

June Mailing to League Members

Our First Legislative Contacts

Early in April, League members Hal Abelson, Stan Kugell, Paul Camacho and Richard Stallman met with Congressman Barney Frank of Massachusetts, who is one of the most respected House members and also on the Intellectual Property Subcommittee. He understood right away what we had to tell him about software patents.

We have also met with staff at Senator Kerry's office.

Our ability to do this was helped greatly by Paul Camacho's political contacts. He is a political scientist at the University of Massachusetts, and already knows quite a few of the staff of the elected representatives in our area.

However, you can probably also arrange to meet with your Congressman, or at least with their staff. This is a very important thing to do. If you suggest that their staff get in touch with the Special Counsel for the House Subcommittee on Intellectual Property, they will be able to learn from him how widespread the concern is about these issues. And then they may want to talk more with you.

We chose the group of people to meet Congressman Frank so that it contained a professor and an entrepreneur. This is probably a good thing to do if you want to have credibility when you meet your Congressman.

RSA Inc. Shuts Down Public-Key Mail Encryption

Programmers who haven't grasped the full scope of the harm done by software patents sometimes offer the RSA patent as an example of a software patent that ought to exist. What they mean is that RSA encryption is not obvious, the way backing store is obvious, or natural order recalc. And that is something we can't deny. But this does not imply that the patent granted for it is free of abuses, or that issuing a patent was good policy.

Perhaps the facts in this article will help dispatch the RSA example as an argument in favor of software patents.

Public key encryption was developed in the 1970s by professors at MIT and Stanford. These schools gave an exclusive license to a company, called RSA Inc.¹, which has done its level best to prevent the most obvious and useful application of public key encryption: the delivery of encrypted mail on the Internet and Usenet.

Widespread use of encrypted mail depends on the universal availability of the software. There have been several attempts to provide free software to the network so that everyone would have it. RSA Inc. has squashed every one.

The RSA patent was obtained for an algorithm called RSA after the names of the professors that developed it. This May, a new public domain mail encryption program was released. It used a different algorithm, called the Rabin algorithm. (The 'R' in RSA does not stand for Rabin.) RSA Inc. claims their patent covers this algorithm, too.

¹ Since cosmetically renamed to Public Key Partners. I use their former name because it seems more appropriate to their nature.

In fact, they claim their monopoly extends to any algorithm that performs two or more exponentiations and combines the results. This is a very broad class of algorithms. (The president of RSA likes to boast of this broadness as if it were a measure of his merit.)

This illustrates the subtle deception behind statements made by the US Patent and Trademark Office that they do not grant patents on algorithms. It is true that no patent covers a single algorithm; this is because a patent monopolizes a class of many related algorithms.

While you might naively think that prohibiting a broad class of algorithms is even worse than prohibiting one, the Patent Office doesn't think so. By careful choice of words, they can deny the existence of algorithm patents, and give the impression that algorithms are not being prohibited by patents. For example:

First, many assumed that we would grant a patent on a computer program or a mathematical algorithm. As we have stated, we will issue patents on computer processes. . . , not on programs or mathematical algorithms.

(This comes from testimony of Jeffrey Samuels, acting commissioner of patents and trademarks, in the house subcommittee on intellectual property.)

This case also shows how the patent system can do great harm while doing absolutely no good. The algorithms concerned were developed by professors who inevitably would have published them, patent system or no. There was not even a possibility that society would benefit by issuing this patent.

Another interesting aspect of this case is that several MIT professors now receive government funding to do research which cannot be used without infringing the RSA patent. The effect is to provide a government subsidy for RSA, Inc., under the guise of research done for the public good.

At the podium, the representatives of RSA, Inc. pretend to be doing the public a service. They claim that use of public key encryption would be impossible without their help—that users must be carefully taught how to use it. Their recent actions reveal that their help is not necessary—and also their true motives.

Please Write to the US Patent Office

Along with this mailing, you will receive a copy of a request for public comment from the US Patent Office. Please write a letter to the Patent Office in response. The address is in the request.

Also send copies to the House and Senate intellectual property subcommittees—they have got piles of mail about this issue, and it is good to keep up the momentum.

