A Chronicle of the Open-Source Software Licensing

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Open-source software has pumped up a revolutionary change in the way the software industry functions. But it has also increased the concerns related to software licensing issues, when we receive, make copies or distribute any software. Generally, a proprietary software license agreement clearly mentions about its transfer of rights to use, modify, copy, distribute or derivative works. But due to a variety of open license standards and their varied impact, sometimes confusion arises for volunteers/open source developers to choose the proper licensing for their software code. In this context, a clear understanding is necessary about the open source licensing issues for the FOSS developers, enthusiasts and volunteers [1].

Software as an intellectual property can be protected by patents and copyrights. A patent protects the invention or the novelty of a work, whereas a copyright protects the expressions of an idea e.g. an artistic work (e.g. music, computer software as literary work, films, designs etc.). In fact, copyright is a bunch of rights given to the creator(s) of the art including rights of reproduction, communication to the mass, distribution, adaptation, overriding and translation of the work. The Indian Patent Act was formulated in 1970, later updated till March, 2015. The copyright act, of 1957, applicable from 21st January 1958, has the most substantial amendment in 2012.

Let us quickly draw the comparisons between copyright and patents in a simpler fashion.

Parameter(s)	Patent	Copyright
What to Protect?	Inventions or ideas (processes, innovative ideas, devices, drug compositions, manufacturers etc. and their improvements	Original works of authorship (books, articles, songs, software code, photographs, sculptures, choreography, sound and video recordings, films etc.
Requirement(s)	The piece of work must be original, creative and fixed in a perceptible medium	The invention or idea must be new, useful and unambiguous
Granted Right(s)	Right to prevent others from making, selling using or importing the patented invention	Right to prevent others from making, selling using or importing the patented invention
Tenure in India	20 years from the date of filing	Generally 60 years. In the case of literary, dramatic, musical and artistic works, the 60 years is counted from the next year from the year of death of the author

***Table 1:*** Comparison chart between Indian Patent and Copyright.

Software licensing is extremely important which not only helps the author(s)/organization(s) but the users also by means of protecting the authors from the legal viewpoint as well as controlling the use and distribution of the said software. If there are multiple contributors in a software project, licensing text is the proper place to recognize them all [2].

Figure 1: Various types of software licensing standards.
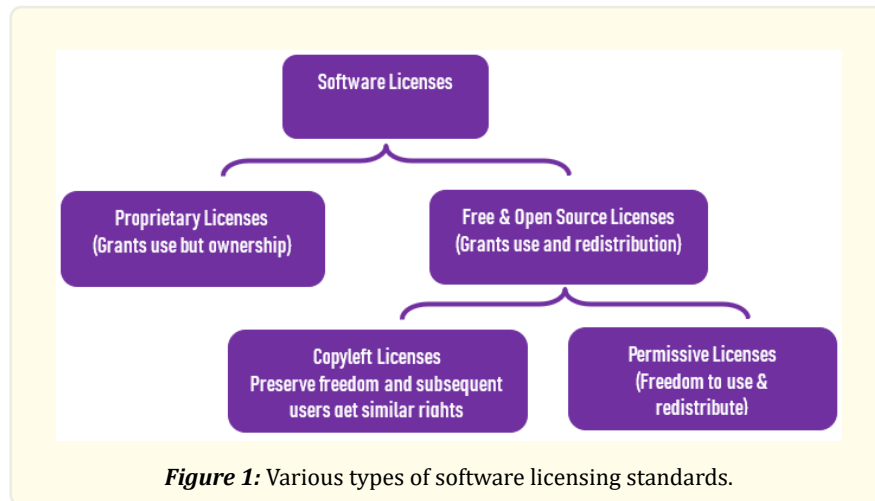
In the case of *proprietary licenses*, there are three categories in which we can classify them. Single user license (sometimes called a floating user license) is a kind of proprietary license which can be run on a single computer or equivalent device (mobile, tablet etc.) as an executable. It requires a license key for the activation of the software. This activation process may be done in both ways, online and offline, depending on the options given by the software. Sometimes the software comes with a hardware key to ensure the avoidance of multiple installations. The next one is the enterprise proprietary license which provides a multiple-user or site license for an organization. The last one is distributor licensing in which the software is re-distributable but the royalty is to be shared with the author or organization.

