FOSS 라이선스 분쟁과 특허이슈

2012. 06. 21.
Lee Chul Nam

SW분야의 지재권 분쟁

FOSS Community IPR

자사의 IPR

Proprietary IPR
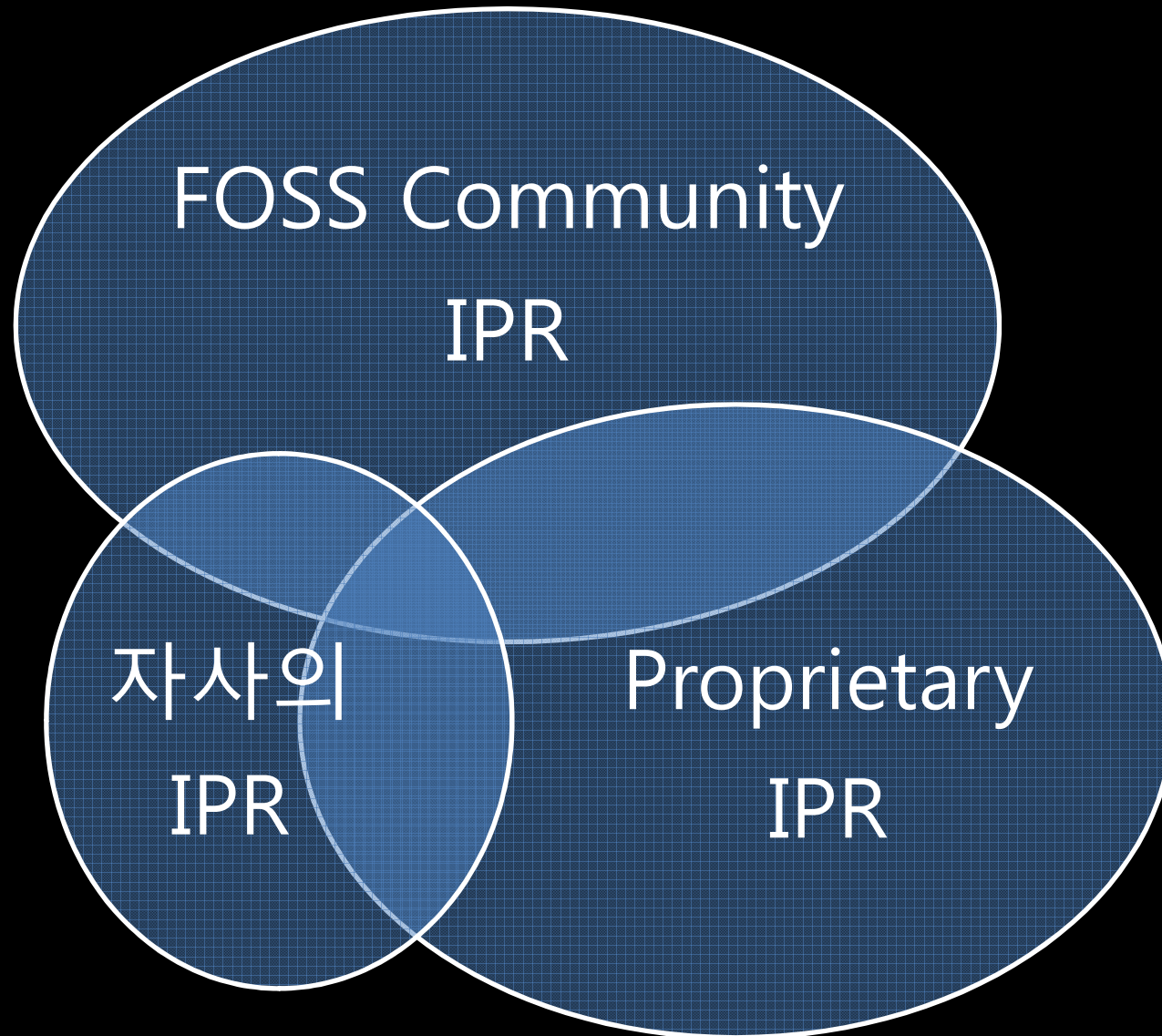
AGENDA

- FOSS License의 의미
  - FOSS 라이선스의 기본원리
  - FOSS 라이선스의 주요 내용

- 저작권 관련 분쟁
  - Oracle v. Google

- 특허권 관련 분쟁

- 자사의 지재권 관리

FOSS License

- FOSS 라이선스의 의미와 특징
  - FOSS 커뮤니티의 헌법
  - 저작권 등 지적재산권에 기반
  - 자유로운 사용, 복제, 배포, 수정을 허용
  - 소스코드의 공개
  - (Copyleft)

  :저작권 제도에 기반하면서도, 전형적인 저작권 시스템에 저항

FOSS 라이선스의 기본 원리

Free to Use, Copy, Distribute, Modify
Source Code

Community

License Rule

FOSS Licenses

You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work (Apache 2.0)

