

# Software Patents – do we care?

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Sources: Wikipedia, <<http://en.wikipedia.org>>;  
Bitlaw, <<http://www.bitlaw.com/software-patent>>;  
RedHat Magazine, May 2005, G. DeKoenigsberg;  
FFII, <<http://swpat.ffii.org>>  
Enterprise Open Source News Desk, June 30,2006

# Patent vs. Copyright

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## ◆ Patent (Latin 'patere' – to lay open):

### ● Granted to inventions related to:

- Processes, machines, articles of manufacture, compositions of matter
- But not for scientific truths or mathematical expressions of it

### ● Grant exclusive rights for fixed period of time

- To prevent other from making, selling ...

### ● In exchange for regulated, public disclosure of details

## ◆ Copyright:

### ● Exclusive rights to use a particular expression of an idea or information for limited time

### ● Applicable to wide range of creative, intellectual works

- Books, plays, movies, music, **software**, ...

### ● Covers only particular form or manner of manifestation

- But not intended to cover actual idea, concepts, facts, ...

### ● Goes to *public domain* after expiration

# Short History of Patents and Copyrights

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## ◆ Patents:

- Venetian Statute of 1474, Republic of Venice
- Statute of Monopolies 1623, King James 1 of England
- Exclusive rights 1646, Province of Massachusetts Bay
- Patent Commission 1790, US
- Paris Convention for Protection of Industrial Property 1883
- Convention on grant of European Patents 1973

## ◆ Copyrights:

- Became issue with first with movable type
- Privilege 1491, Republic of Venice
- Copyright monopoly 1518, England
- German privilege 1501, Aulic Council
- Statute of Anne 1710, England
- Berne Convention 1886 (automatic copyright)
- Universal Copyright Convention 1952

# Software Patents in US

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- ◆ In 1970's:
  - Computer program viewed as mathematical expressions
  - Software related inventions considered non-statutory
- ◆ In 1980's:
  - Software as part of process was patentable (Supreme Court)
- ◆ In 1990's:
  - Software which only process binary numbers – unpreventable
  - If manipulation of real world values patentable (Federal Circuit)
- ◆ State Street decision 1998:
  - State Street Bank v. Signature Financial Group
  - Issue on software/algorithm to calculate values of mutual funds
  - Software implementation of business methods is patentable
- ◆ Currently in US:
  - Software and data structures can be considered patentable

# EU Software Patent Situation

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- ◆ European Patent Convention of 1973:
  - Mathematical methods, intellectual methods, business methods, computer program, presentation of information etc. is not inventions in the sense of patent law
- ◆ European Patent Office (EPO) 1998:
  - Step toward patentability of pure software
- ◆ In 1999-2000:
  - Trilateral Standards on Computer-Implemented Inventions (CII)
  - Commission and EPO proposed change but was rejected
- ◆ In 2003 (proposal 2002/0047):
  - Inventions patentable except software programs
  - Foundation for a Free Information Infrastructure (FFII)
- ◆ In 2005-:
  - EU Parliament reject proposal for software patents
  - Proposal to remove patent system from legislative review

# Software Patent Infringements

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## ◆ Red Hat and Jboss Sued

- Red Hat acquired Jboss in 2006
- FireStar charged Jboss for patent infringements
  - Hibernate 3.0 is available in J2EE EJB and Jboss Middleware (JEMS)
  - US Patent 6,101,502 on
    - ➔ Interfacing an object-oriented application with a relational database
  - FireStar has had relationship with Microsoft

## ◆ Excess of software patents

- One patents for Viagra by Pfizer
- Fourteen patents for positioning/movement of cursor by Microsoft
- Many may not be valid – not original inventions
- Annual patent filling 2000 -> 3000 (Microsoft 2004)
- More software patents do not necessarily mean more innovation!

# Do We Care?

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- ◆ Difficult to know if you infringe a patent
  - Copyright is written in source code – patents not
- ◆ 50% of software patents are invalid
  - But one may need to prove it ( e.g. In court!)
- ◆ Issue may be real (ref. Red Hat case)
- ◆ Concern for
  - Business model software e.g. end-to-end observatory systems
  - Access to databases e.g. Hibernate
  - Utilization of Web interfaces and services
- ◆ Who benefits from software patents?
  - Patent trolls
  - Lawyers
- ◆ Copyrights is adequate – not need for software patents
- ◆ Yes – we should care!