The US's continued technology leadership not guaranteed, top VC tells LES

Leaving San Diego at the end of this year's annual meeting of the US and Canada branch of the Licensing Executives Society, it was difficult not to feel optimistic about the future of intellectual property as a business asset in the United States.

With over 1,000 delegates and a programme that combined a world class array of keynote speakers with a challenging series of specialist seminars, the event confirmed that nowhere in the world is the issue taken as seriously by so many, and that nowhere in the world is so much top quality IP being created.

But, it seems, nothing should be taken for granted. It fell to one keynote speaker to sound a note of warning. Commercialising intellectual property is a wonderful idea and can be extremely lucrative John Denniston, the COO of Silicon Valley-based venture capital firm Kleiner Perkins Caufield & Byers, told his audience, but you have to have the top class intellectual property to do it. And although the United States is clearly the world's leading technology powerhouse right now, there are some indications that if politicians and others are not careful, the US's leadership may begin to ebb away.

Denniston told his audience that, in the short-term, the future of technology innovation in the US was healthy. Although the boom days of 2000 were not coming back there is genuine hope that the market is about to move forward again. The number of interesting business plans being put in front of Kleiner Perkins and based around innovative, proprietary ideas is increasing, Denniston reported. He also expressed confidence in the fact that there would always be a need for new products in areas as diverse as IT and biotechnology and dismissed those prophesising a continuing technology slump.

The big question, however, was whether long-term it would be American companies that created the intellectual property to meet these needs. Here, Denniston said, things start to get less certain. Despite the demand and the innovation currently taking place, the bad news for America is that significant challenges lie ahead. Above all, there are demographic issues. The baby boomers who created the US technology lead are now nearing retirement age and are not being replaced fast enough. There has been a decline in American science and engineering graduates so that there are 17% fewer today then there were 20 years ago. The seven fastest growing vacancy lists in the US are all in technology and by 2010 there is expected to be a five million-strong skilled worker gap in the country.

All this comes at a time when the number of engineering graduates in countries such as India and China has doubled and even trebled in only a generation. In China, the keys to modernisation have been identified as science and technology and, as a result, there have been huge investments in providing high quality further education. In Europe, the EU has declared that its aim is to be the world leader in technology by 2010 and is seeking to develop policies that will enable this to happen. Unless the US is careful, Denniston warned, it could find that it has been overtaken.

Current moves to broaden company disclosure requirements, along with potential threats to Bayh-Dole and donations of IP for tax purposes, will do nothing to encourage innovation in the US, Denniston claimed. Instead, what is needed is a fostering of the entrepreneurial culture. This means more emphasis on science in schools, more immigration, tax incentives, the encouragement of stock options and litigation reform. Denniston's overall message was simple: if Americans do not have the means or the incentives to innovate, the flow of new IP and technology that has helped build the American economy for the last 50 years will begin to slow. Should that happen, others are better placed than ever before to take advantage.

Not easy to dismiss

Although there will always be doom-mongers, what Denniston had to say cannot be dismissed so easily. Kleiner Perkins, after all, is probably the world's leading technology-based VC outfit. During its 30 year life, it has invested in over 400 companies and taken more than 150 to IPO. Its portfolio includes the likes of Genentech, Compaq, AOL, Sun Microsystems and Amazon. In short, it is an outfit that knows technology markets backwards.

But US IP practitioners should not be too down-hearted. Training engineers and proclaiming the desire to world leadership in technology are the easy parts. Much more difficult is turning the training and the vision into world class patents and products. And it is when trying to take such a jump that both Asia and Europe look set to struggle.

Despite the advances of recent years, Asia does not have the financial infrastructure outside of Japan to invest the billions of dollars in R&D that are the pre-requisite of the invention process in most technology markets – even in Japan, companies are much more likely to collaborate on R&D with institutions in the US than they are at home. Then there are IP laws themselves, still widely flouted in much of Asia and too frequently dismissed as low priorities by law enforcement authorities and courts.

In Europe, the rhetoric is wonderful, the practical action rather less so. The Europeans have struggled for years to create an environment in which world class technology entrepreneurialism might grow. Outside a few clusters in countries such as Germany and the UK they have generally failed. There is too much regulation, too many obstacles to success, insufficient funding and not enough determination to tackle the problems; those businesses that do manage to break-through and look promising in areas such as biotech quickly become targets for avaricious US companies. The continent's best and brightest scientists all too often head west across the Atlantic in order to get the academic and economic rewards their talents deserve. Many of those that remain are not inclined to leave their ivory towers to get their hands dirty working with industry. Politicians, meanwhile, often pay lip service to IP rights but regularly fail to give them the priority European industry requires.

Of course, the US cannot afford to be complacent. No hegemony can last forever. In a few years time, the challenge from Asia – and from China in particular - will probably be a serious one. But the chances are that, if the US plays its cards right, in technology and IP we are at the beginning of another American century.