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## "Commercial" versus "Legal" Approaches: Alternative Strategies to Resolving Third-Party IPR Issues Confronting New Ventures

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**Abstract**. For many technology-based ventures, whether classic start-ups or corporate ventures, the viability of the business rests on intellectual property rights (IPR), and external investors will consider these as crucial factors in deciding whether or not to invest in such ventures. "Conventional" due diligence outcomes involving IPR can create a limited set of options leading to the abandonment of a promising opportunity, where IPR - in particular patents - owned by a third-party are seen as the major stumbling-block. In this paper the authors present alternative, "commercial" approaches to dealing with the issues of third-party IPR ownership, which can circumvent the original problem. Unfortunately such strategies are often not considered by advisers. The approaches examined are based on examples drawn from the automotive industry, but the authors argue that both principles and application have wider relevance across industry and in particular to resource-constrained start-up businesses. They offer the nascent entrepreneur the opportunity to strengthen their case for investment, and, if adopted, may increase the stock of investible ventures for professional investors.

Keywords: intellectual property, due diligence, early-stage ventures.

#### 1. Introduction

Of the many hurdles facing a nascent entrepreneur attempting to launch and fund a new venture, the commercial due diligence process can be among the most daunting. In one sense, of course, due diligence is something to be embraced by the entrepreneur. It signals that a potential investor is taking the proposition sufficiently seriously to spend time and money in further investigation. But the other side of the coin is that the entrepreneur now faces what is frequently an exhaustive process of examination in which, as Molian and Solt (2002) define it, "the parties to a commercial transaction identify, document and mitigate all aspects of legal and commercial risk prior to undertaking that transaction." Once that process is under way the entrepreneur can find herself fully occupied in answering a stream of questions and requests for further information. This *discovery phase*, as we might term it, may continue over an extended period, absorbing time that would otherwise be spent by the entrepreneur on developing the business, and is only a prelude to the *documentation and negotiation phase* which then follows if the discovery phase is successfully concluded.

In this process the entrepreneur is at an inherent disadvantage. Unless he or she is a serial venturer – which most are not – the entrepreneur is doing this for the first time, and learning as they go along. Professional investors do this as a matter of routine.<sup>1</sup> This asymmetry is compounded by the disparity in resources. The entrepreneur is constrained by budget and time. A seed capital firm or private equity house is both better funded and equipped to pursue this process, able to use in-house expertise or to call upon specialist external advice as required. In short, a professional investor will spend what is required to identify and document legal and commercial investment risk to its satisfaction and – if it so chooses – employ this information in subsequent negotiation of terms (Molian and Solt 2002). This luxury is seldom open to the person across the table.

The implication so far is that dealing with due diligence is a challenging experience for many entrepreneurs in search of funding. For science and technology-based entrepreneurs seeking investment, there is an additional twist. Much of the future expected value of the venture is likely to reside in the exploitation of intellectual property rights (IPR). A major part of the discovery phase in the due diligence process, therefore, will be concerned firstly with confirming the new venture's claim to good title of any IPR assets and, secondly, to assessing whether third-party IPR is likely to stand in the way of exploiting those assets. A description of the process typically involved is given in *Martinez de Andino* et al (2004).

One possible outcome of the discovery phase is that a potential obstacle exists in the form of third-party IPR, which blocks the commercial exploitation of the new venture's assets. This aspect of the discovery process is normally in the hands of an IPR specialist, either an employee of the investor or an agent engaged externally, who reports his or her conclusions. In cases of such a roadblock, conventional wisdom then concludes that this is indeed the end of the road and the investment cannot proceed, or that the possible options are constrained. In the words of solicitors Inglis and Molineaux (2000), '*The imposition of an injunction will prevent trading to recoup initial investment costs and so could destroy the business.*' Assuming that this advice is heeded, the attractiveness of the proposition is greatly diminished. If the funder withdraws, both the venture's promoter(s) and the investor are then left out of pocket and a promising potential venture either returns to the funding market or withers on the vine.

<sup>1.</sup> A study by Wright and Robbie (1996) offers evidence that VC houses' own due diligence is the most widely-used among various approaches for making investment decisions.

