



# The Conspiracy Theory

## Linux Violates Microsoft's Patents?

The penetration of GNU/Linux had increased and Microsoft just couldn't sit back and see its potential clients move out of its camp. It wanted to make money out of GNU/Linux, and it did!

**R**un! Hide! Surrender! That's the reaction Microsoft probably expected from the open source community when, in a high profile interview, Microsoft general counsel Brad Smith and licensing chief Horacio Gutierrez told *Fortune* magazine that GNU/Linux infringes on at least 235 of its patents. But it seems Microsoft missed the bull's eye not by inches, but by a few feet. And we are still not sure as to what Microsoft wanted to achieve with its shenanigans.

One would doubt that this is something Microsoft had thought of overnight—simply because it's one of those companies that plan strategies far ahead, after analysing market trends. The company might have noticed some trends upsetting its dominance in the global market. Most of its online properties were not performing well. Hotmail, a name that was once synonymous with e-mail, seemed to be losing ground to Yahoo! And people were not even searching for something called MSN Search in Google, let alone using it. Meanwhile, GNU/Linux was trespassing heavily into its core territory—the desktop market.

Apart from that, while OpenOffice.org was offering strong competition to Microsoft Office, Google was reshaping the computing world by taking desktop-based applications to a virtual online world, with its Google Docs and other applications.

Linux was dominating the server market, and there was little space for Microsoft to fight that with its closed model when enterprises wanted transparency. Desktop-oriented GNU/Linux operating systems were getting glossier and more user friendly. And

distributions like Ubuntu had started to replace Windows as the preferred OS.

Adding insult to injury, Microsoft's much-hyped Windows Vista turned out to be a jobless prodigal son. IT managers, after looking at the cost of transition, the limited number of device drivers for Vista, the incompatibility of file formats and the restraining issues, had made the decision to not switch to the “new” thing. The only Vista buyers were



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—Brian Behlendorf, CTO, CollabNet

those who were getting it pre-installed with new PCs. Even new users had started demanding XP instead of Vista (refer to *They Want Their Vista Back* in the June issue of *'i.t.'* magazine, page 22). This same pattern was repeated with office suites—only a few had moved from Office 2003 to Office 2007. In a nutshell, nothing seemed to be working in favour of Microsoft.

“In the time it will probably take your readers to go through this

article, Microsoft will have made \$500,000 in net profit. It's instructive to note that the majority of that profit comes from its Windows and Office lines of business; not coincidentally, the two lines of business most threatened by Linux and OpenOffice.org (also, these are the primary technologies whose intellectual property Microsoft claims are being infringed on). Given the high stakes involved, it's not surprising that Microsoft would take steps to protect its turf,” says Jim

Zemlin, executive director, The Linux Foundation.

### The hidden agenda

The software industry saw a major trend emerge when software patents started getting recognition in the United States. Most companies started piling up stacks of patents. Microsoft picked up the trend, though a little late, and began filing for new patents. In this heap of patents, Microsoft might have seen a very promising revenue-generation model—envisaging that it could make money from the markets it had no direct presence in. The company started signing cross-licensing deals with other companies, *en masse*. The rule of cross-licensing is simple: “I will

pay you for the 10 licences you hold, and you will pay me for the 20 licences I have.” The company that holds greater value in their licences ends up getting royalties for them.

Microsoft, being the company it is, would have been aware that the increasing penetration of GNU/Linux had started burning a hole in its pocket. Red Hat and Novell were enjoying the lion's share of the Linux server market. Microsoft seemed to be getting nothing out of this lucrative

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**How concrete are the claims made by Microsoft that Linux infringes on approximately 235 of its patents, which have not been named?**

How concrete? Since Microsoft hasn’t named them, there is no “concrete”. For all we know, Microsoft just made up the number.

**The US Supreme Court recently ruled in favour of Microsoft in its dispute with AT&T. Ironically, could that be used against Microsoft?**

I agree that the recent Supreme Court ruling seems to weaken patents (and they actually left it open whether

‘intangible’ things like software can be patented at all!), but I actually suspect that Microsoft too is really happy with that ruling. Microsoft is likely to have many more patent problems than Linux could ever have, and in general, most high-tech companies actually dislike patents; so I suspect Microsoft felt relieved that the Supreme Court limited at least some of the insanity of the current patent system.

