## IT Ethics Intellectual Property

H. Turgut Uyar

2004-2015

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## **Topics**

- 1 Intellectual Property
  - Introduction
  - Theories
- 2 Copyrights
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  - Regulations
  - DRM
  - License Agreements
- 3 Patents
  - Introduction
  - Software Patents

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## Property

- defined over relationships instead of objects
  If person X owns the object Y, then X can control other people's relationships with Y.
- easier to understand if talking about tangible objects

- creative works: works of art
- literature, music, movies, paintings
- computer programs
- functional works: inventions

- not exclusive: taking it doesn't prevent the owner from using it
- (digital formats) not a limited resource: easily reproducible

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- what rights to give to the owner?
- not the same as owning a physical property
- hampers competition and progress
- not preferred to give property rights to ideas
- encourage producers to expose their ideas
- making the idea public property after the owner receives financial gains

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## Expression

- property for the expression of an idea
- creative ideas have to be "fixed" on a tangible medium
- book, music CD, . . .
- copyright
- functional ideas have to be implemented in a concrete manner
- machine
- patent

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#### Trade Secret

- formula, process, design, client list, . . .
- advantage in competition
- must have measures to keep it secret: non-disclosure agreements
- no expiration, no need to publish
- if exposed, no longer a secret
- reverse engineering allowed

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## Labor Theory



John Locke (17th century)

#### labor theory

a person acquires a natural right of ownership in something by mixing his or her labor with it

- "natural right"
- not take more than needed

## **Utilitarian Theory**

#### utilitarian theory

it is beneficial for the society to allow intellectual property

 if people can earn money from their ideas they will make them available to the public

## Personality Theory



Hegel (19th century)

#### personality theory

an intellectual work is an extension of its creator's personality

its creator should be able to control how it's used

- why is it wrong to copy software against its license?
- according to labor theory
- according to utilitarian theory
- according to personality theory
- according to social contract theory

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## Copyright

- copyright is granted to the expression of an idea
- software: algorithm is the idea, program is the expression
- it has to be original
- it has to be non-functional
- it has to be fixed on a medium
- it is possible that different people independently come up with the same expression

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## Extent of Copyright

- copying
- distributing
- deriving new works (for example translations, movie adaptations)
- performing (for example theater plays)
- exhibiting (for example paintings)

## Example: Copyright of an e-mail message



The critical email had been forwarded outside of an email group without the consent of author Kenneth Stern, who then sued the person who forwarded the message for breach of copyright.

Stern's email lacked originality and a copyright certificate he had obtained from the US Copyright Office was invalid as a consequence, Judge Dolly Gee said (30-page/177KB PDE).

- an e-mail message
   is forwarded to a mailing list
   without the approval
   of its author
- its author sues for copyright infringement
- the court decides that the message is not a creative work (2011)

http://www.theregister.co.uk/2011/04/12/email\_not\_creative\_enough\_for\_copyright\_protection/

#### Example: Time zone database



HOME

ABOU1

OUR WORK DEEPLINKS BLOG

PRESS ROOM

#### Press Releases

March 2012 February 2012 January 2012 December 2011 October 2011 September 2011 August 2011 July 2011 June 2011 All archives

#### EFF in the News

Press Contact

Protection Time Zone Database Press Materials February 22, 2012

#### EFF Wins Protection for Time Zone Database

#### Copyright Lawsuit Threatened Essential Tool for Engineers Around the World

San Francisco - The Electronic Frontier Foundation (EFF) is pleased to armounce that a copyright less that threatening an important database of the zone information has been disnissed. The astrology software company that filed the less such activation, and agreed to a coverant not to see 'going forward', which will help protect the database from future baseless legal actions and disruptions.

Software engineers around the world depend on the time zone database to make sure that time-stamps for email and other files work correctly no matter where you are, However, last September. Astrolabe filed a lawsuit against Arthur lawid Olson and Paul Eggert – the researchers who coordinated the database's development for decades – Decause the database includes information from an alta in winch Astrolabe claimed to own copyright. But facts – like what time the sun rises – are not copyrightable. EFF, along with co-coursel Adam Kessel and Oliva Najuyen at the Boston office of fish & Richardson P.C. promptly signed on to defend doson and Eggert would move for sanctions If Astrolabe did not withdraw its complexit. Today's dismissal followed.

- part of the time zone database used on some computers is based on the atlas prepared by Astrolabe
- Astrolabe sues to prevent the use of the database
- then retracts its case (2012)
- no copyright on historical facts

## Example: Blizzard vs MDY



automatically, such as fighting.

