

Intellectual Monopolies

also known as "*Intellectual Property*"

Dr. Luis Ibanez, Kitware






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Intellectual “*Property*”

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Property

“For this labour being the unquestionable property of the labourer, no man but he can have a right to what that is once joined to, at least where there is enough, and as good, left in common for others.”

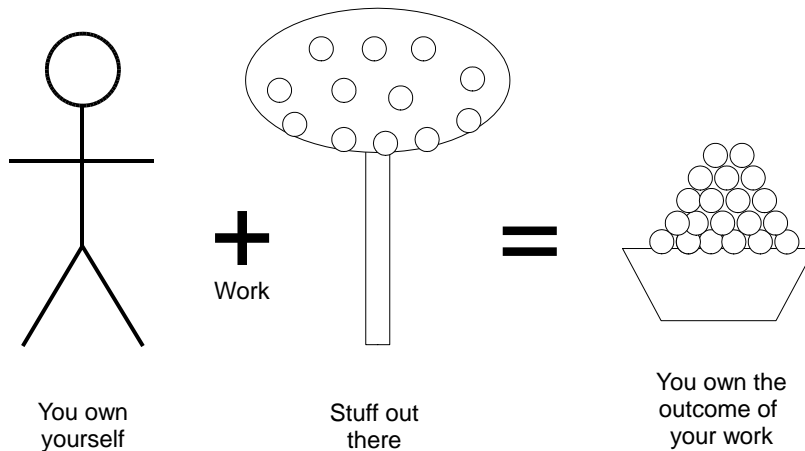
John Locke

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<http://www.constitution.org/jl/2ndtr05.txt>

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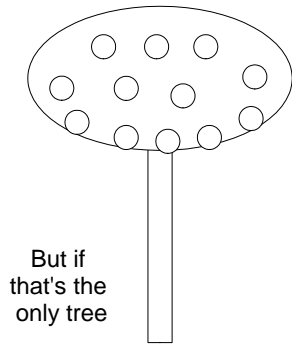
Property



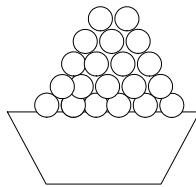
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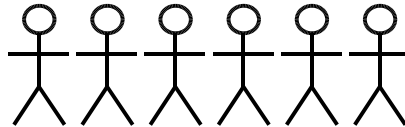
Property



But if
that's the
only tree



And there are
many of you



Then you may
have to share

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US Constitution

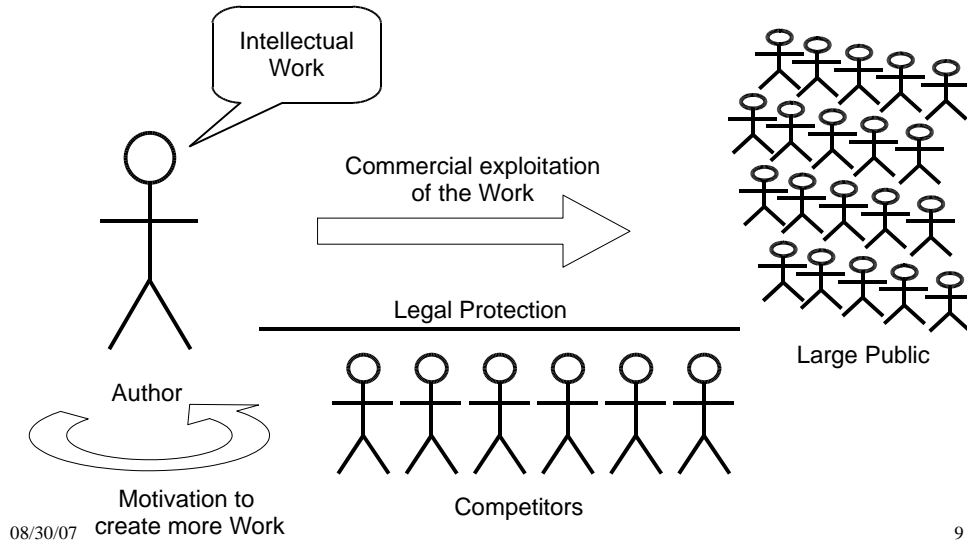
*“Congress has the power to **promote** the **Progress** of Science and useful Arts, by securing for **Limited Times** to Authors and Inventors the **Exclusive Right** to their respective **Writings and Discoveries.**”*

