Rigorous empirical research on intellectual property

How OSS licensing could coinhabit with standards development organisations' existing IPR policies

Interview with
Axel Ferrazzini, Managing Director, 4iP Council

Q&A

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Introduction

Over the past few years, standards development organisations (SDOs) have been assessing how open source software (OSS) could be used to complement standardisation activities. Given that most SDOs have pre-existing intellectual property rights (IPR) policies based on fair reasonable and non-discriminatory (FRAND) access to essential patents, a key challenge for SDOs has therefore been to determine how OSS licensing could coinhabit with SDOs' existing IPR policies. This has led to considerable discussion and debate and some confusion.

Given the diversity of views on the topic, this document is intended to provide some clarity on some critical aspects. In order to do so, a 'Question & Answer' format with Axel Ferrazzini has been chosen, as Axel Ferrazzini has much experience in this field.

Axel Ferrazzini, who is Managing Director of 4iP Council, is an active participant to SDOs; an elected member of the Board of ETSI; as well as an active contributor to the ETSI Board OSS group, since its creation in 2014. In providing these answers, Mr. Ferrazzini has drawn on two recent research papers by Assist. Professor Martin Husovec and Jingze Li, from the Tilburg University and David Kappos' (former Director of the United States Patent and Trademark Office) articles published by The Columbia Science and Technology Law Review (1, 2).

All views expressed in this publication are those of the interviewee and do not necessarily represent the views of 4iP Council nor of its supporters. This document is intended for information only and is not to be understood as legal advice.

Do you think that standards development and open source projects should be undertaken under the umbrella of the same organisation?

Generally, the interest of the standards development community is to oversee the development of stable, interoperable specifications which allow products and software from different manufacturers inter-operate. The interest of the OSS community is to develop a software base for various infrastructure functions (compilers, operating systems, software libraries and the like) that any manufacturer or user can pick up for free and then tailor to their needs. Where these goals align, it should not matter which organisation runs the SSO project, provided the organisation's rules enable the OSS project without undermining the organisation's objectives (though other legal considerations may come into play).

In fact, a more critical real question is more how the SDO and the OSS project can facilitate an efficient exchange of information that would satisfy any potential concerns regarding how the OSS project would accurately map the technical specification. Should the participants of the OSS project be different from the participants of the technical specification process: how to ensure that all the parts of the standard specification are fairly implemented? One grey area, which deserves further research, is whether an SDO can oversee the development of software, e.g. implementing a standard, because this could raise competition concerns by uniformising the implementation and potentially excluding parts of the technical specification.

Could you explain the current debate about compatibility of OSS and FRAND?

There are different definitions of what open source actually is, different types of open source communities, as well as hundreds of available open source licenses that vary in terms and scope. Given this broad variety of open source licenses and lack of consensus on a definition, the Open Source Initiative (OSI), which is a private certification authority, has been trying for some years to provide guidance to the open source community and, in doing so, control the variety of open source licenses available, which could, by the way, be a potential competition issue.

Of relevance to standardisation is the disagreement over whether someone can contribute patentable subject-matter to an OS licensed project, using a license certified by OSI, yet still retain any patent rights as against use of that code in commercial projects (whether the OS license contains a patent clause or not). This disagreement has impeded the acceptance of OS licensed projects by SDOs with a pre-existing FRAND policy because it creates conflict with that policy. This threatens to undermine the most important strength of such SDOs; their ability to attract innovative technical contributions covered by patent rights.

Has the current OSS and FRAND debate undermined standardisation efforts?

History shows that the existing system:

- Has been incredibly successful in balancing the needs of OSS users and developers with the interests of SEP holders through appropriate permissive licenses.
- Is not broken and as such should not need to be changed.

How can one characterise some open source licenses as incompatible with the SDO FRAND commitment - and especially the ETSI IPR policy?

Under the OSI's recent position, it interprets a broad range of OSS licenses (including some that may not be party to the OSI) as possibly incompatible with a royalty bearing FRAND patent licensing regime, where the OSS license terms and the FRAND terms apply to the same patents. However, if some OSS licenses are limited to licensing copyright only, then such incompatibility issues fall away.

So OSS and FRAND are irreconcilable?

It is important to note that the disagreement is limited to OSI-certified projects; open source licenses do not actually need to be OSI-certified in order to be used to develop open source projects[1]. In fact, it is dubious whether an organisation like the OSI can impose its interpretation on license terms that were drafted by other parties, prior to that interpretation being given. As the OSI is a private organisation and does not represent the totality of the open source community, the OSI's definition of open source (Open Source Definition or OSD) is not be endorsed by all open source communities. As such there is no reason to have the OSD applied *de facto*, especially where it could be interpreted as seeking to essentially impose to royalty free patent licensing to what may be royalty-bearing licensing.

Much of the misunderstanding could be resolved by the OSI limiting its interpretation to licenses that its members have been involved in drafting – not third-party OSS licenses. I would add that none of the issues identified are insurmountable; many possibilities exist to ensure that SDOs and OSS could successfully complement each other.