FOSS Licenses

You must cause any modified files to carry prominent notices stating that You changed the files (Apache 2.0)

FOSS Licenses

You must give any other recipients of the Work or Derivative Works a copy of this License (Apache 2.0)

Copyleft

You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, ... provided that you also meet all of these conditions:

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License. (GPL 2.0)
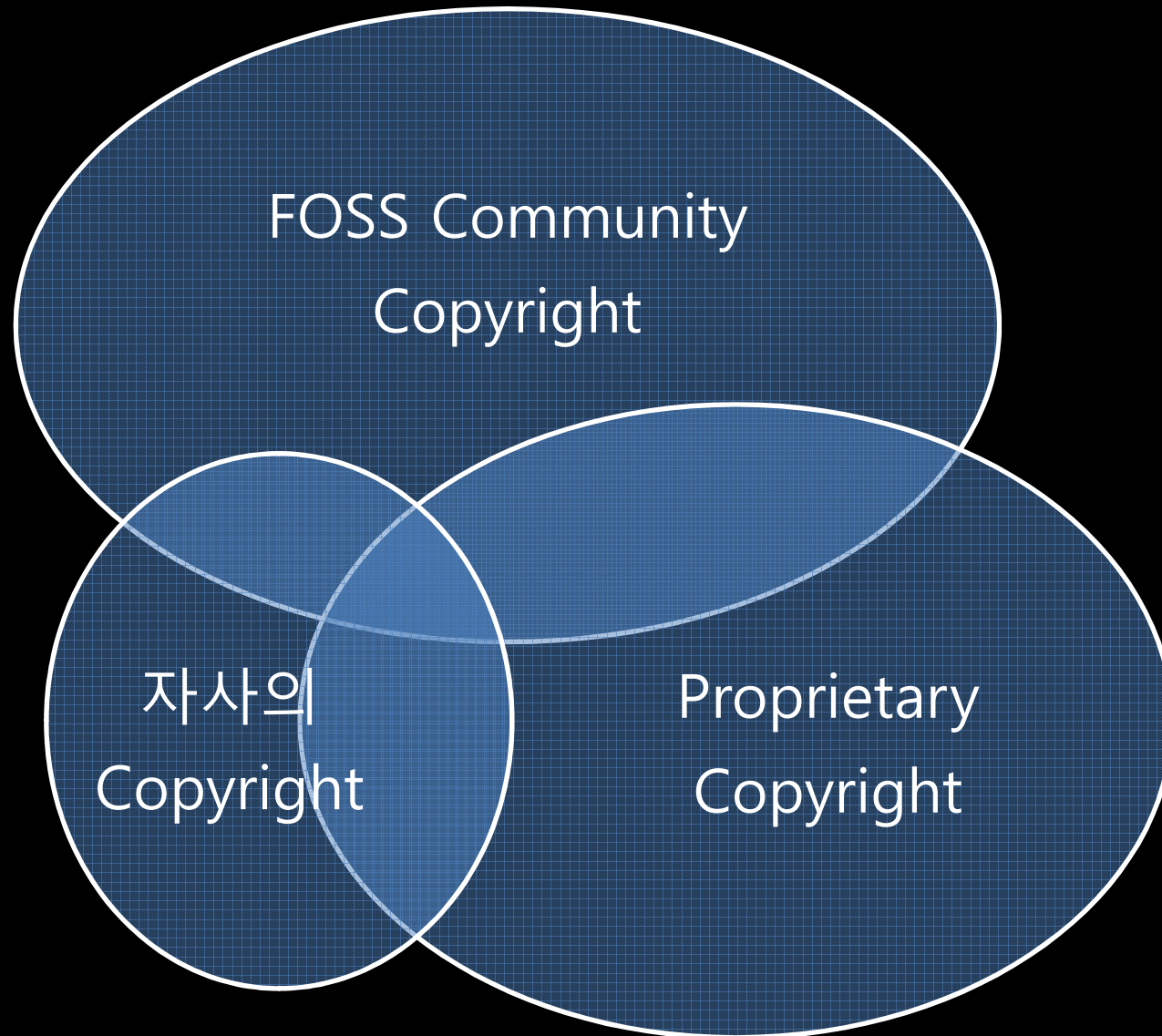
소스코드의 제공

You may copy and distribute the Program (or a work based on it, under Section 2) in object code ... provided that you also do one of the following:

a) Accompany it with the complete corresponding machine-readable source code,

(GPL 2.0)