And it doesn’t seem to impact the point of the Microsoft posturing with respect to open source: they seem to be in it for the FUD (fear, uncertainty and doubt), rather than for any actual legal reasons.

**How secure/protected should a Linux user feel in the wake of these allegations?**

Personally, I think it’s just posturing. And if it results in more companies doing patent cross-licences with Microsoft, I think Microsoft will be happy—that may well be the primary motivation.

But I’m not a lawyer, nor do I intend to start playing one on TV (or in the tech press). So this is just my personal interpretation. The fact that Microsoft didn’t actually name any of the patents makes me think it’s just FUD and hot air.

**How is the Linux community preparing to defend itself?**

Again, none of the patents were named. We actually have much better IP rights controls than anybody else in the industry, thanks to everything being out in the open. There’s no question that we’d ever have any hidden thing that secretly violates somebody else’s patents or copyrights.

**What do you think Microsoft wants to achieve through this threat? What are the prospects Microsoft may sue the customers using open source?**

I really cannot speak for Microsoft. I suspect they are noticing that they have a hard time competing on technical merit or price, and are trying to muddy the waters. I think they’ve already stated that they aren’t in it to sue people, but again—you’re asking the wrong person.

*As told to Swapnil Bhartiya, assistant editor, EFTimes.com*



Linus Torvalds

market. Also, the corporate open source world was posing direct competition to Microsoft's products. The Redmond giant needed a plan to take on the market. So it did what anyone else would have done—it started tapping open source companies for cross-licensing deals.

“They want to put a tax on open source—even though they had nothing to do with its development. Their modus operandi is to seek a fee from every computer user in the world, and they can't imagine someone using a computer without becoming a licensee of Microsoft. It feels like ‘free money’ to them, so why not? They're only acting in their shareholders' interests, which they are legally required to do,” says Brian Behlendorf, CTO, CollabNet.

### Get them before they get you

The industry seemed to be well aware of Microsoft's intentions. There was a remote fear within the industry that Microsoft might use its patent portfolio to scare other companies and force them to sign cross-licensing deals. Biggies like IBM, with larger patent portfolios than Microsoft, would be well prepared to counter Microsoft in court, but no one else would want to wrestle with the legal team of one of the world's biggest companies. So, some of the giants—IBM, Novell, NEC, Sony, Red Hat and Philips—came together and erected a firewall, Open Invention Network (OIN), as a shield against Microsoft's possible threats. Under the leadership of Jerry Rosenthal, ex-vice president, intellectual property and licensing business, IBM, OIN is committed to providing security to its members against any licensing threat posed by

proprietary giants like Microsoft.

Jerry Rosenthal, as the chief executive officer of OIN, set out to acquire patent after patent, creating a pool for the open source community and corporate world. This pool of patents was to be used for cross-licensing purposes to defend the



**“Our agreement with Microsoft is in no way an acknowledgment that Linux infringes upon any Microsoft intellectual property.”**

—Ron Hovsepian, CEO, Novell

GNU/Linux environment, as well as to make these available to support GNU/Linux by licensing them on a royalty-free basis.

### Microsoft exploits GPL's zero day vulnerability

The creation of OIN seemed to have thwarted Microsoft's plans to a great

extent, but it couldn't let go of the lucrative open source market so easily. Microsoft succeeded in getting one of the GNU/Linux players, Novell, into its camp. On November 2, 2006, Novell and Microsoft signed a pretty controversial deal. On the face of it, the deal was projected as an effort to smoothen interoperability between the two platforms, but there was surely something lurking behind the smokescreen. And it was pretty visible in the press release issued by the two companies: “The patent cooperation agreement enables Microsoft and Novell to give customers assurance of protection against patent infringement claims. It gives customers confidence that the technologies they use and deploy in their environments are compliant with the two companies' patents.”

Through this deal, Microsoft not only got access to OSS, but also sent an indirect message that GNU/Linux infringes on some of its patents. Thus, those who use Novell would remain immune to any lawsuit Microsoft may file against those who violate its patents.

This was a wake up call for the GNU/Linux community. The Free Software Foundation immediately got into the act and started discussions to revise and update the GNU GPL; to patch the holes that Microsoft had exploited to sign the deal with Novell.