Much of the standard advice available to entrepreneurs presents the "legal perspective" as the sole and inevitable way of seeing the matter. Here is an extract from a well-regarded text:

an issue that should be analysed in financing a company in a technological industry is "Do the products and services of a corporation infringe on the patents of others?" Where a product or service is being provided, even when it is within the scope of the patents owned by the providing company, it may still infringe the patents of others. Patent infringement can result in an injunction to stop doing business, a judgement for damages and a tripling of damages.

Glazier (1995)

All of the above is, of course, true. However, the contention of this paper is that the ability of a third-party to block the commercialisation of a venture's IPR does not necessarily mean the end of the road. This way of seeing the issue is the result rather of the application of approaches to due diligence which place a greater value on legal opinion than on alternative strategies that reflect commercial realities in the market place. We argue that there is evidence that such strategies are deployed, and that they are delivering viable solutions for businesses which use them. Moreover, we contend that IPR-based ventures seeking funding should actively consider these strategies as a response to roadblocks unearthed during the due diligence process. Finally, we would seek to alert venture funders to such alternative strategies on the basis that these could increase the stock of ventures which merit investment support.

#### 2. Patents as Roadblocks

Before considering these "commercial" approaches, it is useful to review briefly the conventional "legal" approaches to dealing with third party patents. Possibly as a result of the term "intellectual *property*", patents are often compared to fences that surround and keep competitors off a patch of technological real estate (Knight, 1996). However, in many business situations – particularly outside of pharmaceutical and chemical technologies – it is more appropriate to visualize a patent as a roadblock, blocking the path of a third party to an invention with its associated market advantages. Such an approach is supported by Micklethwaite (1946) who describes the purpose of a patent claim as "mak[ing] it as difficult as possible for a potential infringer to get the advantages of the invention".

Using the roadblock metaphor, the conventional "legal" approaches to overcoming third party patents can be viewed as either destroying or bypassing the roadblock. "Destroying" involves submitting evidence to the patent authorities that the patent is invalid and should be revoked – once a patent has been invalidated, it can no longer be used to prevent others from practising the invention (for an overview of the grounds on which a patent can be invalidated

and data on the relative occurrence of the various grounds see Hartwell 2002). "Bypassing" involves finding an alternative way of achieving the market advantage of the invention. Both approaches can be costly and time-consuming, as illustrated by the examples of boxes 1 and 2.

Box 1 relates to a European patent belonging to Austrian automotive consulting company AVL List and presenting a roadblock to other companies wishing to use the particular procedure for analyzing the driving behaviour of vehicles specified in the patent. The box details the timing and estimated cost of legal steps taken by UK automotive consulting company Ricardo to invalidate the patent, i.e. 'destroy the roadblock". It will be seen that, in spite of eight years of effort and a (conservatively) estimated expenditure of over  $\in$ 50,000, Ricardo still have not obtained a definitive decision on the validity of the AVL List patent. Whilst such delay and expenditure is presumably acceptable to Ricardo, which is a large and long-established company, it is incompatible with the pressures on time and expenditure facing the typical entrepreneurial business.

945 (Procedure for analyzing the driving behaviour of vehicles) belonging to AVL List GmbH.		
Date	Legal Step	Estimated Cumulative Cost (Euro)
12/1996	AVL file priority patent application in Austria	
11/1997	AVL file corresponding patent application with European Patent Office	
01/2001	Ricardo submit evidence to the European Patent Office (EPO) as to why the patent application is invalid	2000
12/2001	Ricardo submit further evidence	4000
06/2002	European patent no. 0 846 945 granted to AVL	
03/2003	Ricardo file opposition to European patent	12000
02/2005	Ricardo submit further arguments and evidence	16000
03/2006	Ricardo submit further arguments and evidence	24000
04/2006	Ricardo and AVL attend hearing at EPO	29000
08/2006	EPO Opposition Division decides to revoke patent AVL file appeal	
	11	24000
03/2007	Ricardo file response to appeal	34000
09/2007	Ricardo and AVL attend hearing at EPO EPO Board of Appeal upholds appeal, sends patent for further opposition	39000
06/2008	Ricardo submit further arguments and evidence	44000
07/2008	Ricardo and AVL attend hearing at EPO EPO Opposition Division decides to maintain patent in amended form	49000
10/2008	AVL file appeal	
05/2009	Ricardo file response to appeal	54000

**Box 1** : Challenge by Ricardo Consulting Engineers Ltd to the validity of European patent no. 0 846 945 ("Procedure for analyzing the driving behaviour of vehicles") belonging to AVL List GmbH.