(U.S. Constitution, Article I, Section 8)
http://www.senate.gov/civics/constitution_item/constitution.htm#a1_sec8

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The Intention of the Law



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Intellectual “*Property*”

- Copyright
- Patents
- Trademarks
- Trade Secrets

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Intellectual “*Property*” Concepts

- **Copyright**
 - Exclusive right on the use of Expression of Ideas
- **Patents**
 - Exclusive rights on non-obvious, useful, new ideas
- **Trademarks**
 - Names, logos, symbols
- **Trade Secret**
 - Formula, practice, process

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Intellectual Property

- Geographical Indication
- Industrial Designs
- Tradenames
- Domain names
- Database rights
- Plant breeder's rights
- Traditional Knowledge **

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Intellectual “*Property*” Duration

- **Copyright**
 - 70 years after death of author
 - 95 years after first publication (in works for hire)
 - 120 years from the time of creation
- **Patents**
 - 20 years after filing
- **Trademarks**
 - Defined by active use of the name
- **Trade Secret**
 - Indefinite

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Copyright: Exclusive Rights

- The right to **reproduce** (copy)
- The right to **create derivative works**
- The right to **sell, lease, or rent copies** of the work
- The right to **perform** the work publicly
- The right to **display** the work publicly
- The right to **perform a sound recording** by means of digital audio.

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Patent: Right to Exclude

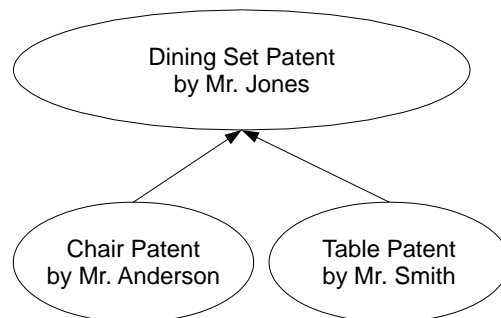
Right to Exclude Others from

- **Making** products embodying your invention
- **Using** products embodying your invention
- **Selling** products embodying your invention
- **Offering** for sale products embodying your invention
- **Importing** products embodying your invention

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Patent: Right to Exclude



Mr Jones can prevent others from making dining sets, but he, himself cannot make a dining set without the permission of Mr. Anderson and Mr. Smith, since he needs to make some chairs and a table.

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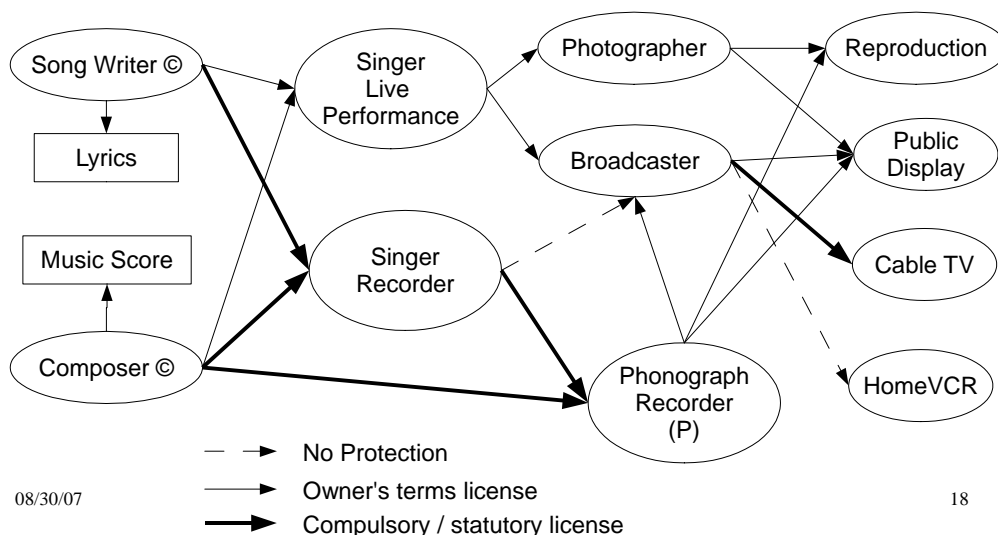
Intellectual “Property”

- Related Rights
 - Performers
 - Broadcasters
 - Recorders
 - Film producers
 - Database creators
 - Photographers