House Subcommittee on Intellectual Property
2137 Rayburn Bldg
Washington, DC 20515

Senate Subcommittee on Patents, Trademarks and Copyrights
United States Senate
Washington, DC 20510

You will probably find parts of the request for comment obscure. Probably anyone except a patent lawyer would. Don't let it stop you from responding—answer the questions that make sense.

The advisory committee which has asked for these comments consists of business executives, lawyers, plus a miscellaneous handful: a university president, one person from a small business, and the president of the association of university technology managers. (I suspect that university technology managers are the ones who get patents for universities.)

While I can't be certain, I suspect that no one on the committee has ever written a program. Perhaps the small business person has, but I'm not sure what line of business his company does.

Here are some notes about some of the questions, suggesting ideas you might use. **Please don't copy these:** if you write your own words, expressing your own ideas, your letter will carry more weight. Look at these ideas, think about them, incorporate them into your thinking or reject them, and then write a letter describing what you think.

In their statement of question I (c), the Patent Office is straining the meaning of the Supreme Court decision (*Diamond vs Deihl*). See the LPF position paper and (for greater depth) Professor Samuelson's article *Communications of the ACM*, August 1990. It will be useful to point this fact out in your reply.

For I (d), the AT&T backing store patent is a good example of how patents interfere with the advance of technology. Likewise the RSA encryption patent.

Question I (e) misses the point somewhat, because it asks for a reason based on legal premises, rather than a reason based on what does or does not serve society well.

For section I (f), I'd say that the courts have done a bad job, so Congress should take it out of their hands.

Section I (h) and I (i) ask whether the PTO should take various steps improve its operations. Likewise sections VII and XI. These steps might help avoid some of the PTO's mistakes, but they could not possibly solve the problem patents have started to create.

At best, these reforms can reduce the number of patents issued in the future. They will not do anything about the multitude of existing patents, or even about those now being examined as the reforms are implemented.

Suppose these steps cut the number of future patents in half; how much will that alleviate the problem caused by the patent system? Not much, because of the phenomenon of overkill.

A country attacked by only half of the US or Soviet nuclear arsenal would be nearly as devastated as if it had been attacked by the whole stock of missiles. That is overkill. Since it is easy for one large program to infringe dozens of patents, the situation is likewise one of overkill. Eliminating even a large fraction of the patents will not avert the disaster; what is necessary is to get the patent system out of the way of programmers.

Section II is interesting, because it suggests Federal help for keeping ideas as trade secrets.

Now, you might think that keeping something secret is a matter of not telling anyone if you don't want him or her to know the secret. But that's not the kind of secret in question here. Trade secret law is designed so that, after you tell a person a secret, the government will help you force him or her to keep it secret for you.

It has long been recognized that trade secrecy is antisocial. In fact, the desire to discourage trade secrecy was one of the principal motives that led the founding fathers to set up the US patent system.

Trade secrecy is not one of the issues that the League is concerned with. But perhaps if the government did less to help people keep secrets secret, there would be less need for patents to induce them not to try.

Section III asks whether the “cost of patent enforcement” is too high. Note the bias here for patent holders and against the victims of patents. I wonder whether the cost of defense against patents is too high.

Section VIII asks about the merits of a 20-year term from the date of filing, versus a 17-year term from the date of issue. The most important thing here is that these are both ridiculously long for a field like computers.

Section XII proposes something very dangerous, since it would allow your employer to file a patent application without your cooperation, and probably even without your knowledge.

Watch Out for the Word “Protection”

“Protection” is the standard word lawyers use to describe monopolies such as patents. They like patents because patents generate business. They like the word because it has a positive connotation: it suggests the prevention of something destructive and wrong.

In a discussion with lawyers, you may feel pressed to use the same word, so as not to sound ignorant. If you do, you will give implicit support to the underpinnings of their position each time you use it. That is not a good way to prevail over them in the long run.

Instead of adopting their word, take the opportunity when they use it to explain its bias, and thus their bias. You can say that you will use instead a word that reflects your position the way “protection” reflects theirs: the word “monopoly”.

Another useful thing you can say is that the only protection you need is protection from patents.

Copyrighted Program-to-Program Interfaces

On May 15, the European Community adopted the software copyright directive which seems to provide for copyrighted protocols, data formats and programming languages.

