropriate IP solicitor or patent attorney. In some cases there may be a stage of internal referral to the person within the firm who knows most about IP before onward referral outside the firm.

*Most work generally comes from existing clients of the firm because they are already clients of the firm in other matters – there is one [case] on IP for websites where there was a recommendation from another firm, but in other cases it's been internal referrals [by] existing or prospective clients of the firm. (S10)*

*I might pass questions on patent infringement to a firm of patent solicitors in London, rather than a patent attorney. (S10)*

Some non-IP solicitors mention that referrals from accountants are low, which may be because non-specialist firms are not seen as the place to refer IP work: 'I've never had anything like that from accountants as far as I can remember'. (S12)

#### 6.1.3 Non-IP-specialist solicitors nonetheless vary in their level of IP knowledge

A general characterisation of non-IP law firms would be to call them 'High Street solicitors'. Among these, the standard of IP awareness is not expected to be very high. Furthermore, the variety of work in such firms is considerably greater than that of an IP-specialist firm. Correspondingly, there is a greater variety of levels of IP awareness among non-IP specialist law firms than among IP specialists.

*I should think they know as little about it as I do, ie \*\*\*\*\* all!...We tend to be rather hot on death and divorce just now – but you can still get IP rights involved there – it happens rarely but these things have a value and somebody has to value them. (S12)*

*We do deal with simple filings of trade marks – if it starts getting into a trade mark infringement action we would pass it on – we wouldn't deal with a significant trade mark or patent infringement case. (S10)*

The key point about non-IP solicitors is that all will recognise where specialist IP advice is called for and will know whom to call on for that advice. Even if not expert, their IP awareness is effective all the same.

#### 6.1.4 Cost constraints also affect SMEs' use of non-IP-specialist solicitors

The most consistent points made by non-IP-specialist solicitors were the high costs involved in anything to do with IP and the inability of most if not all their clients to pay such costs, unless some other investor agreed to foot the bill. Particularly in the current business climate, IP was seen by some as a distinctly secondary issue: 'It's got a fairly low profile in the commercial world at the minute; survival is the name of the game at the moment' (S12).

## 6.2 ACCOUNTANTS

Accountants differ from solicitors in that most accountants can be assumed to be relatively unaware of IP.

Accountants are, however, involved on both sides of the IP divide as is explained below, and there are a number of other similarities with the observations made above about solicitors and patent attorneys.

### 6.2.1 Costs are an issue also facing accountants

A key issue observed by accountants as well as patent attorneys and solicitors is that of costs.

*An SME is unlikely to be able to afford several thousand pounds unless it's a spin-out from a major institution or something like that. Remember, an SME that's raised seed capital has the money but an SME that's just started off probably just has credit cards – it really is that severe. So there isn't a package that is really put together for an SME that makes it that attractive, to be honest. (A2)*

*The IP advisors probably think that they'd rather go to the science park and talk to a business angel investing a seven figure sum which then puts their £40,000 fee into context; but when they're talking to the designer of a widget and they say we're going to charge you £2,000 they say its going to cost £2,000 to make the first batch. I can understand it from both sides and perhaps something needs to have got to a certain critical mass momentum before either side are interested in getting involved. (A5)*

In addition to costs, another issue is how to persuade the established but IP-unaware firm to recognise and manage its IP.

*I think we act for an awful lot of businesses in this area – ones that have not been spun out but the ones that have just been established for a long time, and they have some great ideas but they would not even consider going along and talking to an IP specialist even though he's probably got lots of ideas in there – so how do you get a business that's been going for 10–20 years to actually come forward? They have some great ideas but when you actually talk to them about it, it's always 'oh never done that before type of thing' – so it's how do you educate the sector, more than anything. (A2)*

Part of this process involves convincing the firm that the costs are justified, and this includes matching the probable bills to the firm's financial resources and ability to pay. Referrals therefore depend as much on the client as on the firm to which the work is referred.