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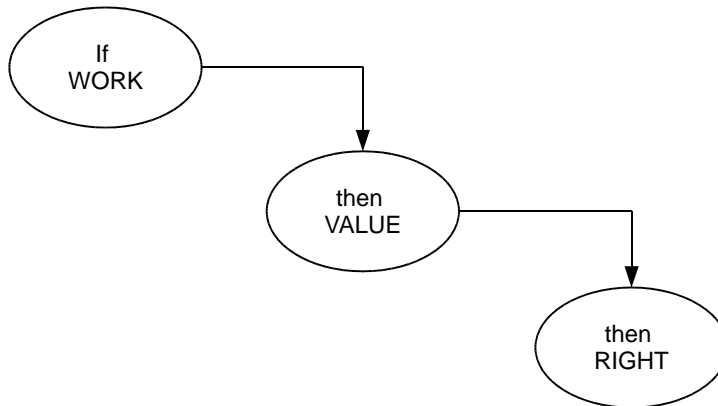
The Intellectual “Property” Network



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The Intellectual “*Property*” Cascade



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Copyright Concepts

- **Copyright is Automatic**
 - Your work is copyrighted as soon as it is put in a tangible form
 - You could add © <year> <author> just to let others know
- **Registration provides additional protection**
 - Is required to initiate litigation
 - Early registration allows for statutory damages and attorneys' fees if litigation becomes necessary
 - Registration is done with the Library of Congress
 - Cost \$45 (+ attorney fees ~ \$100 to \$700)

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Copyright Concepts

- **Works for Hire**

- Works created by employees as part of their job
- Copyright is held by the employer
- Check your contract...
- Contractors own the copyright of their work
- The person who hired the contractor has the right to a nonexclusive license
- US Government does not hold copyrights

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Copyright Concepts

- **Derivative Works**

A work based upon one or more preexisting works, such as

- A translation...
or any other form in which a work may be
- recast,
- transformed,
- or adapted.
- **Very Important in Software Development**

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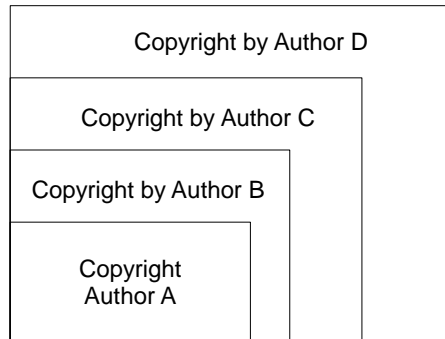
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Copyright Concepts

Derivative Works

Collective Works

Compilations



Example:

http://www.itk.org/cgi-bin/viewcvs.cgi/Utilities/vxl/vcl/emulation/vcl_vector.h?root=Insight&view=mar

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Copyright – Works of Authorship

- Literary
- Musical
- Dramatic
- Pantomimes
- Choreographies
- Pictorial
- Graphical
- Sculptural
- Motion Pictures
- Audiovisuals
- Sound recordings
- Architecture
- Software
 - Source code
 - Object code
- Compilations
- Derivative Works

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Copyright Concepts

- **First Sale Doctrine**
 - You own the copy that you buy
- **Fair Use**
 - Limited use, not requiring permission
 - Stimulate creativity and enrich the public
 - Free speech
 - Avoid censorship of criticism
 - “fair” is not really about “fairness”

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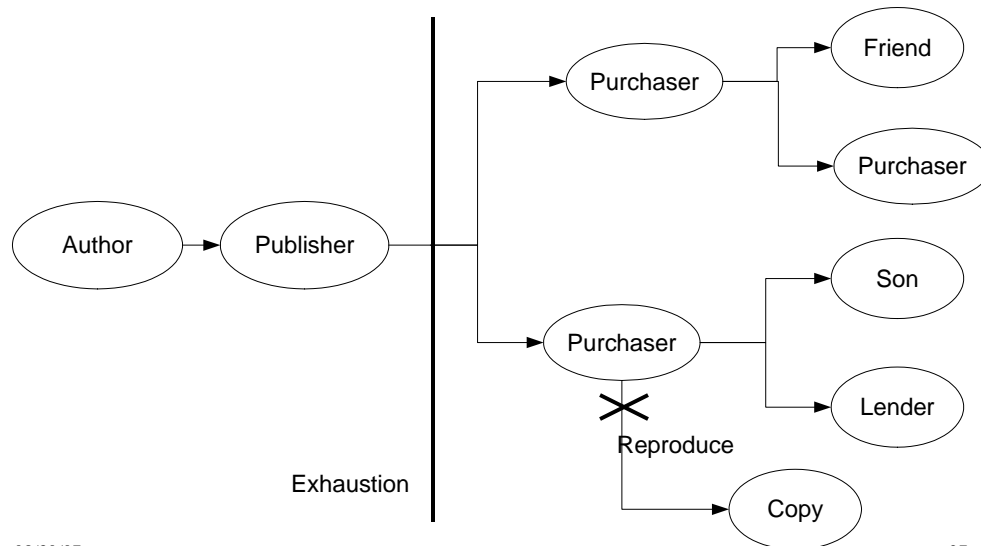
Copyright – First Sale Doctrine - 1909

