‘I can’t believe that!’ said Alice. ‘Can’t you?’ the Queen said in a pitying tone. ‘Try again: draw a long breath, and shut your eyes.’ Alice laughed. ‘There’s no use trying,’ she said. ‘One can’t believe impossible things.’ ‘I dare say you haven’t had much practice,’ said the Queen. ‘When I was your age, I always did it for half an hour a day. Why, sometimes I’ve believed as many as six impossible things before breakfast.’

As I expect you are already aware, Fortune Magazine’s Roger Parloff has authored an in-depth, and extremely well written, article called Microsoft Takes on the Free World. The article appeared on Sunday, and immediately unleashed a torrent of secondary commentary, interviews and analysis, and not a few blogging rants as well.

As well it might. That’s because Parloff reported that Microsoft General Counsel Brad Smith and other senior Microsoft executives allege that Linux, OpenOffice and other open source software violate no fewer than 235 Microsoft patents – and that Microsoft thinks it’s time that those that distribute and use this software should start paying royalties. When a company like Microsoft makes statements like that, people naturally stop and listen.

But that doesn’t automatically mean that they should take the statements at face value, and especially when they are so contradictory. For example, what does one make of the fact that Microsoft wants royalties, but doesn’t want to sue anyone to get them? And if Microsoft really believes that it has so many patents that are being infringed by Linux, why has it waited so long to assert them?

And given the differences between Linux and Windows, why has Microsoft never asserted any of its patents against the many other operating systems – including Unix – that have existed over the years, each of which presumably infringed upon some subset (presumably major) of those same patents?

Then there are the practical considerations: the fact that it would be infeasible for Microsoft to actually sue myriad vendors and customers; the fact that many of the its patents (perhaps most) would not stand scrutiny; that many distributors own patents that Microsoft is presumably infringing as well; the likely hostility that European regulators would have for such a gambit. And so on.

As a result, I believe that the marketplace is rather rapidly going to come to the conclusion that the actual risk of anyone being sued by Microsoft on these patents – ever – is, as scientists like to say, “vanishingly
small." One example of a well-written article (by IDG News Service's Elizabeth Montalbano) that heads in this direction is here. IBM's Bob Sutor, at his Open Blog, provided a more concise commentary, brushing the Microsoft statements aside as "same old, same old." Bob's entire comment read as follows: Again, How Tiresome.

It's tempting to simply echo Bob's comment. But perhaps it's useful to dig a bit deeper (this time in Q&A form), and talk about what patents really mean in the world of high tech today — which isn't necessarily what you'd expect. But first, a disclosure: I provide legal counsel to the Linux Foundation and am on its Board of Directors (and before was counsel to and a Board member of the Free Standards Group), and I am also counsel to OASIS, the developer of ODF. However, the opinions and statements below, as always, are mine and mine alone, and are not made on behalf of these or any other clients of mine.

That said, let's get started. Let's talk about the patents first, for context.

Q: What do you think these patents relate to?

A: We don't know, other than to the extent that Microsoft has disclosed its beliefs in that regard. According to Parloff's article:

[Microsoft licensing chief Horacio] Gutierrez refuses to identify specific patents or explain how they're being infringed, lest FOSS advocates start filing challenges to them. But he does break down the total number allegedly violated - 235 - into categories. He says that the Linux kernel - the deepest layer of the free operating system, which interacts most directly with the computer hardware - violates 42 Microsoft patents. The Linux graphical user interfaces - essentially, the way design elements like menus and toolbars are set up - run afoul of another 65, he claims. The Open Office suite of programs, which is analogous to Microsoft Office, infringes 45 more. Email programs infringe 15, while other assorted FOSS programs allegedly transgress 68

Q: Those all sound like pretty old technologies and programs. Why the big deal now?

A: Glad you asked. Presumably there's nothing new at all, on the infringement side, or on the patent side. The only things that have changed are market conditions, which most notably include the threat to Microsoft's market share posed by the challengers noted. Don't forget that Linux is based on Unix, which has been around, for all practical purposes, forever. To the extent that patents on the important bits were filed, they would have been filed long ago by those that controlled Unix at the time. To the extent that they weren't made the subject of patents, they would constitute "prior art," and could be cited against the validity of any patents filed by Microsoft thereafter based upon the same inventions.

Q: Wouldn't a lot of these patents be getting to the end of their life as well?

A: Good point. Many presumably are, if they haven't expired already. As time goes on, more and more of the core functionalities will be up for grabs.

Q: So many other companies (IBM, Apple, and so on) have products and patents in each of those areas, too, don't they?

A: Absolutely. And some of those companies have been filing patents at a far greater rate than Microsoft for decades. Presumably they have many patents that Microsoft's products would necessarily infringe. The graphical user interface for Windows, you may recall, was loosely based upon Apple products, and there was a big dispute between Apple and Microsoft over whether Microsoft had the rights to adopt its GUI. It claimed it acquired the rights under an existing license, not that it wasn't violating Apple's patents.

Q: Sure. You can't patent something that someone else has already patented, can you? So if these companies got there first, before Microsoft, then you could get the rights you needed to develop your software from them, right?