라이선스의 특징 및 의무사항	BSD	Apache	GPL 2	GPL 3	LGPL 2	MPL	CDDL	CPL/EPL
복제·배포·수정의 권한 허여	O	O	O	O	O	O	O	O
배포시 라이선스 사본 첨부		O	O	O	O	O	O	O
저작권고지사항 또는 Attribution 고지사항 유지	O	O	O	O	O	O	O	O
배포시 소스코드 제공의무(Reciprocity)와 범위			d.w.	d.w.	d.w.	f.	f.	m.
조합저작물(Larger Work)작성 및 타라이선스 배포 허용	O	O			O	O	O	O
수정시 수정내용 고지		O	O	O	O	O	O	O
명시적 특허라이선스의 허여		O		O		O	O	O
라이선시가 특허소송 제기시 라이선스 종료		O		O		O	O	O
이름, 상표, 상호에 대한 사용제한	O	O					O	O
보증의 부인	O	O	O	O	O	O	O	O
책임의 제한	O	O	O	O	O	O	O 11 O

SW분야의 저작권 분쟁

FOSS Community
Copyright

자사의
Copyright

Proprietary
Copyright

Oracle v. Google

- 소송경과 및 주요 쟁점
  - 2007년 구글은 모바일 디바이스를 위한 안드로이드 소프트웨어 플랫폼을 발표
  - 2010년 오라클은 썬 마이크로시스템즈를 인수하였고, Java에 대한 썬의 권리까지 인수
  - 오라클은 안드로이드 플랫폼이 오라클의 자바 관련 저작권 및 특허권을 침해한다는 이유로 구글에 대해 소송을 제기
  - 오라클이 주장하는 저작권에는 자바 API에 있는 37개의 패키지가 포함되었는데, 구글이 해당 소프트웨어를 문자 그대로 복제한 것은 아니며, 37개 API 패키지에 대해 나름대로 구현하였다는 점에는 이론이 없음
  - 오라클의 주장의 핵심은 구글이 37개 API 패키지 전체 코드에 대한 structure, sequence 및 organization을 복제했다는 것임

Oracle v. Google

- 배심원의 평결
  - 37개 API 패키지의 구조 등이 저작권 보호를 받을 경우 (받는다는 가정하에) 배심원들은 구글이 해당 저작권을 침해했다는 평결을 내렸지만, 공정사용에 해당하는지 여부에 대해서는 결론을 내리지 못함
  - 37개 자바 API 패키지들의 문서(documentation)에 대해서는 침해가 없었다고 평결
 - 특정한 코드 일부에 대해서는 "rangeCheck"이라는 코드의 9개 라인에 대해서만 침해평결
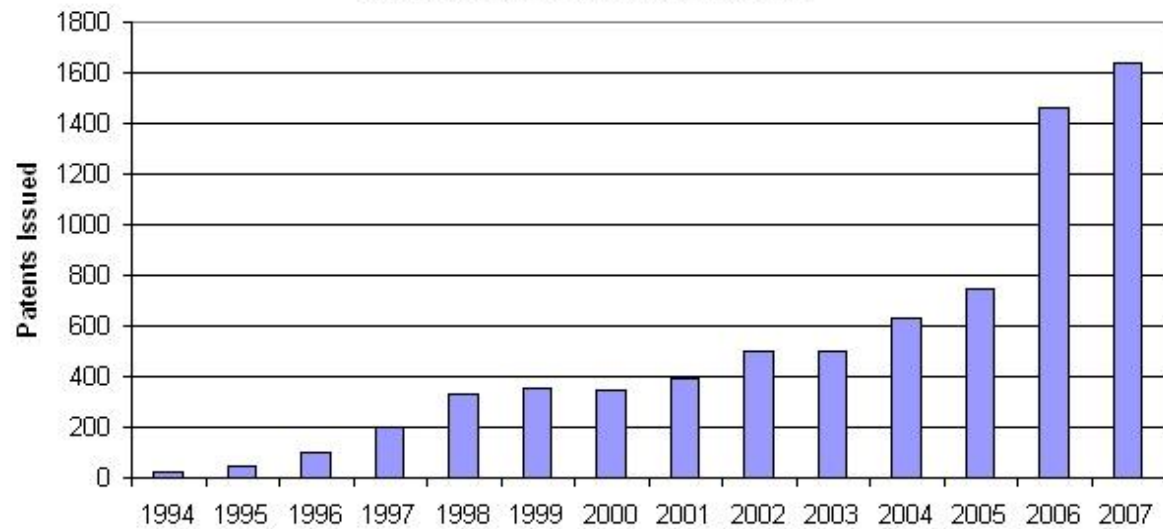
Oracle v. Google

- 소스코드 사례

```
package java.lang;                           // Declares package java.lang

public class Math {                          // Declares class Math

        public static int max (int x, int y) {   // Declares method max

                if (x > y) return x ;            // Implementation, returns x or

                else return y ;                  // Implementation, returns y

        }                                        // Closes method

}                                            // Closes class
```