- **The Purchaser of a legal Copy can**
 - Sell it
 - Give it away
- **Copyright holder right to control distribution**
 - Ends once that copy is sold
- **Excluded**
 - Renting and leasing phonorecords
- **Software**
 - Licensed–not-Sold

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Copyright – First Sale Doctrine- 1909



Copyright – Fair Use - 1976

- **Purpose and Character**
 - Transformative versus Derivative
 - Commercial or nonprofit educational
- **Nature of the Copyrighted Work**
 - Facts and Ideas versus Fiction
- **Amount and Substantiality of the work used**
 - With respect to the entire work
- **Effect on the potential market**
 - Lost of revenue as a consequence of the use

Copyright – Fair Use - Examples

- **Quotation of Excerpts**
 - For illustration or comment in a criticism
 - For illustration or clarification in scholar work
- **Use in Parody**
 - Limited use, not requiring permission
- **Summary of an article**
 - In a news report
- **Reproduction to replace a damaged copy**
 - In a Library

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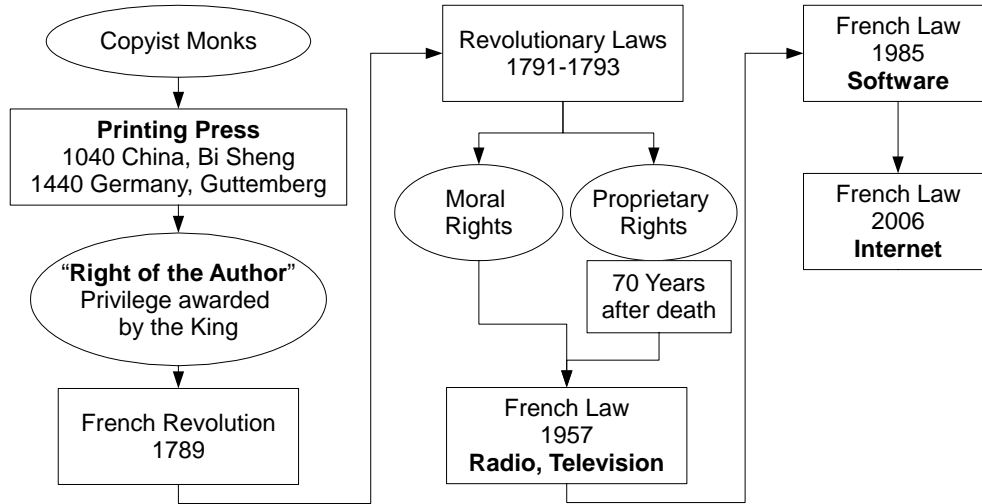
*“If you don't know history
then you don't know anything”*