*Knowing the market and size of client, if it was a larger client with a greater budget [that could] afford more specialist services, [then] from the first meeting I might send them to a larger firm of solicitors who I know could advise and work within their budget, whereas with a smaller business who just want to speak to a solicitor in*

*the first instance, whether or not this is the sort of thing [for which] they might be able to get IP rights recognised, then maybe I'd send it to a more local firm rather than a 'local-national', if you like. (A11)*

### 6.2.2 Accountants admit to referring little work to patent attorneys

Earlier in the section dealing with patent attorneys' views (section 5.1 above) it was noted that patent attorneys received few referrals of work from firms of accountants. Several of the firms of accountants interviewed confirmed this.

*We had a spin-out from a local place and we didn't feel that they had an understanding of their own IP so we put them in touch with [XXXX] and they had a chat with them and they felt more comfortable, but it's not very common, I'm afraid. (A2)*

*Incredibly rare. (A3)*

*I don't think I've ever spoken to a patent attorney. (A30)*

*From personal experience I wouldn't know a patent attorney to whom I would refer anybody. (A11)*

There might be several explanations for this, one accountant speculated that:

*there isn't as much understanding of...IP from the accountancy side, and the patent attorneys aren't as proactive in the marketplace, from our perspective, and the patent attorneys don't want to get involved with the start-up phase. I don't think they're active with the general client; there's a lot of IP work out there but they don't actually seem to get in front of the clients as much as they should, and so they're not seen as natural networkers, maybe. (A2)*

If the patent attorneys are already working at capacity this may be a rational explanation for their lack of networking, rather than perceptions that they need to network more and may not be very good at it. The lack of capacity may explain the lack of networking but the lack of involvement in the start-up phase may also be because VCs and investors begin to apply pressure to manage IP only when they become involved, and this may not be until after the initial start-up phase.

In addition to these reasons, accountants also suggested that start-ups all need solicitors, again emphasising the inevitable links between accountants and solicitors, even if not with patent attorneys.

*Out of nine or ten clients that walk in that are going to start a new business, all of them will perhaps need to consider [a] shareholders' agreement and a directors' service agreement. Whether or not they fulfil it...there's invariably a referral to the solicitor for that. (A5)*

Finally, some accountants ventured that the lack of contact between accountants and patent attorneys was because the client firm had sorted out its IP in conjunction with a patent attorney prior to meeting the accountant.

*I think I can tell you one reason for that, at least my opinion, that is, if someone knows that they [have] got a decent bit of IP they will think whether or not it should be patented, so usually by the time we've met them they've had a conversation with a patent attorney; so having established that they've got a patentable product they'll think about whether they can commercialise it...I have referred people to patent attorneys but it is fairly infrequent. (A24)*

### **6.2.3 Accountants have closer links to solicitors than to patent attorneys**

As mentioned when discussing the views of the patent attorneys (see section 5.1) accountants' work is arguably closer to that of solicitors than to that of patent attorneys. This is probably because the relative lack of IP awareness of accountants has left them able to think of IP matters only as legal issues that should be referred to a solicitor.

*There are IP issues which come up from time to time, invariably with new businesses. We don't have a specific tie-in with an IP provider; there is a company I've referred [clients] to two or three times in the past 12 months in [town] – a firm of solicitors. (A5)*

*In first principle it would be a solicitor whom I know and [who] can deal hopefully with each kind of thing, and that I've used for other services [to whom I would refer work]. (A11)*

For most accountants, IP issues are relatively rare so they are more likely to contact a firm which provides other services, such as a non-specialist solicitors' office:

*...but probably one in 30 might have an IP issue no matter how modest so unless the IP firm is also delivering those other general-practice style services the opportunities to touch the accountant and their client are quite narrow. (A5)*

*Solicitors are good work referrers; for us, patent attorneys [are] very rare – it happens once in a while [that] we do act for a fairly significant firm of patent attorneys. (A24)*

*We work with a firm of solicitors whom I tend to push them to on the rare occasion when it crops up, but the vast majority of our clients are very small businesses who it's not a relevant issue to at all. (A30)*

### **6.2.4 Accountants too can appear on both sides of the divide between high-IP-dependent and low-IP-dependent businesses**

The possible existence of IP-specialist accountants has been referred to earlier. For example one accounting firm specialising in high-tech-related businesses conducts IP training sessions for staff, sometimes involving local patent attorneys or IP solicitors.