Oracle v. Google

- 법원의 판단
  - 자바에서 사용된 동일한 command structure를 복제 하지 않고도 동일한 functionality가 안드로이드에서 제공될 수 있었다는 점은 사실이나,
  - java.package.Class.method() 형태를 채택하는 명령구 조에서, 각 명령은 미리 할당된 function을 호출
  - 전체적인 네임 트리는 창조적인 요소들을 갖긴 하지 만, 그것은 또한 미리 할당된 function을 수행하는 실 용적이고 기능적인 set of symbols에 해당하는 command structure이기도 함
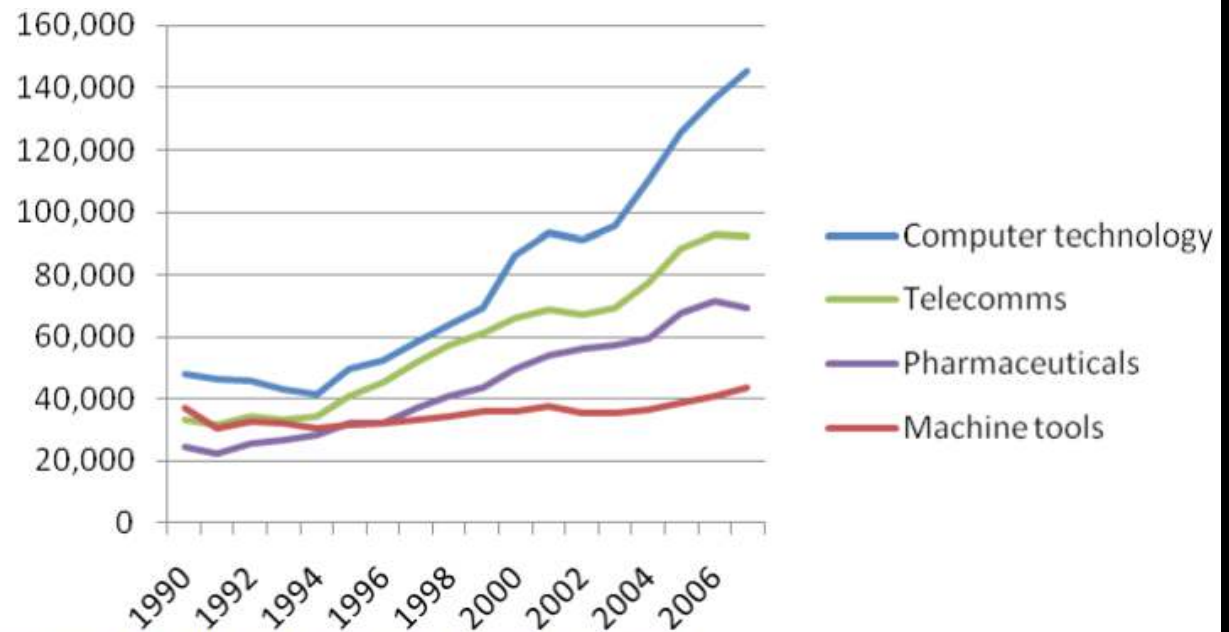 - 이러한 명령 구조는 저작권법 제102(b)에 규정된 시 스템 또는 method of operation에 해당하기 때문에 저작권 보호를 받을 수 없음
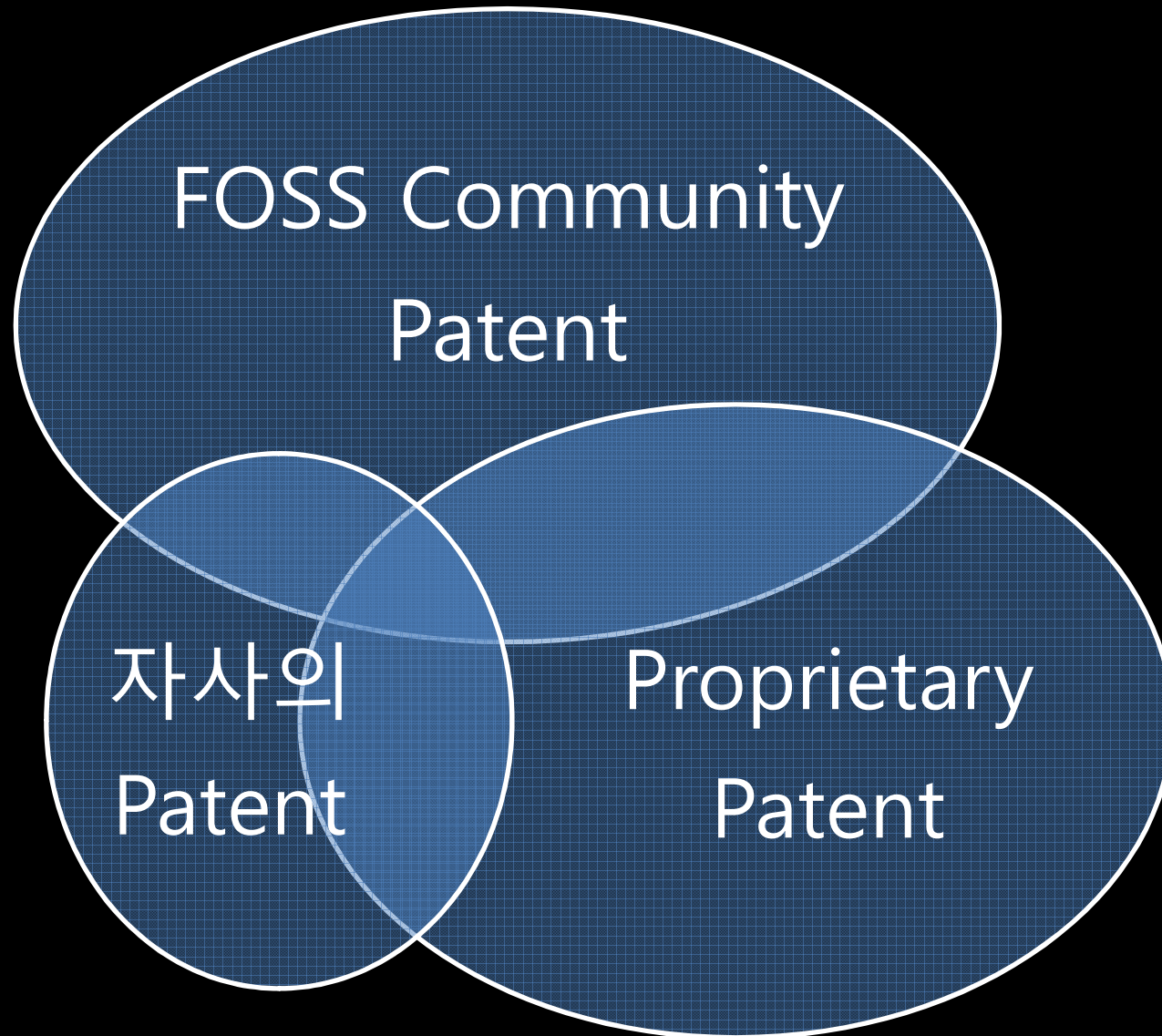
Microsoft's Patent Count