Timeline, Michael Crichton

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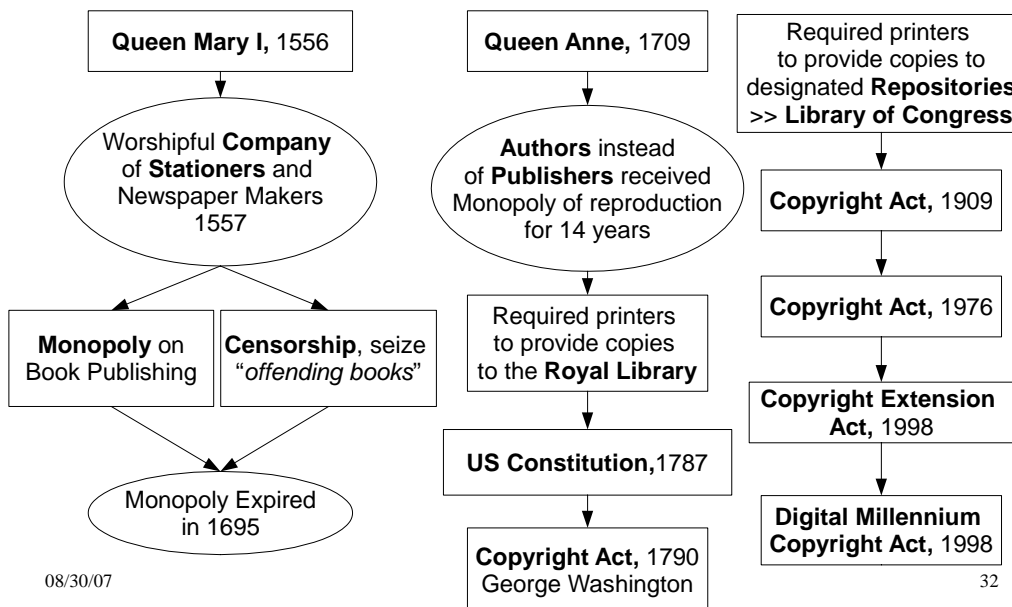
Technological Innovation Driving the Law



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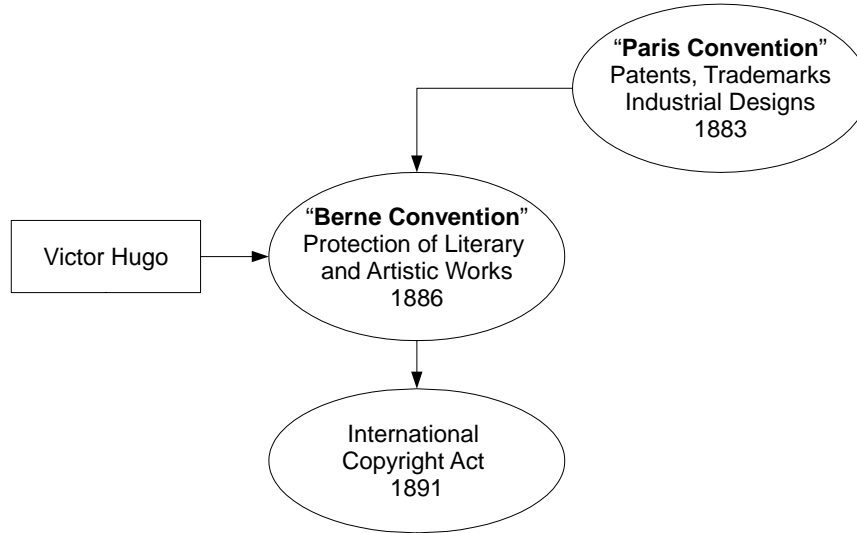
Anglo-American Laws



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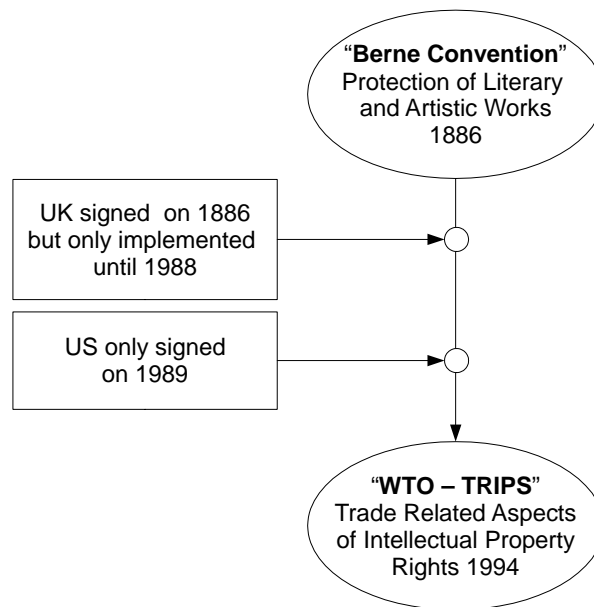
International Law



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International Law & Protectionism



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US Constitution

*“Congress has the power to **promote the Progress of Science and useful Arts**, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.”*

(U.S. Constitution, Article I, Section 8)
http://www.senate.gov/civics/constitution_item/constitution.htm#a1_sec8

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US Constitution

- **The purpose is :**
 - To **Promote Progress**
 - **Not** to enrich publishers
 - **Not** even to reward authors
- **The exclusive rights were intended for**
 - Authors and inventors
 - Not for publishers

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Copyright Enforcement

If you infringe somebody's copyright, you may get a letter from one of the following institutions:

- **MPAA:** Motion Picture Association of America
- **RIAA:** Recording Industry Association of America
- **ASCAP:** American Society of Composers, Authors and Publishers

Copyright Enforcement

Girl Scouts should pay performing rights for camping songs.

