

Who owns the knowledge economy?

"IF NATURE has made any one thing less susceptible than all others of exclusive property, it is the action of the thinking power called an idea... No one possesses the less, because every other possess the whole of it. He who receives an idea from me, receives instruction himself without lessening mine; as he who lights his taper at mine, receives light without darkening me." In Thomas Jefferson's inspiring vision, there are no barriers to the acquisition of knowledge. Nobody owns it, everybody partakes of it—and the world becomes richer.

Two centuries later, when knowledge has taken over much of the economy, Jefferson's words seem to take on a new power. After all, capital has always been one of the main economic barriers to entry, and these days ideas are capital. If getting hold of capital becomes as easy as getting a light, barriers to entry everywhere ought to be tumbling. So farewell, monopoly.

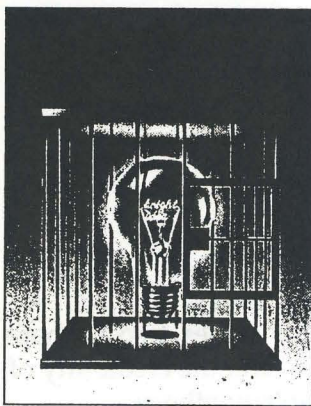
But how is it, in that case, that in America, one of the biggest antitrust cases in history reached judgment this week, causing turmoil in financial markets? And how is it that new monopolies in cyberspace are being created all the time? The reason is that ideas are not in practice the free currency that Jefferson observed them to be in their natural state. Governments award property rights over ideas, making them vulnerable to monopolists if the system is abused.

Property rights for a wired world

The Microsoft case (see next leader) is in many ways an old-fashioned sort of antitrust affair about a dominant firm bullying smaller rivals. But behind it lies a systemic worry, about the wired world's natural susceptibility to monopoly. Increasingly, the value of any good (say, a computer operating system) depends on the number of users; so a new entrant has little hope against a widely used product (say, Windows). The American administration has rightly become more alert to incipient network monopolies of this kind.

Which makes its policy on patents even odder. Patents are the strongest form of intellectual-property right, since they give holders a claim over ideas encapsulated in a work, and not just (as copyright does) on the work's particular form. Their purpose is to reward inventors so as to encourage future invention. Society is balancing the benefits of a free exchange of ideas against future gains from further invention. And the means of striking this balance is to award a legal monopoly to a patent-holder for 20 years from the date of application.

Patents are booming: last year, the United States Patent and Trademark Office awarded 161,000, nearly twice as many as ten years ago (see pages 75-78). That is partly because the value of knowledge has grown relative to other assets—so



companies naturally want more of it. But it is also because new kinds of patents are being awarded, in areas that might have been thought unpatentable, such as computer software, genetic engineering and, increasingly, Internet business methods. In this last category, America's patent office has recently handed out monopolies on such simple ideas as group buying, matching professionals with those seeking advice, one-click shopping and reverse auctions.

The patent office says there is no reason not to issue such patents: they fulfil the criteria that ideas embodied in a patent application must be novel, useful and non-obvious.

But that invites a big question: does the law, which has barely been changed in two centuries, still work? The patent office retorts that the system's durability is testimony to its success, as are the waves of technological change it has fostered. History's great inventors armed themselves with sheaves of patents—Edison, still the record-holder, had 1,093. Without such protection, they would not have bothered.

The Internet casts doubt on the need for such strong protection today. Until recently, it was a patent-free zone in which good ideas travelled freely. Clever people and capital flooded in. They did not, apparently, need the incentive that patent protection would have provided.

The trouble with the law is that it does not differentiate between the incentives needed to invest in different kinds of technologies. It accords as much protection to an idea thought up in the bath as to a drug that may have taken many years and hundreds of millions of dollars to move from conception to marketplace. Even Jeff Bezos, founder of the Internet retailer Amazon and the holder of several business-method patents, has suggested in an open letter posted on the Internet that software and business-method patents should have a shorter life than other patents—say, three to five years.

Inventors still need some protection, but they are getting too much. America needs to scrap its one-size-fits all system, and replace it with one that responds to the investment that an invention represents. Patents should come in different shapes and sizes, or the system will go on producing absurdities. The American Supreme Court foresaw the danger in 1882, when ruling on the matter of boat-propeller technology: "Such an indiscriminate creation of exclusive privileges tends rather to obstruct than to stimulate invention. It creates a class of speculative schemers who make it their business to watch the advancing wave of improvement, and gather its foam in the form of patented monopolies, which enable them to lay a heavy tax on the industry of the country, without contributing anything to the real advancement of the arts."