Patent applications by field of technology

- Computer technology
- Telecomms
- Pharmaceuticals
- Machine tools

Source: WIPO Statistics Database, September 2010

Oracle v. Google

- #6,125,447: Protection domains to provide security in a computer system; Li Gong
- #6,192,476: Controlling access to a resource; Li Gong
- #5,966,702: Method and apparatus for pre-processing and packaging class files; Nedim Fresko, Richard Tuck
- #7,426,720: System and method for dynamic preloading of classes through memory space cloning of a master runtime system process; Nedim Fresko
- #RE38,104: Method and apparatus for resolving data references in generated code; James Gosling
- #6,910,205: Interpreting functions utilizing a hybrid of virtual and native machine instructions; Lars Bak, Robert Griesemer
- #6,061,520: Method and system for performing static initialization; Frank Yellin, Richard Tuck
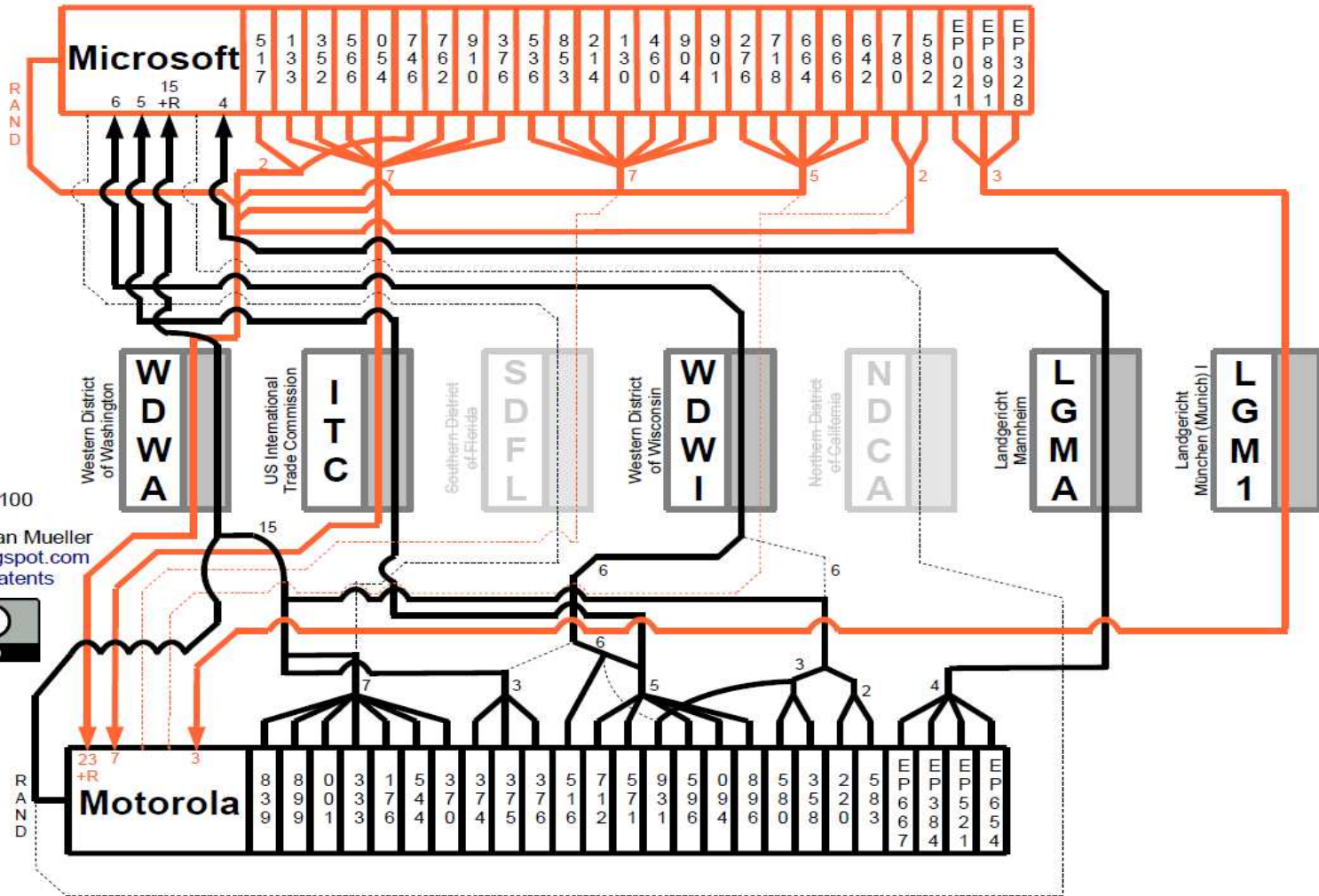
MS v. Motorola