“The birds may sing, but campers can't unless they pay up”

Lisa Bannon, The Wall Street Journal

<http://archive.southcoasttoday.com/daily/08-96/08-23-96/b02li056.htm>

Copyright Enforcement

Is it somebody's birthday ?

“Happy Birthday to You”

Melody by Patty Hill and Mildred J. Hill, 1893

Copyrighted in 1935 by the Summy Company
When is the music going into public domain ?

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http://en.wikipedia.org/wiki/Happy_Birthday_to_You

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Copyright Enforcement

“God Bless America”

Copyright 1938, 1939 by Irving Berlin

Copyright renewed 1965, 1966 by Irving Berlin

Copyright assigned to Winthrop Rutherford, Jr., Anne Phipps Sidamon-Eristoff,
and Theodore R. Jackson as Trustees of the God Bless America Fund.

International copyright secured.

All rights reserved,

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<http://www.loc.gov/exhibits/treasures/trm019.html>

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Copyright Abuse

- **SLAPP:**
Strategic lawsuit against public participation
- **Image:**
Evocation in the public mind
- **Censorship:**
Silencing criticism

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Copyright Term Evolution

- **Statute of Anne 1710**
 - Term of 14 years, renewable for 14 years more
- **Copyright Act 1790**
 - Term of 14 years, renewable for 14 years more
- **Copyright Act 1831**
 - Term of 28 years, renewable for 14 years more
- **Copyright Act 1909**
 - Term of 28 years, renewable for 28 years more

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Copyright Term Evolution

- **Starting in 1962**
 - Copyright term has been extended 11 times
 - Initially the extensions were short: 2 years
 - Then they became large: 20 years
- **Copyright Act 1976**
 - Term of 50 years term after death of author
- **Copyright Act 1992**
 - Corporation 75 years term

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“Mickey Mouse Protection Act” *Sonny Bono Copyright Term Extension Act 1998*

- **New Terms**
 - 70 years after the death of the author
 - In collective works, the death of the last author
 - 95 years in works for hire
 - 120 years from date of creation
- **In a period of 20 years**
 - 1 million patents will pass into the public domain
 - Zero copyrights will pass into the public domain

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Copyright Increasing Scope

- **1790**
 - Charts, maps and books
- **Today**
 - Music, architecture, drama, computer code...
 - *Every creative act that is reduced to a tangible form*
 - Renewal requirement was dropped
 - Registration requirement was dropped
 - Works are no longer required to be deposited in a repository (e.g. Library of Congress)
 - Derivative work is also controlled

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Digital Millennium Copyright Act **DCMA**

- **DRM: Digital Rights Management**
 - Access Control Technologies used to limit the USE (not just the copying) of copyrighted material
 - EFF: Claims that DRM exerts control beyond the limits granted by copyright laws.
- **DCMA:**
 - **Criminalizes** production and dissemination of technology, devices and services for circumventing DRM.
 - It applies even if there is no copyright infringement.

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Software Coverage

- **1980:**
Congress decided that Software should be Copyrightable.
- **1981:**
US Supreme Court decided that software enabled inventions should be patentable.

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Software Patents

- **Problem with the Patent Bargain Principle**
 - Protection of rights is given in exchange for public disclosure of the invention
 - Most software project do not disclose their source code, only the verbal description of what the code does
 - Software patents on basic technologies bring the field to a gridlock, since it becomes too expensive to acquire all the licenses needed for developing applications.

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*Creativity is impossible
without a rich public domain.*

Judge Alex Kozinski

<http://www2.bc.edu/~yen/Torts/Vanna%20White%20Koz%20ed.pdf>

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Balance 平衡

*“Intellectual property law is full of
careful balances between what's set
aside for the owner and what's left in
the public domain for the rest of us.”*

Judge Alex Kozinski

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End