

▶ more than a patent licence,” explains Steve Altman, Qualcomm’s president. “If we were just an IP shop, we would not have been successful. What caused us to be a success was that very early on we didn’t just license patents, we enabled the manufacturers to get to market quickly.”

The licensing practice began when Qualcomm was young and struggling in the early 1990s, helping its cashflow. At first, the company made the mobile phones as well as developing the underlying technology, but in 1999 it sold its handset division in order to focus on the less tangible—and more lucrative—part of the business. Today, it spends almost \$1 billion a year, or 19% of revenue, on R&D. It has amassed 1,800 patents, and 2,200 applications pending.

“We could have very easily said, ‘Let’s close up shop, sit back and wait for royalties to come’. But that would have been a short-lived business: the technology evolves very quickly,” says Mr Altman. In

August, Qualcomm paid \$600m for Flarion, a firm with little revenue but around 100 patents either issued or pending on a new generation of wireless technology. If all goes as planned, this will allow Qualcomm to dominate the next phase of high-speed mobile communications too.

“IP companies can be very profitable. That doesn’t mean we are extortionists by any means. If you get the technology right, you get to license it many times,” explains Tudor Brown of ARM, a British firm that creates the intellectual property behind microchips used in nearly all mobile phones and other wireless devices. ARM is the most ubiquitous company no one has ever heard of, with its technology in use in over 70% of all mobile phones. Whereas Qualcomm still keeps a foothold in the physical world by supplying chips, ARM does nothing but R&D and licensing.

But Mr Tudor has a warning for firms that want to concentrate exclusively on the intellectual-property business: licensing

usually works only alongside a basket of products or services. For IBM, for example, the majority of its intellectual-property revenue comes from the sale of know-how, not patent licences alone. In essence, the difference is that between the recipe for a dish and a list of ingredients.

ARM was fortunate to be in the right place at the right time, when numerous chip-design firms all wanted to outsource the basic technology for wireless chips so they could innovate on top of it. Also, ARM understood that it needed to offer a lot more than just patent licences, such as documentation and support for its licensees. “They are successful only if they get it right, and we are here to help them get it right,” Mr Tudor says.

Yet it is easy to get it wrong. Take BT, Britain’s telecoms incumbent, which in 2000 announced that it had a patent on hyperlinks, a technology that allows people to click on a web-page link to go to another web address. BT claimed it had de- ▶▶

Voracious venture

WHEN visitors walk into the headquarters of Intellectual Ventures, they come face to face with the full-size head of a *Tyrannosaurus rex*—the special-effects model used in the film “Jurassic Park II”. Is that a hint that the company wants to eat IT companies alive?

Nathan Myhrvold, its founder, thinks not. He is excited about the company’s strategy, which he describes as “an experiment”. Intellectual Ventures represents a radically new business model for technology—a cross between a venture-capital fund, a law firm and an R&D lab. It wants to finance inventors to do what they do best—invent—and obtain patents on those technologies. Then it wants to license those innovations to the world (and pursue infringers with razor-fanged determination). The IT industry is terrified of it.

The main reason to take Intellectual Ventures seriously is Mr Myhrvold himself. After selling his software company to Microsoft in 1986, he spent the next 14 years as the company’s top techie. He is naturally brainy, entering university at 14 and getting a doctorate at 23, then doing physics with Stephen Hawking at Cam-

bridge. He left Microsoft worth hundreds of millions of dollars, and turned his talents to promoting innovation (as well as funding dinosaur excavations).

In his view, the world has an archaic idea of patents: that they are worth something only when they come with a product. It reminds him of the businessmen in the 1980s who insisted there was no money in software because people would buy only something they could see, ie, the computer itself.

His business model for his new venture is precisely the same as the one he got to know at Microsoft: come up with a technology so pervasive that no one can avoid paying for it. The difference is that Microsoft tried to operate a monopoly the government sought to make illegal; Intellectual Ventures proposes to make use of the government-granted legal monopoly conferred by a patent.

Intellectual Ventures expects shortly to be granted its first patent, related to digital imaging, and has hundreds of applications pending. But in the meantime the company has been delving into its huge bank account—rumoured to exceed

A new intellectual-property business model

\$300m, from backers that include Microsoft, Nokia and Sony—to purchase heaps of patents up for sale. It has not asserted any patents yet, but many think it is just circling before devouring its prey.

Trolling for business

There have recently been complaints in the industry about “patent trolls”—patent holders that send letters asking IT companies either to pay royalties or face a long, costly lawsuit. Is Mr Myhrvold not the biggest troll of all? He smiles at the question. By funding invention only, he says, even with the cost of licensing it, his firm will provide society with more innovations than it would otherwise have had. In that sense, Intellectual Ventures may be creating a market for inventions that marks a new phase of capitalism. Already a gaggle of firms with fancy names such as iPotential, ipValue, Yet2.com and ThinkFire are making a business of patent transactions, and hedge funds are acquiring patent portfolios. One day, Mr Myhrvold says, the dichotomy between physical products and intellectual property will become extinct.