Apple v. HTC

- **[Patent #7,362,331](#)**: **Time-Based, Non-Constant Translation Of User Interface Objects Between States**
- **[Patent #7,479,949](#)**: **Touch Screen Device, Method, And Graphical User Interface For Determining Commands By Applying Heuristics**
- **[Patent #7,657,849](#)**: **Unlocking A Device By Performing Gestures On An Unlock Image**
- **[Patent #7,469,381](#)**: **List Scrolling And Document Translation, Scaling, And Rotation On A Touch-Screen Display**
- **[Patent #5,920,726](#)**: **System And Method For Managing Power Conditions Within A Digital Camera Device**
- **[Patent #7,633,076](#)**: **Automated Response To And Sensing Of User Activity In Portable Devices**
- **[Patent #5,848,105](#)**: **GMSK Signal Processors For Improved Communications Capacity And Quality**
- **[Patent #7,383,453](#)**: **Conserving Power By Reducing Voltage Supplied To An Instruction-Processing Portion Of A Processor**
- **[Patent #5,455,599](#)**: **Object-Oriented Graphic System**
- **[Patent #6,424,354](#)**: **Object-Oriented Event Notification System With Listener Registration Of Both Interests And Methods**

Patent and OSS Licese

- OSS 라이선스에서의 특허조항
  - OSI의 74개 라이선스들 중 특허 라이선스를 포함하고 있는 것은 34개로 50%에 미치지 못함
  - 그러나 Apache 2.0, GPL3.0 등 비교적 최근의 라이선스들은 모두 상세한 특허관련 규정을 포함

- 특허관련 주요 내용
  - 특허권에 대한 라이선스를 명시적으로 부여
  - 라이선시가 기여자 등을 상대로 특허소송 등을 제기하는 경우 라이선스 종료 (특허보복조항)
  - 제3자가 소유한 특허의 취급에 관한 조항

Licensor's patent

- Apache 2.0

  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.

Licensor's patent

- GPL 3.0
  - Each <u>contributor</u> grants you a non-exclusive, worldwide, royalty-free patent license under the <u>contributor's essential patent claims</u>, to make, use, sell, offer for sale, import and otherwise run, modify and propagate the contents of its <u>contributor version.</u>
  - A contributor's "essential patent claims" are all patent claims owned or controlled by the contributor, whether already acquired or <u>hereafter acquired</u>, that would be infringed by some manner, permitted by this License, of making, using, or selling its contributor version, but <u>do not include</u> claims that would be infringed only <u>as a consequence of further modification</u> of the contributor version.

