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Patent funds: Investing in Asia's innovators

Asia is now responsible for just over a third of all patent filings worldwide. Will independent patent funds, which have already won a niche following in the US, catch on over here?

SMART PHONES – OR, TO BE MORE precise, the commercial value they generate – couldn't exist without patents covering the underlying intellectual property (IP). The iPhone, for example, includes 250,000 patented elements, ranging from circuit boards to the look and feel of the device.

A patent may be seen to award its owner a monopoly on an idea but in reality one license alone is never enough for any invention to be commercially exploited. No company can produce a television, camera or smart phone purely with patents to which it has exclusive rights. And collecting the requisite patents can be nigh on impossible: transactions are complex, expensive and, even when a patent is obtained, there is no guarantee of validity.

To overcome these hurdles and meet the demands of open innovation, a vast IP trading rights industry has emerged. Having barely existed a decade ago, it is now worth around $200 billion and growing at annual clip of 25%. Latterly Asia has become a key player, now accounting for just over a third of all patent filings globally.

But it is not just the manufacturers looking to trade patents. So-called non-practicing entities (NPEs) – sometimes accused of being "patent trolls" – have long been using patents as a way to generate returns either through subscription-based licensing, retail licensing or litigation.

NPEs are increasingly acquiring patent portfolios through fund structures that generate returns for third-party investors. Patents are therefore an alternative asset class in their own right, but one with strong ties to venture capital because many of the IP rights being monetized have links to VC and PE. Knowledge of an idea's origins has intrinsic value in this business.

Gustav Aray was an investment manager with Intel Capital for 12 years prior setting up Rui Zhi Ventures, a Shanghai-based IP brokerage and advisory firm. "Back in the early 2000s Intel had made a series of investments and like everyone else some of them did not turn out as well as we hoped, but there was IP in these companies that could be used by competitors," he explains.

Aray had helped Intel Capital establish its own patent purchase organization, used to collect IP that could augment in its own portfolio. Today, many of Aray's clients include VC-backed companies, inventors or corporations holding patents that have either been superseded by other solutions and become redundant or are no longer part of their core business.

Intellectual approach

Among those eager to acquire these assets are NPEs like Intellectual Ventures, which was among the first firms to establish patent vehicles. It was founded in 2000 by former Microsoft CTO Nathan Myhrvold and Edward Jung, previously a software architect at Microsoft, who had originally set out to start a venture fund but decided against it.

"It wasn't just that they didn't want to be the 3000th venture fund out there, but in terms of gaining exposure to technology, the VC model is pretty risky – you are not only betting on the idea and the market timing, but also on the execution teams," says Eric Nagel, vice president of investor relations with Intellectual Ventures in Singapore. "Patents, however, are essentially a call option on technology. What our founders did was create an invention capital market."

Intellectual Ventures currently manages five global funds with around $6 billion of capital under management and owns around 40,000 active patent assets. The company claims this amounts to the world's largest patent portfolio held by a NPE.

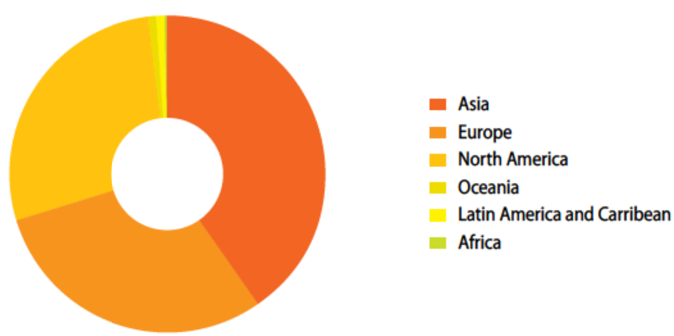
Patent funds differ from their PE and VC counterparts in two key respects. Firstly, the lifespan is around 20 years, matching up with the typical term of a patent. Secondly, the way in which patent funds operate can vary markedly depending on how the patents are procured.

Intellectual Ventures identifies three main approaches. The firm executes its main buying strategy through its flagship Invention Investment fund platform. The first vehicle was formed in 2003 with a corpus of $2.2 billion dollars; the second reached $2.8 billion; and a third is currently being raised, with a reported target of $3 billion. Fundamentally, this strategy bears the greater similarity to PE – Intellectual Ventures takes a controlling interest in the patent or portfolio of patents with the intention of maximizing its value.

"The big difference is that we do an awful lot of investments, each of our funds had done over 1,000 deals," says Nagel. "In 2012 alone we completed around 214 investments."

The majority of deals – around 60% – are below $1 million and most of the rest fall into the $1-5 million bracket. However, the firm does execute a handful of large cap investments

Patent applications by regional share, 2012 estimate



Source: World Intellectual Property Organisation in patent portfolios. One recent deal saw Intellectual Ventures lead a consortium of 12 companies, including Asian tech giants Huawei, HTC, Samsung and FujiFilm, to acquire the Kodak digital imaging patent portfolio for $525 million.

The firm's two other strategies involve the Invention Science Fund (ISF), which launched in 2010 with a corpus of $150 million, and the $650 million Invention Development Fund (IDF). ISF has much in common with a seed round investor, inviting scientists and inventors to develop inventions from scratch at the firm's Washington laboratories for use in industries such as bio-tech, geo-engineering, and agriculture.