*It's only firms like our own which do it – [most of the high street firms] won't even be thinking about IP, it's just not on their radar. I actually set up our technology group within our firm seven to eight years ago and everybody has to go on an IP course to be in the group, so it is in people's minds. Even in much larger firms that would be unusual...we send them on courses, sometimes we bring in a lawyer to talk about [the] latest issues, sometimes a local patent attorney. (A24)*

Although such specialist firms are exceptional it is of course unexceptional to find accounting firms on the other side of the divide that have very little IP awareness.

*From the way these professions have grown they've become more specialist, so becoming more specialist means you do understand that sector a bit more. I mean, how well what I'd call a real local accountant would understand an IP issue – I just don't think they would. They'd have a very good relationship with the person concerned but they wouldn't necessarily understand IP. (A2)*

It is quite possible that this lack of awareness of IP by the accounting firms is a key factor in the lack of direct contact between accountants and patent attorneys. Comments made by such accountants included the following.

*[I] deal with it so rarely, not so sure how to deal with it. (A21)*

*It's not really a thing we would get involved with. We're a very small practice and that type of thing rarely arises...I would not want to get involved. (A24)*

*If it was once a year I'd be surprised. Moreover I think the clients who I deal with, who are already involved with IP – they already have the link established to a solicitor or patent attorney. (A11)*

These comments suggest that it is likely that the majority of accountants who don't specialise in high-tech businesses come across IP so rarely that is not already the subject of expert attention and they are unlikely to be prepared to spend much time preparing to deal with it appropriately.

### **6.2.5 Accountants play a potentially crucial but usually isolated role in mediating IP awareness**

The fact remains that accountants, along with solicitors, are involved with virtually every company. Because of this, any awareness of basic IP issues that is absorbed by accountants stands a reasonable chance of being disseminated very widely. Even if, as a result, some SMEs were persuaded to take an initial consultation with a patent attorney or other IP expert (something for which they would frequently not be charged) it would arguably result in a lot more expert IP advice reaching SMEs in need of it. As one accountant said:

*where [IP experts] could spend time is to focus less on trying to access the SMEs but talking to the spheres of influence and knocking it around and talking to the local accountants, no matter how modest the practice might seem – because at the end of the day we may one day be the referrer. (A5)*

### **6.2.6 Checklists may have a role to play in raising IP awareness among accountants**

The point above raised the issue of whether checklists used by accountants in advising clients to ensure that critical issues are not missed could include IP, something that had been mentioned in the interim review of this research. When this was mentioned to a number of accountants, the reaction was generally positive but a critical point was made by one interviewee:

*the problem we have with checklists is when people don't understand the question on the checklist in the first place. (A24)*

If these checklists are to include consideration of IP-related issues, their use has to be preceded by appropriate training so that it does not simply become a mindless box-ticking exercise.

## 7. SME clients

The conundrum of research on IP awareness is that it is the IP-unaware and the reasons for their lack of awareness as much as the routes by which the others became IP aware that are of interest. Trying to find out what people do not know or are not aware of, and why, will never be easy, as those who don't know about IP are also highly likely to be uninterested in it.

A further problem with studying SMEs' awareness of IP and how they came by it is that it is rare to catch an SME at or near the moment at which its managers become IP aware. With many companies the initial interaction with IP, whether the result of a chance meeting with a patent attorney, an introduction from another professional adviser or a search in a phone directory, may have taken place 20 or 30 years ago and the majority of the staff and managers involved in that process have long departed. In one case an interviewee was fortunately still with the company 25 years after the event, but such is not always the case.