The free software contains freeware and shareware which are also executable files. Freeware is distinctly different from shareware in all aspects. It is generally copyright protected but has the facility to use it unlimitedly. Sometimes these ask for donations but hold control of any future development of the software. Whereas shareware gives the user community a chance of using the software before buying it. Sometimes most of the functionalities are not available or the number of using the software is restricted.

Rights in Copyright

Figure 2: Software Licenses in context of copyrights by Prof. Mark Webbink, New York Law School.
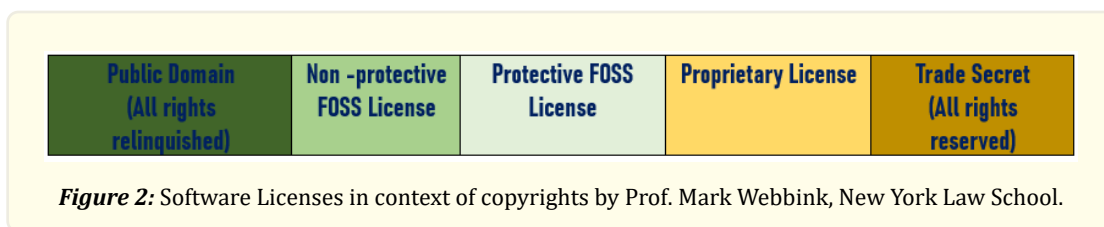
Open Source Licensing

From the above figure, it is now clear that open-source licensing is totally different from the public domain because there is no owner of the software in the public domain. One and only software owners can put the software in the public domain where no claims can be made by the owner on any aspect of the software. Open source licensing can be broadly categorized into two parts; copy-left (protective) and permissive (non-protective) licenses.

Copyleft License

Such type of licenses generally gives the same freedom to the users similar to the author with some freedom level.

Typically the freedom level is described below.

- Freedom 0 - Freedom to use the work at no cost.
- Freedom 1 - Freedom to study the work at no cost.
- Freedom 2 - Freedom to copy and share the work with others at no cost.
- Freedom 3 – Freedom to modify, distribute the modified and derivative work at no cost.

For example, GNU GPL (General Public License) is stricter than LGPL (Lesser General Public License) [3] but both of them are copy-left licenses. Using the LGPL allows the library/software code to be used in proprietary programs whereas using the ordinary GPL for a library/software code makes it available only for free programs, making it advantageous for open-source developers. The GPL license is aimed at giving and protecting all users unlimited freedom to use, study, and privately modify the software, and if the user adheres to the terms and conditions of the GPL, freedom to redistribute the software or any modifications to it.

Permissive License

The software which comes under this license can be edited, copied, added to, and subtracted from, etc. without any obligation to share the updates with the author(s). Coders can collect the permissive-licensed software, make necessary changes or additions, keep their new version to themselves, or share it if they choose to [4]. This is a major feature if you're looking to create proprietary software that you can sell and keep secret from competitors — and one of the main reasons why permissive licenses are popular.

Conclusion

In a nutshell, it can be stated that the IPR-related fields have been observing tremendous growth in India nowadays, due to the emergence of a huge number of start-up engagements and digital innovations. Research and developmental projects are increasing both for government and private parties, impacting global growth in digital domains. In a recent survey by KPMG, India was uplifted as the 3rd largest tech innovation leader in the globe, seriously impacting the world digital economy. Hence, the significance of intellectual property rights has become tremendously important for research, developmental and engineering projects (R, D & E) around India and for the world [5].

References

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