IDF, meanwhile, partners with around 400 universities and research institutions to work on inventions. With more than 10,000 invention disclosures since inception, the has seen around 450 patents granted to date.

Asian ideas

While Intellectual Ventures predominantly focuses on the US – where patents comprise 60% of its portfolio – Asia is gaining prominence. The region accounts for 20% of the firm's portfolio and the firm maintains a presence in Tokyo, Beijing, Seoul, Singapore and Bangalore.

Despite the size of the opportunity, there a few in any Asian firms operating a patent fund model of similar scale to Intellectual Ventures. However, it is not the only NPE in the market. Guy Proulx set up Transpacific IP in Singapore in 2004 after spending a number of years advising start-ups on IP issues as well as working with private equity investors and acquisition groups on technology and due diligence reviews.

"I think Asia is the right place to be with regards to IP," says Proulx, "Back when I started and I was buying Chinese patents a lot of people scoffed at what I was doing, but now they are out here trying to do it with me."

Transpacific began by using its own funds to build a portfolio of patents, selling them three years down the line. The company continues to acquire patents but has also expanded in to other areas such as patent portfolio management, transaction services and strategy consulting.

Patent acquisitions tend to be opportunistic and where large and valuable portfolios have been available Transpacific has brought in co-investors. In November last year it formed a consortium of high-tech Asian companies to buy the patent portfolio of Silicon Valley-based Phoenix Technologies – a portfolio company of LA-based private equity firm Marlin Equity Partners. The value of the deal was not disclosed but industry estimates put it at $10-20 million.

Transpacific has yet to raise an IP fund but it remains a possibility. The issue is whether a patent fund can provide the kinds of returns that would attract traditional LPs. Intelligent Ventures' backers primarily comprise those who have invested as part of a licensing agreement – usually leading technology companies like Apple, Microsoft and Google – as well as a number of US universities and a handful of venture capital firms.

Could the same be achieved with a dedicated Asia fund? Proulx admits that he has been considering such a move for some time but many Asian investors struggle to understand the asset class fully. He believes returns could be compelling with a decent fund realistically aiming for an IRR of 10-15%, although it would be structured in a very different way to a normal PE fund.

"The challenge from the investment side is that intellectual property is a long-life asset," says Proulx. "The type of patent funds I have seen so far are not a good sale. I think the solution will be a hybrid or something like an evergreen fund where you can move investors in and out."

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Beware the trolls

Most patent funds in Asia exist in the form of government-backed entities in places like Taiwan, South Korea and Japan. The Innovation Network Corporation of Japan (INCJ), a partnership between the Japanese government and 19 major corporations, only recently set up its IP Bridge patent fund. It put in an initial JPY2.75 billion ($27.8 million) but the corpus is expected to reach as much as JPY30 billion over time. Investors include Panasonic Corp. and Mitsui & Co.

The IP Bridge fund will purchase unused patents sitting in large technology companies with a view to licensing them to domestic start-ups. It is focusing on the consumer electronics space to begin with, and hopes to acquire 5,000 patents. Around half of the 1.35 million patents registered to Japanese businesses and individuals currently produce no revenue.

Like many of its Asian counterparts, IP Bridge is not just about generating returns. Essentially its aim is to protect Japanese companies from foreign NPE or patent trolls looking to exploit their unused patents.

"The government is concerned about the transfer of Japanese patents overseas," Shigeharu Yoshii, the former Sanyo IP manager who now heads IP Bridge, tells *AVCJ*. "Many Japanese electronics companies are facing financial problems and some companies are shedding parts of their business – these include unused patents which could be acquired by overseas patent trolls."

The fear is not just the loss of IP but the fear that the patents can be bought cheap from distressed companies and then later used against Japanese companies in litigation.

Yoshii explains that historically, Japanese companies have only ever used patents to protect their own products. This runs in contrast to large US tech firms, which have long since been leveraged unutilized patents to make money – and thereby creating a far more developed US IP market populated by NPEs with resources to aggressively acquire patents assets in Asia and se them.

These concerns fears have led to similar vehicles being established elsewhere. In 2010, IP Cube Partners and Intellectual Discovery were set up by Korea's Intellectual Property Office and Ministry of Economics, respectively. Intellectual Discovery, the larger of the two, originally planned to raise $500 million – $200 million from the state and the rest from the private sector. However, this was subsequently scaled back to $100 million after private investors failed to bite.

Efforts in Taiwan have also generated poor results. In 2011, the government created the Taiwan Medtech Fund (TMF). The fund was charged with raising 75% of its NT$5 billion ($167 million) target via the private sector, but plans were abandoned.

This raises the question of whether public-backed vehicles will really have a major role to play in the development of Asia's IP industry. The possibility still remains that the private sector will move into the patent fund space if more investors are won over by the idea and its promised returns.

"Over the last couple of years things has changed – real estate and private equity have not produced as strong returns as in the past, so there is an opportunity," says Transpacific's Proulx, "It really comes down to finding a way to do it that is compelling enough to the Asian investor. Once we do that we will see real movement."