Releasing the third discussion draft for GNU GPL version 3, on 28th March 2007, Richard Stallman, president of the FSF and principal author of the GNU GPL, wrote on the FSF website, “The GPL was designed to ensure that all users of a program receive the four essential freedoms that define free software. These freedoms allow you

to run the program as you see fit, study and adapt it for your own purposes, redistribute copies to help your neighbour and release your improvements to the public. The recent patent agreement between Microsoft and Novell aims to undermine these freedoms. In this draft, we have worked hard to prevent such deals from making a mockery of free software.”

However, even if the doors to exploit the ‘zero day vulnerability’ in GNU GPL were shut, there still seemed scope for Microsoft to not only make money out of the deal, but also re-enforce its claim that GNU/Linux infringes on its patents. Microsoft then did something that infuriated the open source community even more. In the months of March and April, it signed controversial cross-licensing deals with Fuji Xerox and Samsung Electronics Co. It was made clear in the press release issued by Fuji Xerox that it “will obtain access to Microsoft’s patents for Fuji Xerox’s existing and future product lines, including products that incorporate proprietary source and open source software, such as Linux.” Whereas the Samsung-Microsoft deal announcement read, “...Samsung will also obtain coverage from Microsoft for its customers’ use of certain Linux-based products.”

Experts believe that Microsoft has accomplished what it wanted to achieve. According to Laurent Lachal, director, open source research, Ovum, an independent research firm, “It seems to work. Following the open source-specific patent agreement with Novell (which does not prevent Novell from suing

Microsoft should the latter become too overly confident), the company has signed IP deals with Fuji Xerox and Samsung that cover both closed and open source software.”

## Shock and awe

There are many players who rely on GNU/Linux, and here was a possibility



**“It’s time to stop the accusations and show the evidence.”**

—Jerry Rosenthal, chief executive officer, OIN

to use a shock and awe strategy to intimidate them. Observers feel that this move might scare those players, forcing them to sign cross-licensing deals with Microsoft. The best thing Microsoft could come out with was fresh claims that GNU/Linux infringes on its patents. Only this time, it gave a number as well—235.

But the GNU/Linux community seems unaffected. “There are collective industry groups like the Open Innovation Network and our own legal programmes at the Linux Foundation that aggregate patents against predatory patent trolls. With our members’ backing, the Linux Foundation has created a legal

defence fund to protect users or developers of open source software against malicious attack. While we don’t expect to, we will invoke this fund, if needed, to defend Linux,” avers Zemlin.

The confidence in organisations like OIN is deeply rooted within the FOSS community. “I sleep pretty well at night without a concern that there is some time bomb that Microsoft could set off that would overnight remove my ability to use critical open source software. I do not plan to have to pay Microsoft any money; at worst, I might have to give up a feature here or there that has to have a workaround because none of the above approaches work. Despite that, it’s worth worrying enough about the issue to make sure we have strong legal institutions in open source—the non-profits around major foundations, the Software Freedom Law Centre, the Open Innovation Network, etc,” says Behlendorf.

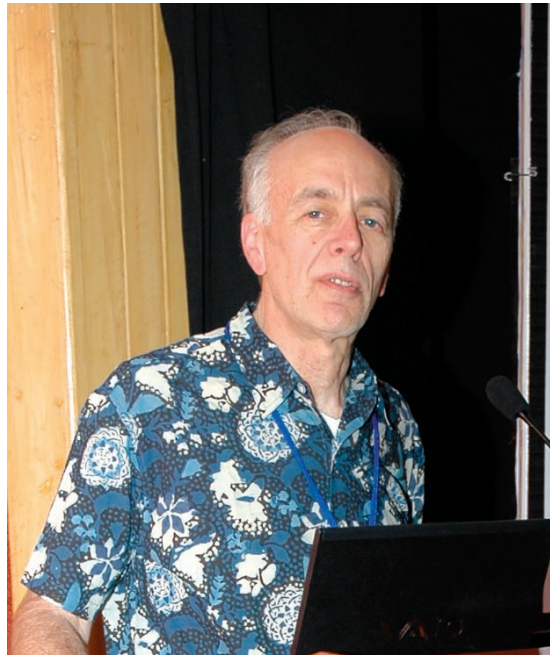
In the wake of these allegations, Rosenthal decided to shoulder the task of building trust and a sense of security amongst GNU/Linux players, by stating, “This is not the first time that unsubstantiated claims of patent infringement have been levelled at Linux. Moreover, just as in the past, these claims are made without disclosing any evidence. It’s time to stop the accusations and show the evidence.”