Box 2 relates to patents belonging to UK metrology company Renishaw (a spin-off from aero engine manufacturer Rolls-Royce) and which presented a

roadblock to US company GTE Valeron, preventing GTE from offering the market advantage of the particular touch trigger probes specified in the patents. The example highlights the time and expense incurred by GTE in trying (unsuccessfully) to bypass the Renishaw patents; time and expense that is not available to the typical entrepreneurial business.

**Box 2**: Attempt by GTE Valeron Inc. to bypass US patents nos. 4153998, 4078314 and 4185919 relating to touch-trigger measurement probes and belonging to Renishaw Ltd.

Attempts to bypass patents typically go unnoticed, particularly if they are successful. However, the success of UK company Renishaw in defending against bypass was reported in the Financial Times (1990). As subsequently explained in more detail by Renishaw (1998):

"GTE Valeron in the USA began to market its own touch-trigger probe. This had to be confronted because the competitor's strength could have made serious inroads into Renishaw's market worldwide. A law suit followed and resulted in a court trial in the USA. It cost about \$1 million before Renishaw and Rolls-Royce [the co-owner of Renishaw's patents] finally obtained an injunction forbidding the manufacture and sale of this probe, together with compensation of a substantial sum which the company agreed not to disclose"

The basis of this success is also explained by Renishaw, namely that:

"During David [McMurtry – the founder of Renishaw]'s employment at Rolls-Royce, he produced a number of different probe designs which were patented by Rolls-Royce themselves. Although not many of them were marketed by the new Renishaw company, the effect of these patents made it very difficult for competitors to find a design which could compete effectively without infringing one or more of the patents"

This was acknowledged in the decision of the US court (1986), which noted that GTE:

"did not intentionally copy the plaintiff's invention, but ... tried [unsuccessfully] to design around the patent claims"

As noted in the Financial Times:

"Renishaw not only emerged with its patent intact but with the opportunity to take over the customers that GTE was no longer able to service."

### 3. Source Data

Evidence for the "commercial" approaches detailed below is a by-product of a recent, wider survey into third party patent infringement clearance practices in UK and German companies, part-funded by the Research Fund of the European Patent Organisation. *Patent clearance* is the process carried out by companies in

the course of new product development to ensure that, when the new product reaches the market, it is not stopped by third party patent rights.

Carried out by the first author in accordance with the methodology set out in Hartwell (2008), the survey covered companies from the automotive sector with a view to investigating anecdotal reports of significant variation in practice in that sector. In addition to generating basic data in accordance with the aforementioned methodology, the survey interviews also revealed approaches to dealing with third-party patent rights that did not utilise the conventional legal mechanisms that the methodology had previously assumed. It is these insights which inform the present article.

The automotive sector was also chosen on the grounds that there are a significant number of in-house IP departments. Such departments are believed to give a better insight into actual "commercial" practice than do smaller companies advised by external lawyers. As noted by Molian and Solt (2002), a lawyer's basic duty of care is to protect the interests of his client which, in the absence of other instructions, are best protected by minimising the client's risk. This, it was suspected, would prompt external lawyers to state what *should* be done according to their understanding of the law rather than what is *actually* done in real companies subject to real budget and time constraints.<sup>2</sup> Also with a view to obtaining reliable information on what is *actually* done, a guarantee was given to participants that the survey would focus on process rather than sensitive legal issues, that participants' identities would not be published and with an offer to enter into a confidentiality agreement. This approach yielded interviews with the heads of ten in-house IP departments in the UK and Germany, representing a response rate of 45%.

There follow details of three manoeuvres, used by various of the companies surveyed, for overcoming third party patents. Whilst these approaches are not necessarily what one might anticipate or indeed recommend from a purely "legal" point of view, they do nevertheless reflect the "commercial" reality in the automotive industry. Moreover, it is the authors' belief that these manoeuvres have wider application and may be of particular help to entrepreneurial companies with their typical budgetary constraints.