In April, when the directive was considered by the European Parliament, the Legal Affairs Committee recommended changes to solve this problem for certain kinds of interfaces. They proposed adding the following text:

Whereas, these unprotectible items include, for example, protocols for communication, rules for exchanging or mutually using information that has been exchanged, formats for data, and the syntax and semantics of a programming language;

This amendment was rejected after serious debate in which the conservative party especially opposed it. The importance given to the question shows that it was regarded as a substantive change—that Parliament believes the law as written permits copyright on the syntax and semantics of a programming language.

The principal supporters of these broad and dangerous monopolies were a few large computer companies: IBM, Digital, Apple and Siemens. (Only one of them is a European

company.) Many smaller companies formed the European Committee for Interoperable Systems to lobby against interface monopolies, but had little success.

What about the United States?

Ashton-Tate is once again pushing its case for a copyright on the programming language used in dBase. Last winter, the judge ruled that the copyright on dBase was invalid because Ashton-Tate had failed to inform the copyright office that part of the program was an earlier, public domain program made at JPL.

It turns out that the “part” in question was the programming language—no part of the program at all!

More recently, the judge reversed his own decision. The case is now proceeding.

The latest version of the System V Interface Definition claims that the interface is copyrighted. Adobe says the Postscript language is copyrighted. You can bet that IBM, Digital and Apple are telling Congress loud and clear that programming languages should be copyrighted. And they will point to the European law as proof this is the best policy.

The Finnish League for Programming Freedom

An organization like the LPF was set up in Finland in late April, after a League member went to Finland to speak about the new monopolies at a technical seminar at Helsinki University of Technology. Students at the university, attending the talk, decided it was time to break out of their inertia and organize.

Richard Stallman will spend all of June speaking throughout Europe, hoping to organize similar groups in Norway, England, France, Denmark, Germany, Holland and Switzerland.

How One League Member Did Something for the Cause

Geoffrey Knauth, a member of the League, found he was using a piece of Lotus software on a Next machine to help manage a rowing event. He was asked by the local Next Users Group to write about this activity.

In the article he wrote, he mentioned his mixed feelings about the program he was using, because it came from Lotus. The result was to catch the attention of the readers for the issue of interface copyright. He even received notes of support from Lotus employees.

Whenever you write an article about a subject related to computers, consider whether you might be able to work in a pertinent reference to the League and its issues. Keep the idea in mind, and you may see how to use it.

Please Collect Some Information for Us to Use

We may be able to strengthen our case against software patents if we have more information of the following sorts:

- Names of companies that have been "surprised" by patents, plus details if possible.
- Names of companies that primarily make their money by blackmailing other companies with threats, plus details if possible.

- Products that have been forced off the market due to software patent or interface copyright.
- Companies that have been pushed out of business in this way.
- Products that were not released because of monopolistic threats.

If you happen to find out about any examples of these things, please inform the League.

Other Activities Needed

The League has not been as active this year as it was last year, and hasn't been in the news as much. This is something we need to try to change.

Here are some possible reasons for the decreased activity.

One is that we have no obvious ways to make a big splash with our activities. Our position papers have already been published, and we don't have any more to publish. Demonstrations as a tactic seem to have diminishing returns in terms of publicity, because the media become inured to them.

Another is that members don't seem to be eager to do work on making activities happen. The League only does what its members do. In order for the League to do things, members need to plan them and carry them out. For the League to do more, and be noticed more, we need more members to participate.

But this year, we have had trouble finding people even to answer them mail reliably. That's not a good state of affairs.

Perhaps there are things that the League could do to help stimulate members' enthusiasm for working on League activities. For example, having meetings in various cities might be useful. Publishing a more attractive and more interesting newsletter might help. However, both of these things take work in themselves.

Would anyone like to do this?

If you would like to organize a meeting of the League members in your area, send mail to league@prep.ai.mit.edu or phone Richard Stallman at (617) 253-8830 if you don't have Internet mail. We will send you the membership list so you can contact people. You could also announce the meeting to the general public, and use it as an occasion for recruiting.

A meeting with thirty people attending is not a lot of work, and can do some good.