*Twenty-five years ago I was working for a company that did a lot of work for [XXXXX] and this particular guy was, at that stage, [XXXXX] of UK's patent agent, and so because of his particular expertise and relevance to our work we decided to use him as well and he's handled all our IP ever since. (SME29)*

The other factor to bear in mind when considering SME IP awareness is that even within the same SIC Code categorisations there can be considerable differences in the extent to which firms are high-IP dependent or low-IP dependent. It is arguable that no company is totally IP independent but it is reasonable to suggest that some businesses are more dependent on IP for their success than others. The distinction to be made, however, is the extent to which a company's perceived IP independence is actually due to lack of IP awareness rather than the nature of the business and industry it is involved in. If that IP independence is due to lack of IP awareness, then the factors that may have led to it might be investigated and corrected.

### 7.1 SMES CAN AND DO INITIATE DIRECT CONTACTS WITH IP EXPERTS

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The current project primarily concerns intermediation of IP awareness but it is perfectly possible for an SME to make direct contact with IP experts. This might happen as the result of simply looking up a patent attorney in a phone directory, or consulting the UK IPO, CIPA and EPO or ITMA websites. All that is required is the most basic knowledge of what IP is and where one might reasonably expect to find more information about it. In this age of googling for information, it does not take too much initiative to find out a lot about IP in great detail in a short time – if one knows what to look for and what to ignore. To some SMEs this much is obvious.

*I picked a patent attorney out of Yellow Pages and I went down and seen [sic] him – nobody gave us any advice [about whom to consult]...It was just obvious that we needed to see a patent attorney. (SME2)*

*There should be more information about it but there doesn't seem to be, but it's fairly obvious what you've got to do. (SME2)*

*It's fairly easy to find people – Internet, Yellow Pages – I mean a patent attorney is a patent attorney, it's not hard to find [one]...If you look at the Patent Office website. (SME39)*

*Yellow Pages, I guess – latterly we've been frightened off by the cost – just got a TM. I haven't pursued patents. (SME48)*

This in a sense relates to the point made when measuring IP awareness for the UK IPO: IP awareness is not merely a matter of knowing that the word patent exists and that there is a patent office. There has to be sufficient awareness of the system to be able to identify that IP is involved, that expert advice is needed and where that advice can be located, and in the meantime sufficient awareness of IP to avoid prejudicing the possibility of protecting any IP – for example by publication.

The earlier work on IP awareness, however, also made a distinction between value awareness and effective awareness (Pitkethly 2007a). The problem that some of the interviews seems to have confirmed is that getting SMEs to use the IP system may be at least as much about lack of value awareness as lack of effective awareness.

### 7.2 NETWORKING AND PROFESSIONAL REFERRALS HELP LINK SMES WITH IP EXPERTS

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SMEs' caution about costs can lead to a certain amount of suspicion of professional advice when it comes to seeking expert IP advice.

*Solicitors don't have anything to do with our IP. I wouldn't let them near it with a barge pole; I don't trust them. We have London barristers for the IP – we spend an awful lot of money on IP, the day-to-day running of the company is dealt with by solicitors, but the IP doesn't get touched by them. (SME2)*

*I certainly wouldn't listen to them [accountants]. (SME48)*

A key means of introduction to experts remains social and business contacts – networking of one sort or another is thus critical to the introduction of SMEs to IP experts, partly because of the trust issue and partly because of the greater willingness to accept advice or just to seek advice from someone who may not be selling something.

*I asked our firm of solicitors if they could recommend a firm of patent attorneys. Dealt with them since – [though] disputes over patents might involve both solicitors and patent attorneys. (SME13)*

As mentioned when discussing the interviews with patent attorneys (section 5.1), the prior experience of managers and the developmental background of the innovation concerned may also play a crucial role in introducing an SME to expert IP advice. In the case of a university spin-out, for example:

*the patents we have are University of [XXXXXX] patents, over which we have an exclusive licence...The firm had lawyers in [XXXXXX] advising on licences.... [One of the directors] had used them before in another spin-out so it was a previous personal contact.... We're also just filing some new patents at the moment...the university had its own patent attorneys which we are now using as well. (SME54)*

*We went to a solicitor in [XXXX] – somebody told us – one of us knew of him. (SME50)*

The involvement of a university TLO and possibly VCs as well should guarantee that the SME concerned takes adequate care of its IP but, for those SMEs not involved with TLOs and VCs, business and personal networks are nonetheless important sources of trusted IP advice.