Both sides have submitted legal

summaries to a court in Arizona

consume resources the entire time."

'Infringed agreement'

Health

Technology

Entertainment

Video and Audio

Programmes

Have Your Say

Country Profiles

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Also in the news

Science & Environment

- MDY sells a "bot" for the game World of Warcraft by Blizzard
- Blizzard sues: "program copied to memory"
- court agrees with Blizzard (2008)

Blizzard argued that Michael Donnelly's tool also infringed the End User License Agreement that all parties have to adhere to when playing the game.

Blizzard says Glide is a software bot which infringes the company's copyright and potentially damages the game.

designs expectations are frustrated, and resources are allocated

In its legal submission to the court last week, the firm said: "Blizzard's

unevenly, when bots are introduced into the WoW universe, because

bots spend far more time in-game than an ordinary player would and

http://news.bbc.co.uk/2/hi/technology/7314353.stm http://virtuallyblind.com/category/lawsuits/mdy-v-blizzard/

game play

#### Example: PRS vs Kwik-Fit

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Have Your Say

#### **₩atch** One-Minute World News



#### Kwik-Fit sued over staff radios

A car repair firm has been taken to court accused of infringing musical copyright because its employees listen to radios at work.

The action against the Kwik-Fit Group has been brought by the Performing Rights Society which collects royalties for songwriters and performers.



At a procedural hearing at the Court of Session in Edinburgh a judge refused to dismiss the £200,000 damages claim.

Kwik-Fit wanted the case brought against it thrown out.

Lord Emslie ruled that the action can go ahead with evidence being heard.

The PRS claimed that Kwik-Fit mechanics routinely use personal radios while working at service centres across the UK and that music, protected by copyright, could be heard by colleagues and customers.

It is maintained that amounts to the "playing" or "performance" of the music in public and renders the firm quilty of infringing copyright.

- Performing Rights Society is an organization that protects the intellectual property rights of the music industry
- sues a car repair firm because of staff radios: "broadcasting" (2007)
- sues a department store worker for singing at the workplace: "performing" (2009)

## Software Copyright

 copyrights don't protect software against imitation of functionality

#### example: Lotus vs Borland (1995)

- similarity in the look and functionality of a spreadsheet program
- is the look of a program protected by copyright?
- court: "yes", appeals: "no"

#### example: Apple vs Microsoft/HP

- desktop interface, icons, . . .
- court: "similar to video player buttons or car panels"

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#### International Treaties

- Bern Treaty (1887)
- TRIPS: Trade-Related Aspects of Intellectual Property Rights (1995)
- WIPO Copyright Treaty (2002)
- World Intellectual Property Organization

#### Telif Yasaları

- Turkey: Works of Intellect and Art Act (1995)
- USA: Digital Millenium Copyright Act (1998)
- protection duration: 70 years after the death of the author
- 95 years for works for hire
- copyright is automatic, no need to register anywhere

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#### Principles

- fair use:
  - no need for permission for some uses
- purpose: criticism, news, education, research
- nature of work: fiction vs non-fiction
- extent of use: whole, parts
- effect on the sale of the work
- first sale: after first sale, copyright owner has no rights on the copy sold

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#### Example: Ralph Lauren ad campaign

boingboin

BOOKS KATNISS KICKSTARTER ARCHIVE B-SIDE FEATURES REVIEWS SCIENCE GWEEK APPS FOR KIDS

#### The criticism that Ralph Lauren doesn't want you to see!

By Cory Doctorow at 10:32 am Tuesday, Oct 6



Last month, Xoni blogged about the photoshop disaster that is this Ralph Lauren advertisement, in which a model's proportions appear to have been altered to give her an impossibly identy body ("Dude, her head's bigger than her pelvis"). Naturally, Xeni reproduced the ad in question. This is classic fair use: a reproduction "for purposes such as reproduction "for purposes such as criticism, comment, news reporting," etc.

However, Ralph Lauren is marketing arm and its law firm don't see it that way. According to them, this is an 'infringing image," and they thoughfully took thought full you concern seed a DMCA takedown notice too. One of the things that makes Priority Colo no awesome 1879, Canadas Friority Colo no awesome 1879, Canadas in Friority automatically act on DMCA takedowns. Instead, they pass them on to us and we talk about whether they pass the giggle-test.

This one doesn't.

- an ad photo for Ralph Lauren is heavily criticised
- RL tries to stop sites from using the photo (2009)

#### Example: Google Book Search



After Google launched the project in 2004, several major libraries allowed the company to scan their collections and serve them to the web at large, including the New York Public Library and the Harvard University library, But in 2005, the ab proker was sued for copyright infringement by the Author's Guild and five members of the Association of American.