Licensee's Patent

- ## Apache 2.0

  If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit)

  alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement,

  then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

Licensee's Patent

- ## GPL 3.0
  - You may not impose any further restrictions on the exercise of the rights granted or affirmed under this License. For example, you may not impose a license fee, royalty, or other charge for exercise of rights granted under this License, and <u>you may not initiate litigation (including a cross-claim or counterclaim in a lawsuit)</u> alleging that any patent claim is infringed by making, using, selling, offering for sale, or importing the Program or any portion of it.

26

3rd Party's Patent

- ## Apache 2.0
  - 7. Disclaimer of Warranty.
  - Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, <u>NON-INFRINGEMENT</u>, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

3rd Party's Patent

GPL 2.0

For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.
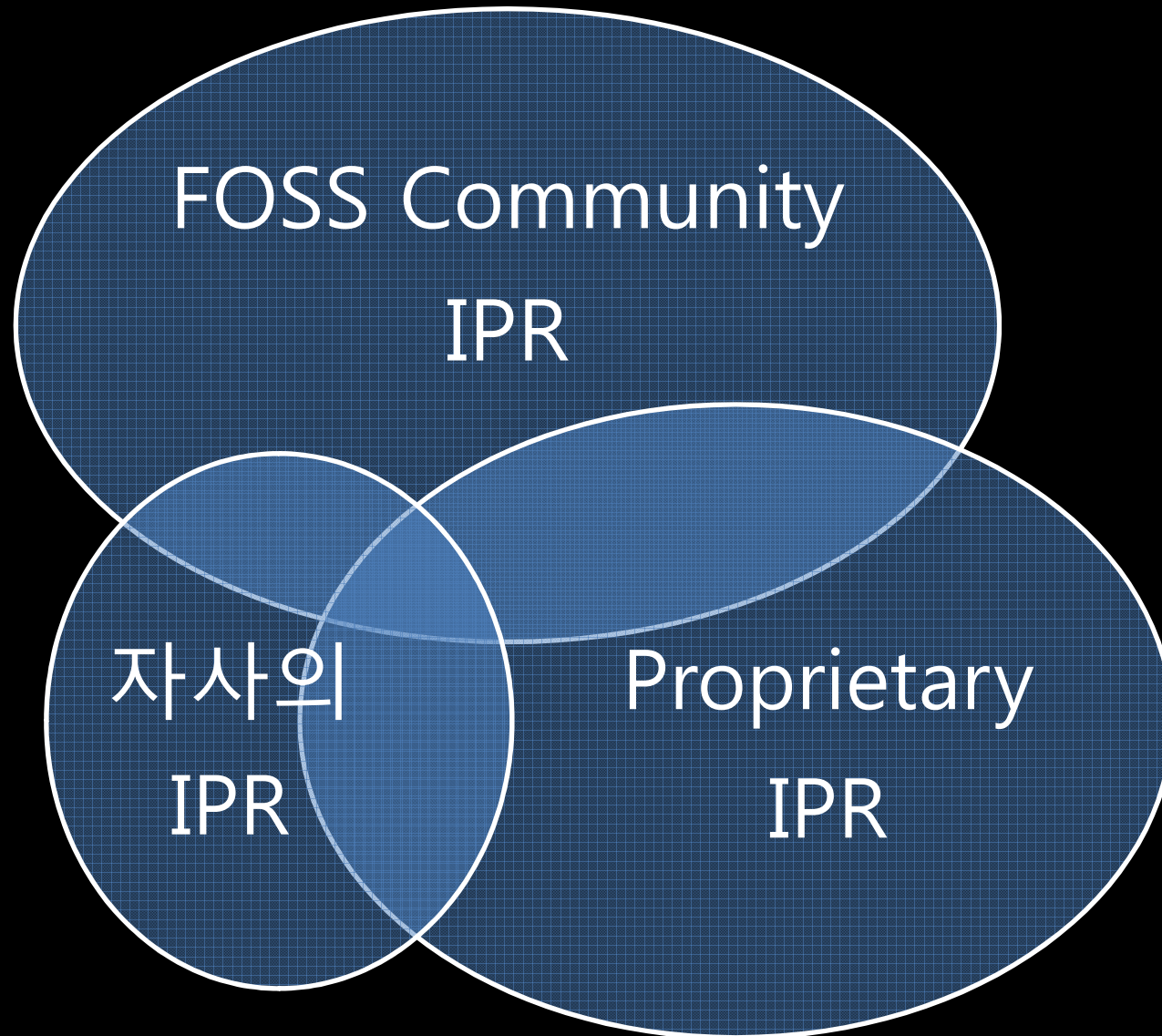
3rd Party's Patent

