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Investor Eye: A Licensing-Based Approach May Be Best For Revolutionary IP

by Barnaby Pickering

Keeping a firm grip on one's IP is a cornerstone of most innovative businesses. However, Robert Cote, CEO of Cote Capital, believes that if the idea is good enough to keep close, it's good enough to license out.

Cote Capital is a New York-based investment firm specializing in identifying businesses where the underlying idea could be effectively licensed out to third parties.

This makes it markedly different from more "traditional" venture finance, which involves series of financing rounds that are staged to sit alongside clinical and or commercial milestones prior to making an exit. Instead of depending on the timing of an exit and receiving a one-off final payment after a buyout or public offering, investors instead receive royalties until the idea or invention becomes redundant.

"If you are building a business through sharing, you will grow faster, make a lot more money, and you are going to be able to withstand greater challenges no longer dependent on a single team for success," CEO of Cote Capital, Robert Cote, told *Medtech Insight* earlier this year.

One major focus of Cote's work is ensuring that any company it invests in is taking the appropriate measures to protect its intellectual property (IP), an art more than a science, with what is "appropriate" varying wildly, technology

Key Takeaways

- If an idea is truly revolutionary, it will be copied.
- Licensing is the best way to stay ahead of any mimics
- Investing in the intellectual property offers a much more "fluid" form of

by technology, application by application. (Also see "*Investing In The Engine: Why IP Licensing May Be Best Approach For Start-Ups*" - Medtech Insight, 7 Mar, 2023.)

investment, with exits easier to project

Cote said this marks the origin of what he calls a “paradox” in IP investments. One would assume that by widely licensing out an idea, copies could quickly arise. After all, the more hands that end up on a technology, the higher the chance that some of them try to reverse engineer it and/or become aware of how it works in "less than honorable" ways.

However, Cote explained that in the case of truly revolutionary technologies, the reverse can happen.

Delving into the detail during a more recent discussion, Cote looked back at his time spent advising Perkin Elmer, where he was involved in its licensing of the polymerase chain reaction (PCR) process, following its joint venture with Cetus in 1985, the original developer of PCR.

PCR was recently thrust into the public limelight due to the COVID-19 pandemic where it was used billions of times worldwide to provide rapid, accurate results. And although its patents are now long-expired, rights holders raked in more $2bn in royalty payments during the period they persisted for.

Where and who did PCR technology come from?

Polymerase chain reaction was invented by Kary Mullis in 1983, while he was working at Cetus Corporation.

He won a Nobel prize for the discovery in 1993, alongside Michael Smith, a fellow chemist that had developed other methods for manipulating DNA. The PCR process uses a thermocycler to heat and then cool a DNA sample.

This process denatures DNA into single

Cote noted that out of all the technologies he's been involved in licensing – Wi-Fi being amongst them – PCR was one where everyone involved knew that, unless licensed and distributed effectively, copies could appear.

"Technological, physical and legal ways of protecting IP will only last so long," he said. "If an invention truly has value, people will work to develop something that might even surpass it."

"They had to come up with a licensing strategy that would protect them in the markets that mattered while allowing teams around the world to build PCR businesses too," Cote explained.

"People think that if they have something valuable – a diamond in their pocket, they should keep it there," Cote said.

But doing this, he pointed out, will only limit the potential of the idea – impact through broad adoption of an idea is where the real money can be made. "Even with all the precautions in the world, a robber will eventually rob a bank – it's just market demand," he said.

strands, which are then used as templates by enzymes like taq polymerase to form new copies, automating a process that previously took hundreds of man-hours.

The original prototype thermocycler, which was given the name 'Mr. Cycler' by the team that designed and built it at Cetus Corporation, used to be on-display at the Smithsonian Museum.

During his time working on licensing PCR technology, Cote had the opportunity to meet and spend time with Kary.

"He was a man that believed in serendipity. He always said that if you were destined to meet him, you would," Cote said. "The legend is that he was married four times – and that his first three wives went to his wedding with the fourth. He was a real rebel."

Cetus knew this – as did Perkin Elmer, spurring it to enter into a 51-49 in-its-favor-split joint venture in 1985 to commercialize the use of PCR directly and through licensing many others.

According to Cote, Cetus broke PCR technology into two main physical components – the thermocycler and the taq polymerase – and Perkin Elmer added a conceptual third, the "label license," so that anyone could perform "PCR" to enable its widespread adoption.

IP associated with the cycler and the enzymes was protected through a combination of physical means, patents, and trade secrets – cyclers at the time were cutting-edge and taq enzyme was difficult to produce in bulk.

Permissions to manufacture both were granted to a variety of companies with hefty royalties attached. These royalties in effect shared in profits, allowing many others to build a good

business in PCR, but not so good that they could undercut Perkin Elmer in markets that mattered, according to Cote.

The PCR process itself was cleverly protected through patents. For any user of PCR to call it "PCR" they had to use a label licensed cycler with a label licensed enzyme fluid.

