THE GOLD RUSH OF '89

Historically, the United States has seen the Great Land Rush of the 1840s and the Great California Gold Rush of 1849. Thousands of people risked life and limb to stake out a small piece of the earth's surface in an effort to ensure their financial futures. Once again, we in the U.S. are witnessing another 'great rush' or — more accurately — 'attempted rush' for riches. This time, however, it is neither land nor gold which offers wealth, it is a new commodity called 'Intellectual Property.'

On every hand we are seeing corporations, universities, individuals and, yes, even the U.S. government, laying claim to what can best be described as 'ways of doing things' with computers or, more succinctly, algorithms. The method of laying claim to this new wealth is by means of copyright and, more recently, patent protection.

Since the early 1980s, there has been tacit agreement that copyright was the appropriate means of protecting intellectual property rights such as computer software, algorithms and related matters. It is a little advertised fact that in the early 1980s possibly as many as 5% of all copyrights went to the IBM Corporation which was legitimately and systematically protecting its software.

Certainly everyone is aware of the long-running copyright infringement suit which the Apple Computer Corporation has brought against the Microsoft Corporation in which Apple alleges that Microsoft's Windowing Software infringes on the 'look and feel' of the Apple approach to computing. It is highly ironic and worth noting that the Xerox Corporation might plan to require royalties from Apple, as it is an open secret that much of the Apple 'look and feel' may well have been developed in Xerox's laboratories!

Litigation of this nature provides wonderful employment opportunities and job security for attorneys. It also forces a judge to render legally binding decisions about matters so completely foreign to his basic expertise as to diminish the possibility of a sound decision. Of course, the people who bring such suits are well aware of this deficiency and hope to take advantage of it. They are operating on the assumption that the first person into court has the advantage. As often as not, they do not really believe they can win a court case, but they do know that they can gain valuable time to establish market share by keeping the competitors busy in court. They often look forward to some sort of out-of-court settlement by which they could end up with far more than they had ever dreamed.

As any attorney is well aware, there are some significant differences between copyright protection and patent protection. Patent protection is much stronger, and successful patent infringement cases can reward company and attorney handsomely. This awareness has caused some organizations and individuals to adopt the strategy of patenting algorithms.

There is the now classic case of the small company which has patented an algorithm for moving the cursor on the screen of a standard video terminal (CRT device). The revenues of this small company are reputed to be \$5 million annually — yet they create and sell nothing. Their entire income is derived from royalties on their single patent. The primary activity of this company seems to be that of going around threatening to file patent infringement suits against other companies.

Many organizations — chief among which are universities — are now attempting to obtain patents for algorithms. Large U.S. universities are encouraging people in their technology and science-related departments to copyright or apply for patents on anything and everything from which the institution might someday derive revenue. Virtually all universities now have patent policies similar to those of large corporations which essentially force the turnover of a great percentage of any royalties to the institution. Universities have become so eager (spelled g-r-e-e-d-y) for such royalties that there is now a case in which a university is suing a member of its own faculty for privately patenting a drug without letting the university's patent representative have it first.

The thinking which appears to lurk behind this trend of patenting algorithms can only be described as cynical. Everyone is well aware that the U.S. Patent Office lacks experience as it now exists to make solid judgements on the patentability of an algorithm. However, all attorneys seem to feel that unless the Patent Office is given some specific reason as to why it should *not* issue a patent, the patent will almost certainly be issued. As things now stand, patents could easily be issued for algorithms which have been in use for 30 years! Certainly, the Patent Office could find it hard to tell right from wrong in such matters. Once a patent is issued, of course, it becomes a major legal task to have it rescinded. Meanwhile, the holder of the patent or his attorneys merely set about threatening corporations with litigation, but offering to settle out of court for very modest royalties. It is then far simpler and less expensive to pay such royalties than to challenge the patent in court. If the patent holder can line up a great number of people paying even small royalties, the aggregate revenue could be substantial. Did I mention cynical?

One does not need to be clairvoyant to see the potential for technological gridlock that such strategies could impose.

In the course of preparing this editorial, I discovered that no one now holds a patent on Calculus and that Isaac Newton left no direct heirs. Hmmmmm....

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