- ## GPL 3.0
  - No Surrender of Others' Freedom (12.)
    - If you cannot convey a covered work so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not convey it at all.
  - Patent (11.)
    - convey a covered work, knowingly relying on a patent license, ...must either
    - (1) cause the Corresponding Source to be so available, or
    - (2) arrange to deprive yourself of the benefit of the patent license for this particular work, or
    - (3) arrange, in a manner consistent with the requirements of this License, to extend the patent license to downstream recipients.
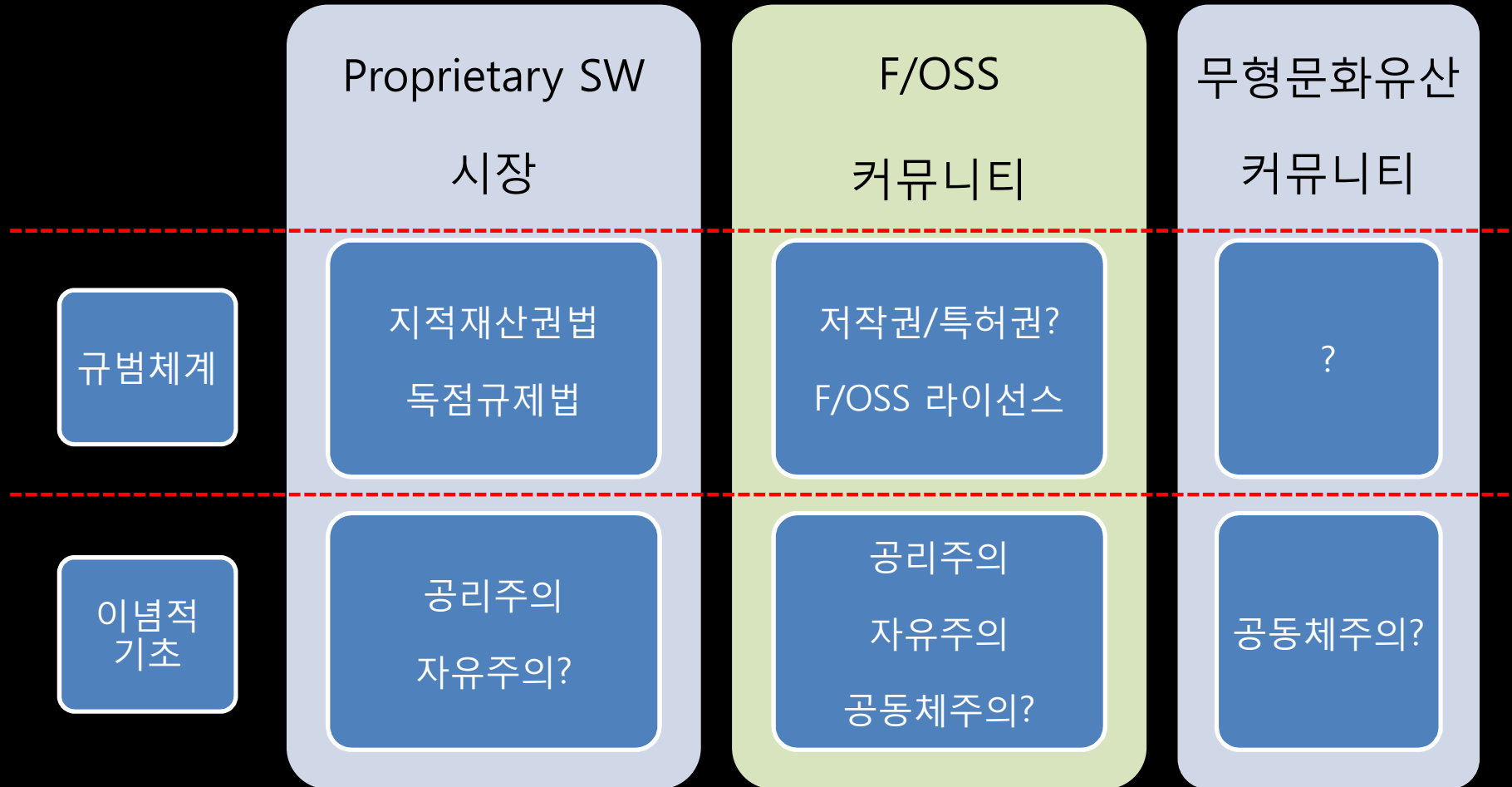
3rd Party's Patent

- If... grant a patent license ..., then the patent license you grant is automatically extended to all recipients of the covered work and works based on it.

- You may not convey a covered work if you are a party to an arrangement with a third party ..., under which you make payment to the third party based on the extent of your activity of conveying the work, and under which the third party grants, to any of the parties who would receive the covered work from you, a discriminatory patent license ... unless ...prior to 28 March, 2007.

자사의 지재권 관리

FOSS Community IPR

자사의 IPR

Proprietary IPR

FOSS의 규범체계와 이념적 기초

	Proprietary SW 시장	F/OSS 커뮤니티	무형문화유산 커뮤니티
규범체계	지적재산권법 독점규제법	저작권/특허권? F/OSS 라이선스	?
이념적 기초	공리주의 자유주의?	공리주의 자유주의 공동체주의?	공동체주의?

Q & A