### **7.3 RECOGNISING IP COSTS BUT NOT IP VALUE IS A CRITICAL HINDRANCE TO SME IP AWARENESS**

As mentioned above, a critical issue for many SMEs appears to be not just lack of 'effective IP awareness' but a lack of 'IP value awareness'. This was apparent from a number of interviews, combined with a general emphasis on the immediate costs but not on the longer-term benefits of IP.

*I would say I was surprised that small and medium enterprises don't actually value IP because it's [a] major asset for us.... I now get an awful lot of people coming to me either to solve problems or, with IP, they want us to go forward with or do something with it. Some of it is the same line of business but we seem to have made a name for ourselves. (SME2)*

*With SMEs there's never enough time or resources so anything's got to be low cost and low time. (SME6)*

*I think that probably unless people think they are on to a winning ticket [they] will ignore the problems. (SME50)*

Unless SMEs are convinced of the value of IP it will be very difficult to persuade them to invest their limited resources in it, even if the long-term returns from that investment are potentially substantial. It probably takes either the incentive of the need to meet VC expectations or the realisation that the firm has a potentially world-beating innovation that will be beaten by the world if it is not protected properly.

### **7.4 SOME SMES SIMPLY IGNORE IP ISSUES**

Just as some SMEs considered that the way to research and gain IP awareness was obvious, so some SMEs adopted the opposite approach of just deliberately ignoring IP.

*We just try to be quick into the market. Just keeping ahead by being faster. (SME6)*

*We've defended our name once or twice...[but]...it's a rarity to be involved with this. (SME6)*

*I'd give up straight away...[if seeking IP advice]. (SME41)*

Again, this relates to the SMEs' assumptions about the cost-benefit balance of gaining IP protection. Although there may be circumstances where ignoring IPRs may be appropriate, it is rarely sensible to do so without serious consideration.

### **7.5 WEB-BASED IP RESOURCES CAN PROVE A SIGNIFICANT HELP TO SMES**

A number of SMEs mentioned the great help that websites – especially the IPO and Espace websites – were in gaining knowledge about IP or where to find IP advice at minimum cost.

*The [IPO] website is a godsend because advice costs an arm and a leg [if you] use a patent agent, and you can learn a lot by looking at the website and what patents other people have got, and I'm not sure people are aware of that and how easy it is to use. (SME13)*

*Everything is done via the Internet. I would think everybody will do what I did, just put patent attorney [and the place name] in and that's it. (SME16)*

### **7.6 INDUSTRY ASSOCIATIONS AND ADVICE CENTRES ALSO HELP RAISE IP AWARENESS**

Finally, SMEs and many IP experts and intermediaries mentioned organisations such as chambers of commerce, Business Link, industry associations and the like, which had helped to varying degrees, by providing either direct information about IP or advice about where to seek information on it. In some cases this related more to general business advice than IP advice, although where SMEs arrived at the centre or association early enough in the IP process they could be of more help.

*Business Link did lending forecasts and things like that – a business model. Helped us in the early days but we'd already got the patent in place. (SME2)*

*Company name just registered as a company – used Giftware association and spoke to lawyer but they asked for £2,000. (SME41)*

*First through a colleague who used to use the patent attorneys before – personal introduction... Also, SEEDA hub introduction...would be next port of call. (SME42)*

One interviewee was quick to draw a distinction between quangos his company respected and trusted and those he had less time for. In particular, MAS (Manufacturing Advisory Service) was singled out as a very useful and respected source that would be listened to if they said something about IP:

*MAS have the potential with the good work that's been done already to become quite a useful friend of manufacturers, designers and developers...it's possible that they could have a link into IP – I mean I'd listen to what they said, in other words I'd trust what they say whereas with some other quango somewhere along the line telling me about IP – I'd just ignore it. (SME16)*

Finally, though it might seem off the beaten track of IP awareness, one interviewee mentioned the existence of NISP (the National Industrial Symbiosis Programme) as a potential model from which firms might usefully learn when trying to increase both IP awareness and the efficiency of use of the patent and IP system. Recycling might seem related to IP awareness only through the possibility of some new recycling-related invention. In fact, a key issue in IP awareness is the inability of SMEs to see how to make the most of their IP. 'Recycling' IP and ideas might lead to lower costs and increased IP awareness for SMEs if the right business model could be devised.

