



Advancing Innovation That Makes A Difference

APPROACHES TO COMMON LICENSES

*Hosted by Matt Upton and Zack Stacy
IP Development Team*

PROTECTING SOFTWARE

- Patent

- [*Alice v. CLS Bank*, 134 S. Ct. 2347 \(2014\)](#).
- invention should be much more than an “abstract idea”
- if the invention is directed to an “abstract idea,” then it must include/claim additional elements that “transform” the abstract idea into a patent-eligible application.
 - it improves computer functionality in some way (i.e. it enables certain computations that were previously unavailable, speeds up processes, or requires fewer resources), or
 - it solves a computing challenge in an unconventional way.

- Copyright

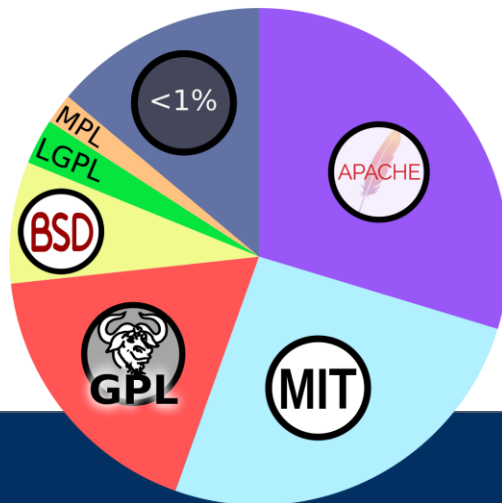
- Common Law Copyright
 - Automatic at the time the code is fixed in a readable medium
 - The author is the person that writes the code
- File w/ Copyright Office
 - Software typically register as literary work
- Most common form of software protection

OPEN-SOURCE LICENSES VERSUS CREATIVE COMMONS LICENSE

- Open-source License (OSS)
 - Software license that allow content to be used, modified, and shared
 - Two main categories
 - Permissive
 - Copyleft
 - Usually require attribution
- Creative Commons License (CC)
 - Public copyright licenses that enable the free distribution of a copyrighted “work”
 - Recommended not to use CC license for software
 - Baseline Rights
 - Attribution
 - Share-alike
 - Non-commercial
 - Derivative works

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OPEN-SOURCE LICENSES

- A copyleft license allows users to use, modify, and share the work under the condition that the reciprocity of the obligation is maintained. Components with a copyleft license require users to make their code open for use by others as well.
 - Dependencies with permissive licenses like MIT, Apache 2.0, ISC, and BSD allow you to license your project however you want.
- On the other side of the spectrum are the permissive open source licenses, which give users the freedom to use, modify, and redistribute, and allow proprietary derivative works, while placing minimal obligations or restrictions on users.



96%

of the total codebases
contained open source



77%

of all code in the total codebases
originated from open source

[2024 Open Source Security and Risk Analysis Report](#)

PATENT CLAUSE CONUNDRUM

- Most tech transfer offices abhor them / Industry loves them
- Apache 2.0
 - “3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. . . .”
- Software licenses solve a small category of patent problems.
- Grant: require that distributors of a software package give recipients a license to use any necessary patents, and
- Retaliation: make patent aggression less attractive by revoking patent rights that any aggressor received through the license

UNIVERSITY TTO'S ARE MOSTLY WRONG

- Popular licenses (MIT & BSD) were created during the darkest days of software patentability was the first Federal Circuit's decision explicitly recognizing the patentability of software.
 - Licenses that do not have express patent grants may “grant” implied patent licenses (equitable and legal estoppel)
 - No major open-source license contains a reservation of rights (exception = MPL 2)
- “... where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted.” (Apache 2.0)
 - This passage stipulates that a license is only granted for those patent claims that are both (1) licensable and (2) necessarily infringed when using the relevant open-source software.
- Retaliation clause,
 - revokes the license in case a software user themselves raises a patent infringement claim against the open-source software.
- Open source is international not just US.