## Name it to claim it

Microsoft has not yet revealed the specific infringements, although it has described the areas. “Out of the 235 patents it claims to have been violated by GNU/Linux, 42 are said to be part of the Linux kernel, about 45 are part of OpenOffice.org, and about 65 are related to the graphical user interfaces (in GNOME and KDE, for example),” says Tony Wasserman, executive director, Centre for Open Source Investigation, and director, the Software Management programme, Carnegie Mellon West.

According to Lachal, “Microsoft has been claiming that open source software infringes on its patents for some time but had so far declined to give any details. Microsoft is still refusing to specify which patents are being infringed (a common stance among IP holders: it is not in their interest to divulge their IP cards until it becomes legally necessary).”

“It’s important to note that the US Patents and Trademarks Office has very little expertise in the area of



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software, which makes it possible for someone to patent almost anything. It’s hard to know if Microsoft’s patent claims would be upheld if they were

challenged and reviewed,” adds Wasserman.

Behlendorf, too, is not buying any of Microsoft’s claims, “Until they reveal specifics about which patents they feel conflicted, there’s really no way to determine how concrete their claims are.”

Defending the company’s claims, Horacio Gutierrez, vice president of intellectual property and licensing, Microsoft, says, “Even the founder of the Free Software Foundation, Richard Stallman, noted last year that Linux infringes well over 200 patents from multiple companies. The real question is not whether there exist substantial patent infringement issues, but what to do about them. Microsoft and Novell have already developed a solution that meets the needs of customers, furthers interoperability, and advances the interests of the industry as a whole. Any customer that is concerned about Linux IP issues needs only to obtain their open source subscriptions from Novell.”

Ironically, even Microsoft’s closest ally in the open source world, Novell, doesn’t seem happy with the allegations made by Microsoft. Bruce

## FOUR WAYS IN WHICH MICROSOFT’S ‘CONCRETE’ PATENT CLAIMS COULD BE RENDERED MOOT:

- **Disputed infringement:** After a careful look, it might turn out that Microsoft’s claim that a particular patent applies doesn’t actually apply. Ultimately, in a dispute, it’s a judge and jury trying to determine this, which could be a very complicated and technical debate. Generally, though, patent suits aren’t even launched unless the infringement is very clear, so there’s a high burden on Microsoft to prove infringement.
- **Workaround:** It’s entirely possible that a given claim can be worked around to still accomplish some goal, and that might be the most cost-effective way for the community to respond.
- **Invalidation:** Many patents are awarded on the flimsiest of justifications, and can be invalidated by a public search for prior art or petitioning the PTO for a re-examination based on obviousness. The obviousness test has been made tougher recently by decisions made by the US Supreme Court, which is good news as it may make it harder for a trivial invention to be covered. Any public disclosure of a patent claim against a high-value open source project will lead to an army of people looking for prior art. The Public Patent Foundation has recently organised several such public invalidations.
- **Mutual defence:** There are many significant patent holders now who are also big stakeholders in open source—IBM, Sun, HP, Novell, Oracle, and more. Any claims by Microsoft that would affect these companies, or even small patent holders, could incite them to make similar claims against MS, forcing MS to back down. The Open Innovation Network is an organisation of Linux-using companies who have contributed a set of patents for just such a ‘mutual defence’.

Courtesy: **Brian Behlendorf, CTO, CollabNet**

Lowry, director, global public relations corporate services, Novell, writes on the Novell Open PR, "There's an article out in *Fortune Magazine* talking about Microsoft, intellectual property and open source. Because of our interoperability agreement with Microsoft, which includes a patent element, Novell is featured in the story. We've received a number of inquiries about the story, in which Microsoft lays out the specific number of patents it claims are violated in Linux and other open source projects. While providing numbers is new, the claims that violations exist are not new. In response to similar Microsoft claims back in November, we put out an open letter from our CEO, Ron Hovsepian, which states our position on this issue. That position hasn't changed."

