What on Earth is OIN

Keith Bergelt fights patent trolls alongside this unique community.

Q OK, tell me what the Open Invention Network (OIN) is.

A The Open Invention Network is a unique entity, being a community of patent non-aggression with more than 900 participants – financially supported by Google, IBM, NEC, Philips, Red Hat, Sony and SUSE.

Q Oh. For a moment I thought we were finally doing an article on a Tolkien character. So the name Oin doesn't refer to a dwarf, then?

A No, of course not. OIN is a collaborative enterprise that enables innovation in open source, specifically Linux, by leveraging a portfolio of more than 900 strategic, worldwide patents and applications that's paired with a unique, royalty-free licence agreement.

The patent portfolio itself is worth a great deal – in the order of hundreds of millions of dollars – but any person or company can gain access to OIN's patents for free, as long as they agree not to sue anyone in the collection of software packages that are called the 'Linux System.' A licensee also receives royalty-free access to the Linux System patents of the 900+ other licensees. In essence, each licensee is agreeing to support patent non-aggression in Linux.

Even if an organisation has no patents of its own, by taking a licence it will gain access to OIN's whole patent portfolio with no field of use limitation.

Q Wow, that all sounds very nice and altruistic, but how does OIN make money? A dwarf needs his gold, after all.

A OIN's mandate is to preserve freedom of choice, and enable open and healthy competition in markets where Linux is deployed. OIN's charter is to create a patent litigation "no-fly" zone around Linux., and making money is not part of the model.

The OIN member companies mentioned earlier provide the funding to operate and support the purchase of patents and applications, as well as the creation of directed inventions. This gives the OIN the freedom to look at strategic intellectual property and purchase it when it deems it to be the right fit.

Q That seems fair enough. So what types of companies have become OIN licensees so far?

A OIN actually has a long list of technology industry stalwarts. These include internet companies such as Yahoo and Mozilla; networking leaders like Verizon, Juniper Networks and Cisco; social media companies like Twitter, Dropbox and Wikimedia; cloud companies including Rackspace, United Stack and PistonCloud, and essentially all of the major Linux distributions.

Q But why is OIN necessary? Surely everyone loves a good patent dispute?

A Unfortunately there are organisations that are looking to use intellectual property to stifle competition. As a result, OIN was created to enable and protect Linux developers, distributors and users from non-practicing entities (aka patent trolls) and companies

antagonistic to Linux and open source; and who instead of seeking to out-innovate platforms such as Android in the market place, are seeking to aggressively enforce intellectual property rights.

Q Trolls, eh? You sure this isn't about Tolkien? Anyway, how can poor quality patents affect the Linux community?

A In the last decade, we have watched the adoption of open source, and Linux in particular, become an engine of innovation. It touches people every day – ATM and online banking systems, smartphones and their apps, search engines, public and private networks, and an ever-growing group of desktop operating systems. Linux servers are the foundation of cloud computing. Linux and the innovations it has enabled are now incredibly widespread.

In a misguided effort to slow or stall the progress of Linux, we have observed certain

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organisations that either don't understand how to leverage open source or how to manage the integration of open source and proprietary technology, attempt to use patents – including poor quality patents – in an attempt to unduly influence the marketplace or unbalance the competitive playing field. The results of such efforts are quite often at odds with the original purpose of the patent system, which was, and remains, the enablement of innovation.

Q Joking aside, that sounds pretty horrible. How does this work?

A Organisations are leveraging their patents, in an ever-growing number of cases, via lawsuits. There are two different types of software patent suits. The first is between two practicing entities, or organisations that make or produce products or services based on their intellectual property. In these cases, one company sues a competitor for infringing one of its patents in the development of a product or service that has taken market share from them. Many practicing entities sue for patent infringement in good faith, believing that they will be unable to recoup the costs of their research and development in the market. Others, having lost the battle for customers, turn to leveraging poor quality patents in a last-ditch effort to stifle their competition. Because of software's extremely short time frame, an injunction stopping a disputed program from hitting the market for six months or a year can significantly hinder a small competitor.