## 8. Conclusions

### 8.1 INTRODUCTION

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The nature of this research precludes anything more than tentative generic statements about SMEs, since it is based on qualitative studies of a limited number of firms and individuals. Its purpose is to reveal the many factors involved in the intermediation of IP awareness and, by highlighting such issues, first to illuminate an area of the recent IP awareness survey which the quantitative data did not explain so clearly, secondly to provide ideas for potential ways to improve SME IP awareness and access to expert IP advice, and finally to provide the groundwork for further hypothesis development concerning SMEs' use of IPRs.

### 8.2 MAIN FINDINGS

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#### 8.2.1 Direct connections

SMEs can and do make direct connections with sources of expert IP advice. For instance, the plethora of Web-based resources, in particular those of the IPO and EPO, should in theory make locating advice on IP easier than it has ever been for any reasonably diligent and even minimally IP-aware manager.

In addition to Web-based resources, there are a variety of organisations, such as Business Link and Chambers of Commerce, which provide either direct advice or networking opportunities that may lead to sources of expert IP advice.

Despite these facilities, SMEs may still continue to ignore IP issues until forced to consider them, either by the threat of infringement proceedings or by the threat of failing to raise finance from sources that pay close attention to the IP management of their investments (such as venture capitalists).

The reluctance of many SMEs to consider IP efficiently is in large part due not just to lack of effective IP awareness but also to lack of IP value awareness combined with the high up-front costs of some forms of IP protection.

#### 8.2.2 Indirect links

SMEs can and do access a variety of sources of IP advice by a range of indirect links. These may be based on the past experience of the management team and past contacts, and on current personal and business networks. Such networked links have the advantage of being trusted links compared with direct advertising, which is relatively rarely used save for directory listings. In addition to these informal indirect links there are a number of intermediaries who play significant roles in raising IP awareness.

Solicitors, whether IP experts or in general practice, and in whatever size of firm, have close links with accountants through involvement in company formation and associated work, and yet also have good links with patent attorneys, whose work they understand and largely complement rather than compete with (save for some areas of trade

mark work). Solicitors are thus able to link accountants and the accountants' clients, as well as their own direct clients, with IP experts. They may themselves be IP experts, that is, IP solicitors, or they may refer the accountants to other IP solicitors within the same firm or other firms, or to patent attorneys in private practice. Solicitors thus have a bridging role in the intermediation of IP awareness.

Accountants, in part owing to their involvement in company formation and taxation, have relatively close links to solicitors in general practice or to the general practitioners within larger firms, which might also include IP solicitors. They have very few direct links with patent attorneys. SME clients of accountants may therefore fail to be put in touch with expert IP advice in cases where the accountant constitutes a gap in the intermediation of IP awareness. This may be partly because of the low level of IP awareness and involvement with IP in most accounting practices. Since accountants are involved with most SMEs at some stage, and very often early in an SME's life, increasing IP awareness among accountants might help raise SME IP awareness in turn.

Venture capitalists, where involved with SMEs, may play a crucial role in enforcing higher standards of IP management as part of protecting their investment. Because VC funding does not arrive until an SME has been running for a while, early opportunities to protect and preserve IP are being missed. By comparison, such problems may not occur with very early involvement of business angel 'seed corn' funding or a university TLO which funds initial patent applications.

High costs due to the professional fees involved in obtaining IP protection and particularly patents are inevitably a discouragement to SMEs and, again, overcoming this barrier is a matter of not just reducing costs but also increasing (realistic) perceptions of value.

In the future the advent of more mixed professional partnerships may give rise to better referral of firms for IP advice in the same way that the presence of both solicitors in general practice and specialist IP solicitors in the same firm can give rise to very efficient internal referrals.