# 4. Manoeuvre A: Get through While the Patent Roadblock Is under Construction

Under European patent law, a patentee can only prevent third parties from practising an invention (by means of a court injunction) once a patent application has been granted by a patent office – "once the patent roadblock is complete", to

<sup>2.</sup> The latter suspicion was borne out at an early stage when an approach to a small but heavily IP-dependent automotive company in the UK was rebuffed on the grounds that "this is a sensitive area and our (external) patent attorneys have advised us not to participate".

use the earlier metaphor. This in turn only takes place once the patent application has been examined to confirm that the invention meets the criteria for patentability (primarily that the invention is both new and non-obvious). This examination process typically takes several years, during which time the patent roadblock may be considered to be "under construction". Nevertheless, the patent statutes make clear that third parties can still be liable for infringement of a patent application while it is under examination and that a patentee can demand compensation ("damages") for such infringement once the patent application has been granted.

The survey has revealed that, in the automotive field, not all companies are put off by these legal penalties. Where – as is often the case with niche products – a production run is short and the third party patent application is still at an early stage in examination, it was found that a company sometimes proceeded with production on the basis that this would end before the third party patent application came to grant. *In terms of the metaphor, the company got through while the patent roadblock was still under construction.* 

This manoeuvre is facilitated by several factors, the first of which is an average time from initial (priority) filing to grant of 48 months for European patent applications in the field of automotive technology (the average time for all technologies is 55 months)<sup>3</sup>. A second factor is the limited production run, which allows a realistic financial provision to be made for the damages likely to be payable in the event that the patentee pursues a claim once the patent is granted. This of course assumes that the patentee discovers the infringement – comments from those surveyed suggest a wide variation in the extent to which companies actually police infringement of their intellectual property.

Unlike the second and third approaches discussed below, the "get through while the patent roadblock is under construction" manoeuvre does not *remove* risk. In particular, there remains the possibility of a determined patentee, having detected infringement, asking the European Patent Office to expedite examination with a view to completing the patent roadblock before production has finished. Nevertheless, the survey suggests that – in the automotive sector at least – this first approach can be commercially justified.

For entrepreneurial business ventures, this first approach represents an alternative "commercial" way of overcoming a third party patent to the conventional "legal" approaches of invalidation or bypass discussed above with regard to boxes 1 and 2. Although not without risk, this first approach avoids the diversion of resources and delay in getting a product to market that can equally well cause an entrepreneurial business to fail.

<sup>3.</sup> The European Patent Office (2009) states that, on average, a granted patent was published 43 months after the application was received, the figure varying from 36 months for Vehicles and General Technology to 60 months for Biotechnology. It is assumed that most applications are received at the end of the "priority year", 12 months after initial filing.

### 5. Manoeuvre B: Booby Trap the Patent Roadblock

The conventional "legal" approach of destroying a patent roadblock involves a company firstly assembling evidence and arguments against the validity of the patent and then submitting that material to the patent authorities in order that they might issue an official revocation of the patent.

The survey has revealed an alternative approach in which the patent roadblock, rather than being destroyed, is merely booby-trapped: evidence and arguments against the validity of the patent are assembled by the company as before; however, rather than being sent to the patent authorities, this material is sent to the patentee together with an invitation to grant the company passage through the patent roadblock (typically implemented by means of a free of charge licence). Should the patentee refuse this invitation, the booby trap is sprung, the evidence and arguments being sent to the patent authorities in order that they might consider revocation of the patent.

Assuming the patentee chooses to grant a licence, such an approach has obvious cost advantages for the company - an idea of the potential costs associated with a conventional challenge to a third-party patent can be gained from the case study in box 1. The patentee also saves the costs of defending a conventional challenge.

There is, however, a further advantage for the company in that the patent roadblock remains in place to deter other companies from following the same route: had the roadblock been destroyed by a conventional legal challenge then everybody – not just the company filing the revocation request but also that company's competitors – would know that the invention of the patent was free for use.