Q So where do these annoying patent trolls come in?

A I was just coming to that. There are also suits where a company – one that does not sell anything or make anything –sues a practicing entity for patent infringement with poor quality patents. Suits where the plaintiff doesn't make or sell any products are more commonly referred to as 'patent troll' suits.

At one point in time, trolls or 'patent assertion entities' primarily targeted large companies with deep pockets. These days, more small and medium-sized companies are being sued. This can create a problem, especially if the company is too small or cash-poor to step up and defend itself in court. Frequently, the primary 'food stuff' of patent trolls is poor quality patents, which can be acquired relatively cheaply yet can be used effectively to threaten operating companies into a settlement.

Q Nasty business. So what can be done to address the poor quality patent problem?

A According to OIN, the way to prevent poor quality patents from causing problems is to stop them from being granted in the first place. To do that, the OIN looks to leverage prior art. The heart of most of the world's patent systems includes the idea that a patent can only be granted on something that is new or novel. In other words, you cannot have a patent on an innovation or inventive step that is already documented by people in any given field. Prior art is a legal term that means all information that was available to the public before a given date that demonstrates the patent is not new or novel. If the information was available before an application is received, then a patent is not supposed to be granted. The public is a vast place these days, so in practice the prior art that considered is stuff that is documented, organised and readily searchable by a patent examiner. If patent examiners are unable to keep up with what is current, then they don't have grounds to deny non-novel ideas.

In computer science this is a particular problem, both because innovation moves very fast and because there is no single place to look for information on new inventions. Even in places where a lot of new ideas are logged, such as public repositories, much of the code isn't documented in a way that describes what it actually does. For example, a complete search of Gitorious and GitHub wouldn't really help examiners ascertain the current state of the art – even if they had time to look at everything there.

Q How can the Linux community help make prior art more readily available to patent examiners?

A The Linux community is used to working together to solve common problems, and making prior art easier to find for the United States Patent and Trade Office is one of them. There are two primary methods by which the USPTO invites the public to participate in the process of patent examination. The first is by submitting relevant prior art related to current patents or applications to prove that a specific patent or application is not novel. The second is by creating defensive publications, which are published on completely new inventions, to ensure that those very inventions cannot be patented by others later. For both methods, there are community resources to help make the process of participating easier.

Q Sounds great – can you give us an example of this happening?

A Sure. Several initiatives have sprung up to crowdsource prior art for specific areas, with OIN supporting all of them. In fact, OIN, along with the Linux Foundation and the Software Freedom Law Center, sponsor Linux Defenders (**www.linuxdefenders.org**). This project works specifically with the free and open source community to generate defensive publications. When an inventor wants to document something innovative without seeking a patent, they can create a defensive publication. The invention then enters the public domain and can't be patented by any other party. It also becomes part of a prior art database that is commonly searched by the USPTO, which helps block later patent applications on the same innovation.

Many companies use defensive publishing in conjunction with a patent or two to augment their defence. For the Linux community, we are harnessing these legal documents to bypass the creation of poor quality patents and ensure that the inventors have unrestricted access to their inventions. Linux Defenders was established to work, free of charge, with the Linux and open source community to catalog inventions and have them hosted in the key databases where patent examiners look for prior art. By participating in Linux Defenders, developers, distributors and users can play an active role in protecting themselves and the community from the threat of poor quality patents. It encourages the Linux community to become active participants and help significantly reduce the number of poor quality patents that could hinder Linux's growth.

Q OK, you've convinced me. I want to join the OIN community. How complicated would it be for me to sign up?

A Joining the OIN community through the licence agreement is very straightforward. The licence agreement is essentially the same for everyone – from large companies to new startups to individuals – and can be viewed at **www.openinventionnetwork.com**. LXF