A: Bingo. And in fact, there are several projects already in existence to do just that. One is called the Open Inventions Network. It was formed (and invested in) by IBM, NEC, Novell, Philips, Red Hat and Sony in 2005. OIN's mission is to:
[R]efine the intellectual property model so that important patents are openly shared in a collaborative environment. Patents owned by Open Invention Network are available royalty-free to any company, institution or individual that agrees not to assert its patents against the Linux System. This enables companies to make significant corporate and capital expenditure investments in Linux — helping to fuel economic growth.

Another effort to create a patent "safe haven" is the Patent Commons, which is hosted by the Linux Foundation. Here's how it describes its mission:

The Patent Commons Project is dedicated to documenting the boundaries of The Commons -- a preserve where developers and users of software can innovate, collaborate, and access patent resources in an environment of enhanced safety, protected by pledges of support made by holders of software patents. Our Library is a central, neutral forum where patent pledges and other commitments can be readily accessed and easily understood.

Yet another is the Open Source as Prior Art project (which also receives support from the Linux Foundation). Together, these efforts are directed at defining, expanding, protecting and maintaining a patent "safe haven" within which open source software development and use can take place.

Q: But if Microsoft has patents that really would be infringed, why doesn't it just come out and cite them?

A: There are two reasons that people always talk about, and a third one that in this case really matters. Let's briefly review them.

The first one is that once you name a patent and say someone else is infringing it, then if you sue them and win, they can be held liable for treble damages – roughly speaking, three times the value of your lost sales after you put them on notice of their violation. That would make you think that Microsoft would want to name the patents immediately, wouldn't it?

The second reason, though, is that once a patent owner does name the specific patent claims it says you are infringing, you can go to court, and ask the court to determine whether those claims were validly issued or not. As you saw above, there are a lot of companies that are willing to invest time and money in protecting Linux and other open source software. So as soon as Microsoft named a patent, those companies could, if they wished, go to court (or subsidize someone else to go to court) and try to kill it. They could also start changing the software to try and "design around" the infringement.

But the third reason, as we'll discuss at greater length below, is that the patents don't really matter very much anymore anyway, except for the "Air Wars" (aka FUD) value of making people worry about infringement.

Q: All right, so I think I'm getting the picture. Operating systems and productivity software have been around for a long, long time, and many companies have patents in these areas. So, probably no single company – even Microsoft - could safely build products in any of these areas without infringing the patents of other companies. If that's true, how do they do it? Do patents mean anything at all any more?

A: Ah – that's the question, isn't it? And that brings us to the point where we need to follow Brad Smith as he steps through the looking glass to try and figure out what's really going on here. You'll notice that in the Fortune article, Smith says that Microsoft decided that pursuing cross licenses was the route they decided to take, after considering whether to start suing people, or just throwing in the towel.

Q: Yes, I remember that. So what's cross licensing all about?

A: A cross license is what two different companies enter into when they both have something the other wants. In this case, that would be the patents underlying the same products. Cross licenses can be limited (to a single small set of patents), or domain specific (e.g., relating to a single product type), or they can even be company-wide. There is a vast, invisible web of patent cross licenses of all types that run everywhere throughout the technology industry.
Q: How do they come about?

A: Sometimes they are arrived at peacefully. For example, standard setting is in part basically an exercise in cross licensing, to the extent necessary to permit a standard to reach the marketplace on acceptable terms to adopters. And sometimes they are the result of truces that follow years of head bashing, and involve large payments to settle outstanding litigation. If you think about it, you'll recall reading about these from time to time. An example is the rapprochement reached between Microsoft and Sun in 2004. They buried the hatchet in many areas with that agreement, while reserving their independence to compete in other areas.

Q: Got it. So let's get a bit more specific. What's going on with the new Microsoft announcement? What are they focusing on? What are they trying to achieve?

A: Sorry – I've got to do a bit more explaining first. When you get to this level of activity, you have to think of what's going on as international diplomacy, not just commercial activity. The stakes are huge, the number of players is enormous, and everything is interlocked. You can't just charge around like a bull in a China shop, no matter how big a bull you are.

Like diplomacy, you're also dealing in perceptions as much as with facts. If Microsoft really did have killer patents, the usual thing would be to pick out a few small targets and sue them, overwhelming them with your legal assault, spending them into the ground. If you're feeling insecure about your patent, you might settle quickly, asking for a very low royalty - or even no royalty at all - from the "infringer." As part of the settlement, the little company agrees not to disclose terms. Then, of course, you announce to the world that you've "won," and that your patent has been tested and stood up to the challenge.

Next, you point to that victory to intimidate others into paying you royalties as well. If the royalties you ask for aren't too high, many will simply agree to pay up rather than risk being sued. And note that it only takes a single patent claim to block someone from selling a product, unless it pays up. The most famous example of this strategy is the Lemelson series of bar code patents, which reaped more than $1.5 billion in royalties over a period of many years before two companies, Cognex and Symbol Technologies finally decided that they weren't going to knuckle under. They went to court to challenge the Lemelson patents, and refused to settle. The court found that Lemelson had improperly extended the patent filings before asserting them as "submarine patents," and that some of them should never have been issued to begin with. Cognex rightly claimed a great victory for the marketplace.