Both the above advantages would seem to be compelling for the entrepreneurial business: not only are precious resources saved, the business also gains an advantage over other competitors. However, by its very nature, it is not possible to tell the extent to which it is currently used outside of the companies questioned as part of the survey.

The "booby trap" manoeuvre does not find favour with everybody. The patent authorities would prefer to see invalid patents publicly revoked, with a view to ensuring that patents are granted "only for innovations having sufficient inventive merit and meeting the needs of society" (European Patent Office, 2009). The "booby trap" approach also requires a company to bring itself to the attention of a patentee and for this reason was not favoured by all companies surveyed, some preferring to reserve their evidence and arguments until such time as the patentee accused them of infringement (which often did not occur, not least because the patentee did not police for infringement). However, from a risk management point of view, this latter approach is less satisfactory as it does not *remove* risk, unlike the licence that may be obtained using the booby trap manoeuvre.

# 6. Manoeuvre C. Get a Big Brother to Let You through the Patent Roadblock

The last manoeuvre identified by the survey is truly "commercial" in that it takes no account of the validity or examination status of the patent in question. Instead, a company uses the commercial strength of a partner (a "big brother") to persuade the patentee to grant the company passage through the patent roadblock.

Companies using this approach in the survey were typically automotive component suppliers, their partner usually being a large automotive OEM.<sup>4</sup> When faced with a third-party patent roadblock preventing the company from supplying a certain product to the OEM, the company would ask the OEM to ask the third party to grant the company a licence.

The success of this approach depends heavily on the commercial relationships between the parties. In the absence of any existing relationship between the OEM and the third party, and assuming that the third party is itself in a position to supply the OEM, there is little incentive for the third party to grant the requested licence. If, however, the third party is already a supplier to the OEM, then the threat of sanctions, for example the loss of future business, may persuade the third party otherwise. Similarly, the OEM is only likely to make representations on the part of the company if it has a common interest with that company, typically the need for a second source of components to ensure security of supply.

Entrepreneurial start-up business are unlikely to be sufficiently developed to be able to provide a second source of components in the kind of quantities typically required by automotive factories. Accordingly, this third approach would appear to be the least useful to the entrepreneur. Certainly, the authors are not aware of any instances of it having been used by entrepreneurial businesses in the automotive sector.

Nevertheless, the third approach serves as a useful reminder that patents are *commercial* tools amenable to being dealt with in a *commercial* rather than a purely legal fashion. Indeed, the authors believe that this is the key "take away" from the survey: a willingness to investigate approaches to resolving third-party patent issues that do not involve simply destroying or bypassing a patent may save time and money that can be employed more usefully elsewhere in the business.

As mentioned, the "big brother" manoeuvre does not affect the validity of the patent, so that there is no incentive for the patentee to grant the company a free licence, as might be the case with the "Booby Trap" manoeuvre. Nevertheless, even a licence for which the company has to pay will still remove a risk to the company's business and may still be cheaper than conventional "legal" approaches.

<sup>169</sup> 

<sup>4.</sup> Original equipment manufacturer.

## 7. Discussion

It is hard to envisage anything more discouraging for a technology-based earlystage entrepreneur than to be told that commercial exploitation of her invention cannot proceed because of third-party IPR. Under English and other jurisdictions, ignorance of such an obstacle is no defence should proceedings be brought for infringement by an aggrieved third-party (Inglis and Molineaux 2000). In any case, whereas a resource-constrained entrepreneur might fail to discover the problem in advance of commercialization, the due diligence process instigated by a professional investor will almost certainly identify such obstacles.

The issue is not, however, whether such obstacles can be circumvented by uncertain and expensive litigation – which professional investors will undoubtedly baulk at. It is whether there are commercial alternatives that the entrepreneur can cite as avenues to explore before time is called by the potential investor.

The three approaches that we present are grounded in an assessment of the commercial realities of a business situation. Who are the relevant parties? What are the existing commercial relationships, and wherein does the balance of power lie? The effectiveness of manoeuvre A – getting through while the roadblock is under construction – is based on trading off the potential value of rapid market entry and early sales against provisions for subsequent infringement claims. If the market is sufficiently attractive, and the chances of the manoeuvre passing below the radar are good, then there is a case for a calculated gamble – especially if market entry of itself creates additional opportunities further down the line.