In addition, I highly recommend reading this article written by David Kappos "The Truth About OSS-FRAND: By All Indications, Compatible Models in Standards Settings". In it Kappos covers several arguments that are often presented against the application of FRAND to open source including "*why some think OSD-compliant licenses and patent royalties cannot coexist and explain why that view is incorrect*".

Would it be possible to have a sort of hybrid open source license to reconcile the different parties involved in the current debate?

Being a very optimistic person, I am confident that there are already existing solutions. For example, a very interesting open source license that would merit more attention is the Open Air Interface (OAI) license. The OAI Public License v1.1 is a modified version of Apache v2 license, with the modified patent clause that allows contributing parties to make patent license available to third parties on FRAND terms for commercial exploitation.

Does it mean that Apache v2 is incompatible with the FRAND Commitment?

[1] Please see the OSI public archives on this topic.

No. The Apache v2 license *(permissive, royalty free patent grant including a strong patent retaliation clause[2])* requires any technology contributor to agree to a royalty free (RF) patent license covering its contribution to the specific OSS project. It does not cover licensing outside that particular contribution for that project. Apache v2 can be used in an RF-only FRAND situation (for example to promote and create tooling or testing software for the standards) only to the extent that those projects do not implement a royalty-bearing FRAND SDO specification. What Apache v2 cannot do is encourage patent holders who contribute their patents to the SDO specification under a FRAND royalty regime to then also contribute their inventions in code to the Apache v2 licensed code project. Using the Apache license will also not protect the Apache project code users from possible patent claims covering use of Apache projects, unless the patent holder expressly contributed its patented invention to the code under the OSS policy or the patent holder is relying on the OS code in its commercial applications, to such an extent that triggering the patent retaliation clause would be a sufficient deterrent.

Would permissive and copyright-only OS licenses, such as the BSD 3-clause and BSD 3-clause Clear licenses, be good candidates to facilitate the complementarity of FRAND standard-based and OSS?

Given that the original drafters of the BSD license did not intend it to have a patent clause, it is likely that the OSI interpretation of its OSD to BSD 3-clause[3] and BSD 3-Clause Clear[4] are incorrect. In the case that this Open Source Definition can be rejected then the BSD license would be as good a candidate, as may others. One downside with BSD 3-clause, as with many OSS licenses, is that its terms are not overly clear. For more on this I recommend the insightful article by David Kappos "Open Source Software and Standards Development Organizations: Symbiotic Functions in the Innovation Equation". BSD 3-Clause Clear as indicated by its name makes clear that it is a copyright - only license, and that it does not grant patent rights. As a result, any patents one would receive would necessarily be governed by the SDO IPR policy and not through the mere use of the SDO - provided software.

What are the limits of licenses including a royalty free patent grant if used in a FRAND SDO environment?

One solution to the concerns raised about the SSO/FRAND incompatibility is for FRAND-based SDOs to amend relevant OSS licenses used, to ensure that they are compatible with the SDO's IPR policies. The various options for this could be: use a common OSS license and make it subject to the SDO's IPR policy; use a bespoke or OSS copyright-only license with no ambiguities as to patent rights being covered; or an OSS license that expressly allows FRAND patent licensing, as regards to technology contributions. A further option is of course to encourage OSS development outside the FRAND SDO and collaborate accordingly.

Do you know any SDOs with a FRAND IPR policy having created a solution to facilitate the cohabitation with OSS projects?

Several SDOs such as the Broadband Forum, oneM2M and ATIS (one of the organisational partners of 3GPP) have chosen to license their open source projects under the BSD 3-Clause license, and subject to their IPR policy: it allowed these organisations to immediately have a clear framework for open source projects to be created and they could still amend and change their policy in the future if need be.

Another option would be for SDO's to prohibit commercial use of the OSS it develops. There is currently a debate initiated by some prominent open source participants. They have created open source licenses that restrict the ability to commercialise the OSS licensed thereunder. Those licenses are the Commons Clause and the Server Side Public License (SSPL)[5].

Is the current debate insolvable?

[2] "Patent retaliation" clauses are included in several free software licenses. The goal of these clauses is to create a penalty so as to discourage the licensee (the user/recipient of the software) from suing the licensor (the provider/author of the software) for patent infringement by terminating the license upon the initiation of such a lawsuit. (source Wikipedia)
[3] https://spdx.org/licenses/BSD-3-Clause.html
[4] https://spdx.org/licenses/BSD-3-Clause-Clear.html
[5] More information may be found here.

I hope that it is clear that there are OSS licenses that are compatible with FRAND. There is consensus that open source licenses exist that would preserve the interests of all the parties willing to encourage the collaboration between SDOs and OSS communities. It only requires a common determination to collaborate.

In fact, both research papers from Assist. Professor Martin Husovec and Jingze Li suggest that standardisation and open source software are complementary. The former usually comes with FRAND commitment (especially in the ICT sector) which can comprise either royalty bearing or royalty-free conditions, and the latter is highly dependent on the type of open source license chosen, as these started as licenses on software code, later also including explicit patent clauses in a few cases.

The Industry should not be distracted by a few frictions that a handful of individuals are trying to magnify. The community can focus on the existing solutions and ensure successful complementarity.