#### 8.2.3 The IP divide

It is apparent that most of the professional advisers to SMEs, and indeed the SMEs they advise, can be very roughly divided into high-IP-dependent and low- or perceived non-IP-dependent firms or individuals. The typical high-IP-dependent SME is likely to be in a high-tech-based industry with VC funding and advice from IP solicitors, patent attorneys and very probably even IP-aware accountants experienced in arranging later-stage financing for such ventures. In contrast, on the other side of the IP divide, the low-IP-dependent SME is likely to be in a mature industry which, even if technically based, involves standard manufacturing or service operations and minimal opportunity for patent protection, and with at best few, and probably no other, IPRs such as trade marks,

registered designs or the like, and professional advisers who are both IP unaware and uninterested in becoming IP aware. These descriptions may sound extreme but the SMEs interviewed included examples of both types, and several interviewees said that the division was a reasonable description, with one saying that the distinction might be there but more of a gradation than a sharp difference.

The implication of the IP divide is that the high-IP-dependent business needs little or no help regarding IP awareness and it is only with the low- or apparently non-IP-dependent firms that there is concern about IP awareness. As pointed out earlier, the key question is the extent to which a company's low IP dependence is due to IP unawareness rather than the nature of the business and industry in which it is involved and, if due to unawareness, the factors that may have led to that, which might be corrected. If low IP dependence is due to lack of IP awareness, the next question is whether this is more specifically a lack of IP value awareness or lack of effective IP awareness. The interviews suggest that it is quite likely that lack of IP value awareness may play as significant a role as lack of effective IP awareness.

#### **8.2.4 Barriers to IP awareness**

As mentioned above, the failure to be aware of IP value is one aspect of overall IP awareness. Costs are a critical issue for SMEs but one solution is the recognition of sufficient IP value, despite the propensity for SMEs to recognise costs but not value.

Other barriers to IP awareness potentially lie with individuals. Non-IP-specialist solicitors may fail to place sufficient emphasis on IP, and accountants who are also IP unaware, and who act as the main professional adviser to a company, may give inadequate consideration to IP issues. If the business and company operate in a non-IP-dependent manner this may in itself, through inertia, act as a barrier to consideration of IP issues and moves towards more IP-aware management.

The current abundance of work for patent attorneys may also form a barrier to the spread of IP awareness in that it reduces the incentive for patent attorneys to market services to local SMEs. As mentioned in 5.1.3, the recent downturn in business conditions since the interviews were conducted might reduce the abundance of work and make SME work more attractive, though it may also reduce the number of SMEs and amount of work available from them. Even if concerns about the long-term future of agency work from overseas may lead some medium-sized firms of patent attorneys to develop IP-practices focused on work from local IP-dependent SMEs, other SMEs with a low dependence on IP or which perceive themselves as non-IP-dependent could still be left isolated from sources of IP awareness.

Whether this is justified will depend on the circumstances but the assumption must be that no firm is completely IP independent and thus most firms should benefit from proper consideration of IP management.

#### **8.2.5 Potential solutions**

The aim of this research was not to provide solutions to all the problems it might identify. The interviews did, however, reveal a number of factors that any solutions devised will probably have to take into account.

The first is that in trying to encourage SMEs, intermediaries and IP experts to develop greater IP awareness among SMEs and to provide them with easier access to IP advice, the financial and other interests of SMEs, intermediaries and IP experts all need to be taken into consideration.

It is just as important to convince SMEs of IP's value as it is to reduce IP costs. Intermediaries need to have their IP awareness raised and to be convinced that this is in their clients' best interests and therefore theirs as well, while IP experts need persuading that paying attention to SMEs is in their own long-term interests as well as those of the SMEs. Conflicts of interest between professions, for example over trade mark work, need to be accepted as part of meeting client needs.

Careful consideration may need to be given to the number of qualified IP attorneys available to meet demand. This might be a controversial and rather more complex problem than it may appear at first. The numbers of qualified patent attorneys cannot be increased quickly and even if it were possible to do so, this might have unintended consequences. More efficient use of existing patent attorneys might be less controversial and more effective, but this area needs more study.