Examples of this first approach in an entrepreneurial setting are beyond the scope of this paper. Even in the field of large automotive companies, such "commercial" approaches are not well documented and have only been revealed through application of the survey methodology outlined above. That such an approach is known to exist, however, and that entrepreneurs should be aware of this, is important in allowing them to argue the commercial case to investors for their proposition.

Manoeuvre B is the booby trap approach of presenting to a third-party a case that would invalidate a patent, in the expectation of being granted a licence free of charge. In the opinion of the authors, this manoeuvre offers the nascent entrepreneur a more effective weapon in her armoury than the previous approach. First, it removes the risk inherent in the calculated gamble of manoeuvre A, and is thus more likely to appeal to a financial investor. Second, the granting of free or peppercorn licences is established practice in many sectors, such as software and consumer electronics, where complementary goods or services are essential to a third-party's commercial success. Mobile phones and personal organizers require applications to be able to compete in the market. Aspiring musicians need air time or internet accessibility to establish a following. Thus there are precedents to look to, which again is encouraging for the professional investor. Third, the application for a licence to a third-party creates a dialogue which may of itself unlock opportunity for the new venture: an unexplored market entreé, for example, or a consulting assignment based on the particular competence of the entrepreneur.

Manoeuvre C relies on pressure being brought to bear from a large market player with a strong vested interest in the proposed commercialization, and who can bring pressure to bear on the owner of the potential road block. The applicability of this stratagem is wholly dependant on the particular circumstances prevailing in the individual case. Accordingly, we think this scenario is likely to be the rarest of the three. However, that does not mean it should be discounted up front, in particular if the new venture is seeking funding from a large and well-connected professional investor. Such investors, particularly in technology sectors, typically have deep market knowledge and understanding of commercial structures and relationships. Thus they may be placed to identify opportunities to create a persuasive case to put to a large market player which are in that player's interest.

### 8. Conclusion

Concerns over the effectiveness of conventional commercial diligence approaches are nothing new. Sengupta (2003) reports questions within the private equity industry itself about the increasingly high costs of due diligence investigations, with the concomitant charge that much of this has marginal relevance to the commercial investment agenda. Molian and Solt (2004) contrast the "large-scale" due diligence approaches typical of corporate merger and acquisition activity with "small-scale" due diligence which, they contend, is appropriate to new venture funding deals. Small-scale due diligence is concerned with striking a deal which accurately documents commercial intent and seeks to minimize risk where possible, without hobbling the ability of the entrepreneur and his or her team to execute. These authors argue that the large-scale model is too often imported unthinkingly into the new venture arena. This model is designed primarily to uncover historical risks and liabilities, actual or contingent, which may impact on the parties to a transaction. These risks and liabilities are addressed through exhaustive checklists implemented by lawyers, intellectual property attorneys, accountants and other specialists. For a typical new venture, historic risks and liabilities are a less significant issue for a prospective investor than the ability to execute future business strategy. An excessive focus on the venture's historic "baggage" will produce unnecessarily high legal costs, distract the entrepreneur's attention from key business issues and create avoidable delays in getting the venture to market. Ultimately the costs involved have to be recouped, and will be reflected in the hurdle rates of return required by professional investors.

#### 172 "Commercial" versus "Legal" Approaches: Alternative Strategies to Resolving Third-Party IPR Issues Confronting New Ventures

The thrust of such critiques is that there is an important distinction to be drawn between what we characterize as "legal" and "commercial" approaches to early-stage investment decisions. In this paper we have presented one dimension of this polarization, the case of third-party roadblocks that potentially prevent the exploitation of a venture's IPR. If professional investors confine themselves to a purely "legal" framework in which to view these issues, they will diminish the stock of investable ventures. For entrepreneurs, we have identified three manoeuvres or stratagems that may strengthen their position in arguing their case to professional investors. For both parties, the ability to deal with an infringement risk in a cost-effective manner may make the difference between a successful investment or a promising venture withering on the vine. From a broader social and economic perspective, we offer this as a contribution to the agenda of encouraging innovative ventures in challenging times.

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