

## Germany latches onto its IP potential

*Organisations in Germany are beginning to recognise the value of their dormant intellectual property and put it to use. This represents an enormous opportunity for experienced venture capital firms. By **Rolf Dienst** and **Miro Morczinek***

Outstanding market opportunities, minimum realisation opportunities: in 2001, switches that obtain the energy required for transmitting a pulse from the switch itself no longer numbered among the core activities at Siemens. Yet construction contractors, as well as shipbuilders and carmakers, were still interested in this technology. Within seven months, a Siemens team had formed an independent operating unit on the basis of around a dozen existing patents, some using this technology. With capital from Wellington Partners and others, team members formed a company called EnOcean and embarked on a journey to seek their fortunes as entrepreneurs. One year later, this start-up's products can be found on the shelves of major electronics chains, and sales are rising significantly.

EnOcean's approach impressively documents the swiftly changing scene in Germany's research laboratories. Still carefully shielded off from the outside world in the 1990s, the development departments at large technology corporates, the numerous government-funded institutes at universities and major research associations, like the Max Planck Institute, are today opening themselves to the outside world. Experts are systematically scrutinising patent libraries and other intellectual property outside the mainstream of their greatly narrowed core competencies for exploitation by third parties. At the same time, research managers are actively seeking contact with interesting start-ups that meaningfully complement their own core competencies. Spin-in and spin-out are the watchwords today in German industry, which is thus following the Anglo-Saxon lead.

### **The question of how to value IP**

With a tradition that now dates back 20 years, the German venture capital industry is a natural partner to technology vendors in this area. With their capital and their know-how, venture capital firms are accompanying these spin-offs and supporting these now independent units in building enterprises that operate internationally. However, there is one question that has to be answered before they invest: how do you value intellectual property? The key parameters, whether patents, technology innovations, management experience or customer relationships, for valuing young technology providers cannot be measured, weighed or counted – they are intangible assets.

At this point, literature in the field recommends that one of three valuation methods be employed, based on either cost, income or market approach. The first approach strongly emphasises the costs of creating the intellectual property, the second focuses on the potential income that can be generated, while the third alternative endeavours to put a fair market value on intangible assets. For all of these methods, certified public accountants typically recommend that the data of related products and processes be analysed – a costly and time-consuming process.

In all honesty, these kinds of valuation methods, which can be very well substantiated on a theoretical level, play only a secondary role in the real world. From the standpoint of a financial investor, patents primarily serve the following three functions:

- they create a barrier to the entry of new competitors;
- provide a freedom-to-operate environment

without the fear of constant infringement lawsuits; and

- establish a good negotiating position in connection with reciprocal patent utilisation rights.

IP assets do not serve as a yardstick for valuing the company, but rather as a basic prerequisite for calculating its long-term business potential.

There are only a very few examples of successful pure IP developers and exploiters. US-based Rambus is one. In Rambus's case, its corporate capitalisation was subject to considerable fluctuations as a result of the insecurity associated with its intellectual property valuation.

Normally, the estimated benefit of a patent as a barrier to competition and, therefore, as a yardstick for valuing is considerably lower than the actual benefit. In the case of information and communication technology, research expenditures are typically quite low.

The situation is different in the biotechnology industry, where patents, and patent terms in particular, are the crucial factor in a company's positioning, competitive edge and market rankings. Nevertheless, pending patent litigation can have a negative impact on the business development of a start-up, whose customers react very sensitively to these kinds of issues, or could even serve as a reason for rejection by a financial investor.

There is a second reason for rejection by financial investors: intellectual property assets should be fully and unambiguously owned by the start-up, as exclusive in-licensing can lead to problems in connection with an exit or limit the number of exit targets in the case of partial rights to intellectual property. Here, there has sometimes been less willingness in the case of corporate spin-offs to fully transfer existing intellectual property to the start-up. The interest of the parent corporation in this case is more likely to focus on the possibility of minimising risk in the event of the start-up's insolvency and on creating a back-up option for joint intellectual property. These issues have usually been resolvable by means of jointly agreed goodwill valuations and appropriate distribution of the holdings. What has proved to be problematic, however, is how to treat existing patent-sharing agreements – reciprocal utilisation rights between blue chip companies, which also influence the start-up's ability to utilise the intellectual property. Aside from this, a venture capitalist focuses on two issues in making a valuation: sales and people.