> *"Nobody wants to be in a world made of old oaks. They simply shade everything." – Robert Cote*

"It's a bit like a printer – Perkin Elmer didn't want people producing knockoff ink cartridges, so you needed that label license on both components" Cote explained.

There were some violations. In academia, there was some rule breaking – on occasion researchers would not want to pay the premium for licensed taq enzyme as they did not need to rely on the "PCR" label to sell any products. Some unlicensed cyclers were created too.

Regardless, Perkin Elmer's strategy was highly effective, according to Cote. "They weren't being undercut in either market because users needed both a licensed machine and a licensed enzyme to perform PCR. Of course, developing the technology for commercial use was expensive, so Perkin needed high margins – more than 50% if I remember correctly – to cover the R&D and scale-up costs."

In the short time following Cetus and Perkin's 1985 deal, more than 50 other companies were involved in licensing of PCR technology, rapidly taking it worldwide into a plethora of sectors and applications.

The Financial And Talent-Based Reasons For IP Investing

Investing in the IP behind an idea is vastly different from investing in any single venture.

One of the greatest differences is found in the personnel involved.

"There's only so much time in the day for one team," said Cote. "And typically, any founding team is going to have a specific skillset suited to a specific industry, which means that their ability to disrupt elsewhere is limited."

PCR is a perfect example of this, Cote pointed out. Had the idea remained with Cetus, it may

have fallen flat, as the team there was primarily focused on pharma.

"When you invest in a company, you want the founders to be laser focused on where they're the A team, not where they're the B team – this means they miss opportunities," Cote argued. When investing in the IP, the investor no longer cares only about who is running each licensed venture – the focus expands to licensing the "A team" in each sector or region of the world, reducing its dependence on any one team for success.

> *"[Private equity] comes into a business and nickel and dimes the whole thing, cutting costs and jobs for efficiency– financially engineering growth, but they never actually grow it." – Robert Cote*

Another major difference between IP investing and venture investing is how and when the investors get paid. In a "traditional" VC deal, family fortunes, wealthy individuals and sovereign funds plough in a set amount of capital at a certain point. Then, depending on their expertise, investors then take a hands-on or hands-off approach.

After a typical period of 5-7 years, during which additional investment might be needed, investors can exit, typically by selling the company or going public.

This time spent waiting carries quite a lot of risk. Moreover, depending on the macroeconomic conditions at the time, exiting via IPO can become incredibly difficult. In funds where a mandate is set to exit with a particular timeframe, this can lead to worse-than-expected returns.

Comparatively, IP investing is much more fluid. "Market dynamics in IP will determine the longevity of your monopoly rents," Cote explained. "When I enter an opportunity, I'm thinking about the barriers to entry and the resulting time frame of exclusivity for an idea. I'm paid along the way through sharing in revenues for the IP investment – I don't need to wait for a lottery ticket at the end."

"That's why you need high barriers to entry and that's why you want to spread your innovation as far as it can go – you want to discourage people spending the time, money and effort required to replace you," he continued.

Because of all these factors, there is "never" a pre-determined exit opportunity – Cote said he views any investment as a "venture that may be exited, but because of my model, I am not

wedded to how that happens, and through sharing in revenues have the added dimension of selling the cash flows to exit."

Investors' Missteps And The Need For Physical

Prior to investing, Cote always considers whether the idea can be further innovated.

"Evolution is the only way to keep the gift of innovation giving beyond a five-year model – which is about as far forward possible you can forecast to," he said. Cote then pointed out that "all industries die a slow death" due to a cyclical effect where competitors become parasitic. "Too many people can do the same thing, meaning they can only compete on price. Margins drop from 50% to 5% and everyone is on the poverty line."

Innovation is the only way to break this cycle.

"Innovation creates efficiencies in a product and thus more value for your customer. The whole chain from supplier to product to end customer, when innovated on, will be transformed," he said.

This is where Cote sees venture capital and private equity (PE) going wrong.

"PE comes into a business and nickel and dimes the whole thing, cutting costs and jobs for efficiency– financially engineering growth, but they never actually grow it," Cote said. "And while they get a good return and have right-sized the ship in higher margins, they've not transformed it to become self-sustaining long term."

He likened the current stacking up of assets and wealth in companies to a forest. Instead of it being comprised of a variety of different-sized trees "all the old oaks are gobbling up the saplings."

"Nobody wants to be in a world made of old oaks. They simply shade everything," he said.

And on the topic of VC, Cote pointed out that venture capital has shifted their focus to software and the sheer number of funds present today means they're bidding up valuations to where they're unrealizable at exit. Moreover, "software has a lower barrier to entry to copiers and together this leads to poor performance," Cote said.

"All the world's empires were founded on making real, physical things. If we ignore funding new ideas that create new efficiencies in products that are manufactured, if we do not begin to build again in better ways, even sustainable and renewable ways that are good for the environment, we're stunting the growth of the other half of our job base. It's not a happy place to live," he concluded.

“If you want to change psychology and raise the frequency of people, it’s always a happier place when it’s growing. All ships rise on a rising tide. This is why investing in the idea, not just the venture, is vital.”