"Any language used by the owner of the patent, or any conduct on his part exhibited to another from which that other may properly infer that the owner consents to his use of the patent in making or using it, or selling it, upon which the other acts, constitutes a license and a defense to an action for a tort."

MIT LICENSE

Permission is hereby granted,	That's a straightforward start to the granting of permissions.
free of charge,	No fee is needed in order to benefit from the permission.
to any person obtaining a copy of this software and associated documentation files (the "Software"),	We have some basics defined: subject of the license and who is to benefit.
to deal in the Software without restriction,	Well, that's pretty good. Now we are getting to the heart of the matter. We are not messing around with nuance: "without restriction" is pretty clear.
including without limitation	This introduction to a list of examples points out that the list is not a backhanded limitation: It is a list of examples.
the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so,	Suggestion of exclusive rights of a <u>patent owner</u> and exclusive rights of a <u>copyright owner</u>
subject to the following conditions:	The permissions are subject to a condition.
The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.	typical of so-called permissive licenses.
THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.	For completeness, let's include the disclaimer.
the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so,	We have a mixed assortment of actions one might undertake with respect to software.

OPEN-SOURCE PATENT GRANTS

License	Capture	Grant Applies To
Apache 2.0	Patents infringed by contributions or combination	Entire work
CDDL	Patents infringed by contributed software	Contributions+Combination
GPL3	Patents infringed by Contributor Version	Contributor Version
BSD+Patents	Patents infringed by contributions or combination	The software
Mozilla 2.0	Patents infringed by Contribution or Contributor Version	Contributions and Contributor Version

DEFENSIVE TERMINATION

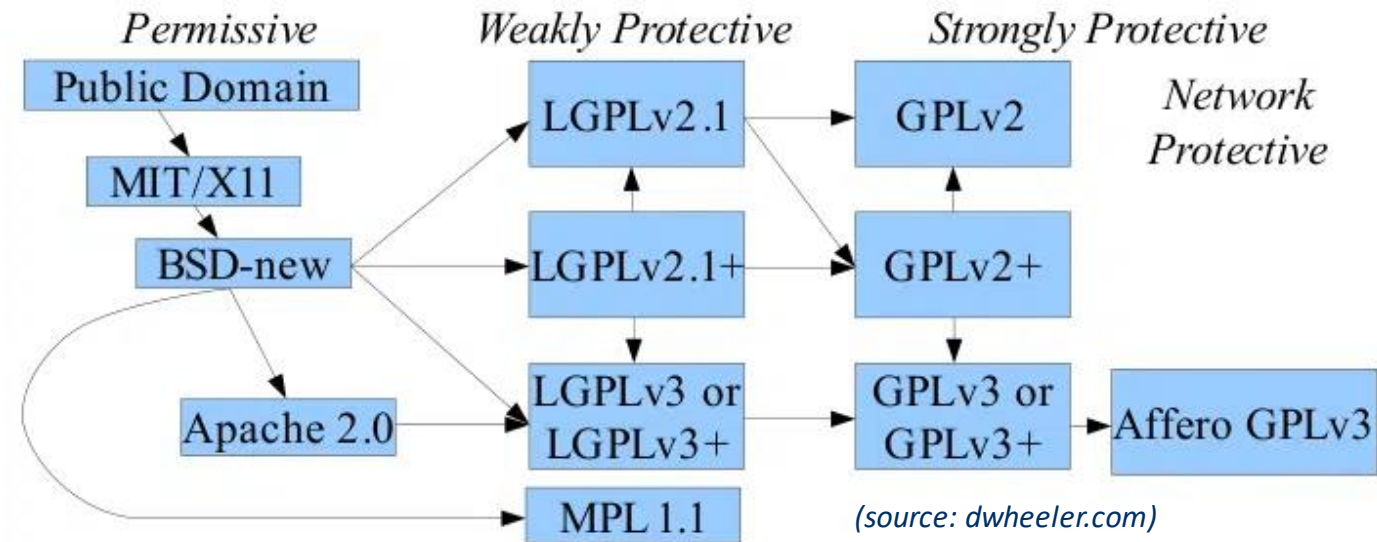
License	Trigger	Terminated Rights
Apache 2.0	Any patent claim (including cross-claim or counterclaim) accusing the Work of direct or contributory patent infringement	Patent grants from all contributors
CDDL	Any patent claim (excluding declaratory judgment actions) against a contributor accusing the Contributor Version	All rights. 60-day cure period.
GPL3	Any patent claim accusing the software	All rights
BSD+Patents	N/A	N/A
Mozilla 2.0	Patent claim accusing the software (excluding declaratory judgment actions, counter-claims, and cross-claims)	All Rights