Increasing the IP awareness of accountants might be achieved by the addition of IP issues to checklists but, as mentioned in section 6.2.6, this would be unlikely to be really effective unless accompanied by related training leading to an understanding of what is being checked.

Ultimately the problems with IP awareness lie not with the IP-aware but with the IP-unaware and the unexploited IP resources they may have.

## 9. Next steps

The next step in the progress of the present research involves the dissemination of the results of the research. This will involve circulating copies of this report to participants who requested it but also disseminating the results more widely through the publication of this report by ACCA and the holding of events and seminars to publicise the results in conjunction with ACCA and other bodies, such as the UK Intellectual Property Office (UKIPO) and the Oxford Intellectual Property Research Centre (OIPRC).

## Appendix A: SMEs interviewed

	SIC (2003)	Employees
Safety equipment manufacture and installation	45	10–49
Recycling equipment manufacture and installation	1	50–249
Plastics mouldings	25	50–249
Injection mouldings	25	50–249
Drying equipment	31	10–49
Laboratory supplies	33	10–49
Furniture manufacture	36	(10–49)
Specialised engineering licensing	28	10–49
Specialist electronic components	33	10–49
Welding equipment	29	(10–49)
Greetings cards	21	0–9
Specialised coatings	31	(10–49)
Temperature control	31	(10–49)
Measuring services	33	0–9
Nanotechnology-based product manufacture	73	(10–49)

## Appendix B: Interview questionnaire outlines

### EXPERTS

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1. How common is it for SMEs to be referred to you by others for expert advice on IP?
2. Who or what are the main categories of referrers of business or sources of business from SMEs to your firm?
3. Who or what among these is *the* most common category of referrers of business or sources of business from SMEs to your firm?
4. Does your firm track sources of new business referrals?
5. Without mentioning names can you describe any typical case where you have had an SME directed to you as a source of expert IP advice?
6. Do you refer work to other IP professionals? If so what type of professional?
7. Do you have any general comments:
  - a. first, on raising SME's IP awareness whether via intermediaries or directly?
  - b. secondly, on the role of intermediaries in referring SMEs / work to you?

### INTERMEDIARIES

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1. If you encounter an SME client with an IP-related management issue:
  - a. would you deal with the issue in house? OR if not,
  - b. whom would you refer them to for expert advice?
2. How common is it for you to refer SMEs to others for expert advice on IP-related issues?
3. Who are the main sources of expert advice on IP to whom you refer SMEs?
4. How common is it for SMEs to be referred to you by others for expert advice on IP?
5. Who or what are the main categories of referrers of business or sources of business from SMEs to your firm?
6. Firms sometimes track incoming work: does your firm track outgoing referrals of business to other firms?
7. Without naming firms, can you describe any typical case where you have been able to direct an SME to a source of expert IP advice?

8. What activity would be most helpful in helping you raise SMEs' awareness of IP?
9. What activity would be most helpful in helping you enable SMEs to access expert advice on IP?
10. Do you have any general comments on raising SMEs' IP awareness whether via intermediaries or directly?

### SMES

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1. Has your company ever sought advice on IP? (No need to mention names).

**If YES GO TO => A. If NO GO TO => B**

#### A. If already sought advice on IPRs

1. Who or where did you first seek IP advice from?
2. From whom, or where, did you eventually obtain expert IP advice?
3. Did anyone or anything introduce you to or recommend this source of IP advice?
4. How common is it for you to seek expert IP advice?
5. What are the IP-related issues you have come across most often?
6. Without naming firms, can you describe any typical case where you have been directed to a source of expert IP advice by somebody?
7. With which source of professional business related advice are you most often in contact?

**NOW GO TO 'ALL'**

#### B. If NOT already sought advice on IPRs

1. With which source of professional or business advice are you most often in contact?
2. How would you be likely first to identify an IP-related issue?
3. Whom would you be most likely to contact for expert IP advice?
4. What would most help you locate expert IP advice?

**NOW GO TO 'ALL'**

### ALL

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1. Do you have any general comments on about raising SMEs' awareness of IP?

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