Q: Good for them! But why isn't Microsoft suing a few little guys here? With that many patents, surely you'd think they would have a few good ones, right?

A: Ah - but maybe that doesn't even matter. Let's assume that Microsoft has existing cross licenses with many of the companies that are promoting Linux (it does). Let's also suppose that many of those cross licenses cover operating systems and office productivity software (I don't know that this is true, but I assume it must be). Now who do you sue? If you decided to sue a few little guys, how would you prevent one of the big guys with cross licenses from simply granting a license to the targets you picked? And how about if some of those cross licenses were up for renewal, or you wanted to expand them? How much do you want to incense the owner of the patents that you need access to? Finally, even for big companies, the costs of patent infringement law suits are huge, the results uncertain, and the time between filing suit and finally winning (or losing) is very long.

Q: So big companies don't actually have that much freedom to use their patents to exclude competition, do they?

A: Exactly. In fact, patents today among the Big Boys are a sort of barter commodity, rather than singular weapons. Or you can think of them as Carbon Credits – something that you move around to make your life easier while continuing with business as usual.

In this sense, then, the much greater value of patents is defensive and not offensive - you get them to preserve your freedom of strategy and movement. Sophisticated companies now largely take this view. They have patents so that other companies can't stop them from doing what they want to do, not so that
they can stop other companies from doing what they don't want them to do. Starting to get the Looking Glass part now?

Q: I think so. So we've turned the system upside down and inside out: I don't get a patent to create a monopoly, but to prevent you from creating one, right?

A: You're catching on much faster than Alice. That's it exactly. Once a patent "thicket" have developed in a product area, where everyone owns some patents, no one can stop everyone else from selling products there. All you can do is negotiate terms.

Q: Got it. So can we get back to Microsoft now?

A: Yes, Grasshopper, you are now ready to receive enlightenment.

Q: Please…

A: Sorry. The Q&A format just went to my head. So let's look at what's actually been going on. Microsoft has announced three Linux cross license deals so far: with Novell, Dell and Samsung. In each case, it's refused to reveal the terms. It's also refused to identify the patents. So we're looking at a black box, where we don't know what value, if any, is actually being paid to Microsoft in exchange for Microsoft agreeing to cross license rights in operating system software.

Q: The Novell deal does look awfully one-sided. Most of the cash seems to be going to Novell, not the other way around.

A: Yes indeed. The Fortune article says Microsoft explains this by saying that Novell has valuable network computing patents that Microsoft patents may infringe, and since Microsoft sells so much more than Novell, it needs to pay more. But Novell has been moving away from its network computing business for years, and Microsoft hasn't (to my knowledge) announced anything new in this area that would create an urgent demand for access to such patents. Why did those patents suddenly become so valuable to Microsoft right now?

Q: So we don't know what value each party is actually placing on the Microsoft patents?

A: None at all. Cross licenses often cover an incredible range of activities that can go far beyond simple patent licensing. Look at all the territory that the Novell-Microsoft pact covers. Or go look more closely at the old Microsoft-Sun agreement I linked to above: it settled litigation, set the stage for technical collaboration, included Microsoft support for Java, Windows certification for Sun servers, and much more. As you can see, patents can be just the nominal invitation to the party, and the public announcements cover only what you want the world to know – or, more to the point, what you want the world to think.

Q: OK, so boil all this down for me, would you?

A: I'll try. Here's what I think the Fortune article, and Microsoft's statements, really mean:

1. Microsoft has said it won't sue customers. That's good, and makes sense. So customers can rest easy.

2. Microsoft probably can't sue many of the companies it needs to worry about most, because existing cross licenses with those companies would prevent it. Note that Microsoft hasn't said a word about its patents being infringed by AIX or Solaris, for example. These cross licenses would presumably protect Linux distributions offered by the same vendors as well.

3. The agreements that Microsoft has already signed with customers and distributors may assign little, if any, value to the patents. It's possible that the value actually went in the other direction, with Microsoft paying more to get the other party to agree to include public mention of open source patent licensing at all.
4. Microsoft is clearly feeling threatened. It's no coincidence, to my mind, that it has suddenly linked OpenOffice with Linux in this story. Windows and Office provide the lion's share of Microsoft's revenues and profits, and it needs to defend them with everything it's got.

5. Within the next week or so, the industry will be treating this as "so what" news. Lots of journalists and bloggers already are.

A: So has anything really changed?

Q: To my mind, not much at all. Going back to my diplomacy analogy, it's like the US moving another carrier group into the Persian Gulf when things get hot, to let the local regimes know that it's keeping a close eye on things. Is it going to attack? No. It's just signaling.

But I think that in this case, Microsoft may be making a misstep. By focusing so much attention on this issue, it causes more articles – like this one – to be written to dispel the FUD. And it spawns more patent-focused efforts like those noted above to support open source software development and use. The result is that instead of cowing the little people, it helps pull back the curtain.

And then you find that all-powerful Oz (and his patent portfolio) doesn't look so all powerful, after all.

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