CONFLICTS & MULTIPLE DEPENDENCIES

- The '24 OSS report noted that although license conflicts were down—they were found in 53% of codebases as compared to 65% in 2020

Permissive licenses are compatible with each other.

Permissive licensees are compatible with MOST copyleft



The most problematic practice is combining two copyleft licenses. As a rule of thumb, copyleft licenses are incompatible unless they have explicit compatibility provisions.

ADDITIONAL CONTRIBUTOR AGREEMENTS

- Your project uses an open-source license that does not include an express patent grant (such as MIT).
- Your project is under a copyleft license, but you also need to distribute a proprietary version of the project. You'll need every contributor to assign copyright to UK (but not the public) a permissive license.
- You think your project might need to change licenses over its lifetime and want contributors to agree in advance to such changes.

GRANT REQUIREMENTS

- Some NSF grants require making source code available

(see NSF 22-572: Pathways to Enable Open-Source Ecosystems (POSE))

- (i) be publicly accessible preferably via an open-source license (proposers are encouraged to consider licenses approved by the Open-source Initiative)
- (ii) have some external third-party users and/or content contributors.
- NIH encourages OSS. Release of research software; however, may be restricted when:
 - Patent protection for the software is under consideration.
 - The software code contains or may be used to obtain personally identifiable information.
 - The software is associated with a medical device.
 - NIH recommends consulting your institution's Technology Development and Transfer Office or Sponsored Projects Office as appropriate to determine whether you should restrict release of your research software.
- NASA's Earth Science Data Systems (ESDS) Program requires that all software developed through research and technology awards (i.e., Research Opportunities in Earth and Space Science [ROSES] or unsolicited proposals) or other government-funded development is to be made available to the public as Open-source Software.
 - This policy strictly requires "permissive" licensing when no other restrictions exist; thus, only permissive licensing shall be accepted and used for Open-source Software development. In contrast, an example of a "restrictive" license is the GNU General Public License

PATENT + OPEN SOURCE

- OSS v. Proprietary (false dichotomy)
- A patent is a right to alienate (don't have to use)
- Defense: against someone else patenting that functionality and asserting the patent against the OSS.
- Offense: prevent someone from replicating the functionality of the OSS and licensing it under a proprietary license.

Common University Pitfalls

1. If someone is going to make money off work done by the university, the university should get a cut. This leads to policies that either make open source difficult or require non-commercial use.
2. If there is no money to be made, the university is happy with open source, but mostly doesn't help to make it happen. Either the creators must state that the work cannot be commercialized, or again, a license that forbids commercial use is required.

PATENT + COPYLEFT

Why then, would anyone want to obtain a patent on an invention that is going to be distributed under the GPL?

1. The author may plan to license the patent to others to produce a revenue stream
2. The author may want to assert his patent rights against redistributors who do not conform to the GPL license terms (for example, by failing to redistribute under the GPL)
3. The author may want to have patent rights to use as an offensive or defensive weapon against infringers who are not using the GPL'd software and
4. The author may plan to also distribute a non-GPL'd version of the software.

HOW WE CAN HELP

- Strategies for distribution and protection
- Addressing conflicts in existing licenses
- Evaluation of OSS used in the development of the innovation
- Authorship evaluations
- Selection of open-source license

Q&A



Office of Technology Commercialization

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otcinfo@uky.edu

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