Hovsepian wrote in that open letter, "We disagree with the recent statements made by Microsoft on the topic of Linux and patents. Importantly, our agreement with Microsoft is in no way an acknowledgment that Linux infringes upon any Microsoft intellectual property. When we entered the patent cooperation agreement with Microsoft, Novell did not agree or admit that Linux or any other Novell offering violates Microsoft patents."

### So sue me!

Through this calculated move to declare that GNU/Linux infringes on its patents, Microsoft may be trying to take the shock and awe game to the next level. There is a possibility that Microsoft might now get into low-profile talks with industry players and convince them to sign cross-licensing deals. To push its agenda ahead, Microsoft might even try to slap some lawsuits against competitive companies. Even if the court rejects appeals relating to the first round of patents, Microsoft would be ready with another set. It

has enough resources to drag a legal dispute. In a situation like this, the defending company would be forced into an out-of-court settlement. And that translates into one thing: cross-licensing and royalties.

"It seems unlikely that they would



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—Laurent Lachal, director, open source research, Ovum

go after the Linux companies initially, who have everything to lose and so would fight to the end. It's much more likely that they would first go after a company whose use of Linux or open source is incidental, so Microsoft could reasonably force them to switch back to MS software or to pay a small fee to settle. But the history of SCO

trying to do the same thing is probably discouraging Microsoft from going any further than they are today," says Behlendorf.

Many industry experts feel that it would be a poor idea for Microsoft to scare GNU/Linux users through patent infringement threats because almost every company has a mixed environment. Along with the open source solutions they use Microsoft products as well. It would make no sense for Microsoft to alienate its customers. Besides, some governments are also major users of proprietary software, even as they advocate open source software. It's nearly impossible to sue a government.

Will Microsoft sue the larger supporters of GNU/Linux, such as Sun (which pays many OpenOffice.org developers), IBM or Red Hat?

Wasserman believes that, "It would be a bad idea for them to sue people or companies. SCO has spent six years trying to pursue similar claims against IBM with no success. IBM is very well prepared to fight Microsoft on this issue, and Microsoft might well lose many of the patents that it claims as its own. I would also note that IBM has recently stated that it would not pursue claims on many patents that it holds, effectively giving them to the open source community. Finally, the stock price of Red Hat has not changed significantly since the Microsoft announcement, an indication that the investment community does not view the claims as a significant potential threat to Red Hat's business."

There is another reason why Microsoft might not want to take some companies to court for patent infringement. In a recent high-profile dispute, involving Microsoft and AT&T, the US Supreme Court sided with Microsoft rejecting AT&T's claims that Microsoft infringed on its

patents. In a separate case, judges also made it clear that courts should be more flexible in the way they interpret the standards governing whether patents are valid or merely 'obvious' combinations of previous inventions.

"I'm not a lawyer, but I did understand that decision to make it tougher to litigate internationally on software patents. The US Supreme Court, in another recent decision, also seemed to raise the bar for obviousness of patents by invalidating one patent that was a mere combination of two prior innovations. Microsoft has actually been fighting to limit the power of patents in some of these cases, and supports the patent reform bill currently in front of the US Congress. It makes sense—remember the Eolas decision? Bad patents, and bad patent law and precedent are just as dangerous to Microsoft as they are to open source—perhaps more so," says Behlendorf.

### May the force be with you

It has been made abundantly clear that big companies are in a much




**"When you take on a single member of this community, you take on everyone. That is a powerful force."**

—Jim Zemlin, executive director,  
The Linux Foundation

stronger position to counter Microsoft's shock and awe game. But, there is some element of fear amongst small developers or start-ups that want to stick to GNU/Linux. Who would come to the rescue of small players if Microsoft decides to go after them?

"We are engaged in improving software patents, as well, through our Open Source as Prior Art Program. Also, as I stated before, with our members' backing, the Linux Foundation has created a legal defence fund to defend users or developers of open source software against malicious attack. Organisations like the Linux Foundation exist to defend the community in cases like this. In addition, when you take on a single member of this community, you take on everyone. That is a powerful force," declares Zemlin with passion and conviction.

These words very well address the fear, if there was any! 

*By: Swapnil Bhartiya, assistant editor, EFTimes.com*



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Do you have a query,  
suggestion or a complaint?

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