## VCs value sales and people

In the process of selecting new portfolio companies, everything initially revolves around one question: where is the business case? During the next step, investment managers then chiefly consider three issues:

- How large and profitable is the market for this business case?
- How unique is this business case?
- Can the team implement this business case?

Established VC wisdom says that while a first-class management team can help turn a mediocre business idea into a success, a mediocre management team dooms every first-class business idea to failure. In other words: it's all about the people. During intensive meetings, VCs endeavour to get a good picture of the people at the head of the company, their strengths and weaknesses, as well as the way they work together in a team. Early on, they explore whether and where additional managers can be recruited. A company's intellectual property naturally also includes its human resources; but putting an actual value on them is based less upon theoretical methods than upon years of practical experience in dealing with top managers and management talent.

EnOcean is a good example of this: the management team consisted of an organisational professional with outstanding training within the Siemens organisation, a sales professional with years of direct contact to key accounts, as well as an engineer with a great sense of reality who never loses sight of the market opportunities for his idea. The interplay between these managers has ensured that EnOcean has thus far been able to satisfy all of its milestones to the month and so advance to become a major international player within a matter of one and a half years.

And the company also has a second, invaluable advantage: it addresses multiple billion-dollar markets that are still open to innovative newcomers. This means that it satisfies a venture capitalist's key prerequisites – the market a company goes into has to offer a certain minimum volume and enable double-digit growth rates. In valuing market and sales potential, venture capital firms draw upon both external studies as well as extensive talks with relevant customers, suppliers and potential competitors.

At this point, VCs are forced to put a value on what lies at the heart of every technology vendor: its patents and innovations. In the technical due diligence phase, both a patent check, as well as an analysis of the

competitive environment and potential substitute technologies are on the agenda. Both are tools of the trade for a venture capital firm, but not the basis for valuing the business case. This valuation is additionally based upon an assessment of the company's growth potential and the ability of its management team to actually achieve this growth.

### **Entrepreneurial spirit**

In the education, commitment and ability of management teams to fulfill their business plans a great deal has changed in Germany in recent years. Talented managers today view entrepreneurship as a desirable alternative to working in the second or third tier of a corporate organisation. In addition to the difficulties involved in reaching adequate leadership positions, given the way corporates are rapidly developing their structures, this change in mindset has also been triggered by the new economy boom with its enthusiasm for start-ups and entrepreneurship.

Managers today are very serious about pursuing the spin-off issue in their companies, and in doing so they are being welcomed with open arms by their supervisors. Corporate groups like Siemens or Bayer, as well as universities or research institutes, are pushing spin-offs of independent technology start-ups, because they view them as an opportunity to meaningfully exploit dormant intellectual property. They often contribute IP in the form of patents or licences in connection with the spin-off, in return receiving equity holdings in the new, independent unit.

At first glance, corporates' valuations often tend to be based upon the models outlined at the outset. The question of how much income

the corporate could have achieved through pure out-licensing, in particular, is the subject of valuation reports. Ultimately, though, the patent holder usually increasingly closes in on the latter valuation methodology: the crucial factor is with which competitive edge the new company will address which markets with which growth rates.

In the case of EnOcean, enormous potential can be seen at year-end 2003. After the company had initially concentrated on the development of wireless lighting switches for use in building large office and residential complexes, small teams are today working on wireless switch solutions for monitoring car tyre pressure or for wiring the lower decks of cruise ships. This market potential forms the basis for any valuation of EnOcean, while the underlying patents serve only as a tool for providing a certain degree of protection against imitators. ■

***Rolf Dienst** formed Wellington Partners in 1991, after having already built TVM in the 1980s. With a fund volume of EUR 265 million, this Munich-based firm numbers among Germany's major early-stage financiers. Serving as the lead or co-investor, the firm has already accompanied such successful technology vendors as Chipbroker ACG or biotech player Actelion in going public, and has sold WLAN AG to Swisscom, for example, as well as German auction house Alando to eBay.*

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