Publishers.

With its \$125m settlement - still subject to approval by the court - Google will establish a "Book Rights Registry," a means of resolving copyright claims from authors and publishers and leveling three years of legal fees. US copyright holders who sign up with the Registry can receive a cut from Google's future Book Search profits. And if your works have already been diolized, you can land an immediate cash power.

Alternatively, copyright holders can use the Registry as a means of telling Google to leave their books alone.

- Google scans printed books and includes pages in search results
- Author's Guild sues,
   Google claims fair use (2005)
- settlement for 125 million \$ (2008)
- 300 thousand € fine in France (2009)

#### Example: Turnitin

#### Fair Use Bolstered by Student-Cheating Detection Service

What is Turnitin WriteCycle?

WriteCycle

By David Kravets M April 17, 2009 | 3:05 pm | Categories: Copyrights and Patents

A federal appeals court granted a boost to fair use advocates Friday when it ruled that an online cheating-detection service storing thousands of student essays did not violate the intellectual property rights of the essayists.

Students who claimed Turnitin.com breached their copyrights because it placed their works in its database brought the lawsuit. The site compares new essays submitted by teachers with a database of other essays to determine whether plagiarism was at work.

The E-Commerce and Tech Law Blog eloquently provides the nuts and bolts of the decision by the 4th U.S. Circuit Court of Appeals:

The court stepped through the fair use analysis, dropping positive notes here (commercial uses can be fair uses), here (a use can be transformative in function or purpose without altering or actually adding to the original work! citing Perfect 10 line. V. Amazon com Inc.), and here (fact that furnish com used the entirely of the plaintiffs work did not preclude finding of fair use). And it turned back a lot of other, small-bore challenges to the district court's fair use finding.

Some 6,000 educational institutions in about 90 countries use the California-based cheating-detection service.

- plagiarism detection service
- universities subscribe for a fee
- assignments compared with each other, with previous assignments, and with Internet sources
- students sue Turnitin for copyright violation
- court rules fair use (2009)

http://www.wired.com/threatlevel/2009/04/fair-use-bolste/

## Legal Immunity

- some organizations cannot be sued for copyright infringement resulting from the actions of their users: safe harbor
- service providers
- search engines
- Internet Archive

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#### File Sharing

- increase in file sharing also increased copyright violations
- centralized networks: Napster, Kazaa, . . .
- distributed networks: BitTorrent (requires search engine)
- file hosting services: Rapidshare, Megaupload, . . .

### File Sharing Debates

- file sharing also has legal uses
- courts decide that services are responsible for preventing large scale copyright violations
- are damage assessments realistic?
- how to distribute collected fines?

#### Example: Betamax

- Universal film studios sue Sony over the Betamax video recorder (1970):
   "this device can be used to violate copyrights"
- court: "there are also legal uses"

#### Example: The Pirate Bay



#### Pirate Bay founders lose appeal

Three founders of The Pirate Bay have lost an appeal against a conviction for illegally sharing copyrighted content.

The Swedish appeals court upheld the 2009 ruling against the site's founders which saw them sentenced to a year in iail and heavily

The ruling reduces the sentences the men face but increases fines to 46m crowns (£4.1m).

Three of The Pirate Bay's four founders were in court for the verdict. The other was too ill to



pirated music, movies and games

The original verdict on Peter Sunde, Fredrik Neij, Gottfrid Svartholm Warg Related Stories and Carl Lundstrom was handed down in April 2009 following a lengthy

Lawvers acting for music labels and movie studios alleged that via The Pirate Bay, the four men helped people circumvent copyright controls.

The founders defended themselves by saying that The Pirate Bay did not host any pirated material directly.

The appeal court ruling will see Mr Neil serve a 10 month sentence: Mr. Sunde eight months and Mr Lundstrom four months. Once Mr Svartholm

Warg is fit his "criminal liability" will be tested by the appeals court

- TPB: BitTorrent search site
- founders sentenced to 4-10 months jail and 6.5 million \$ compensation (2009-2010)
- is it any different from Google?

Pirate Bay founders back in court

Pirate Bay founding

Attacks target recording industry

body disbands

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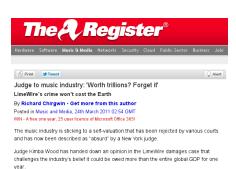
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#### Example: LimeWire



- in the LimeWire case, the music industry demands 75 trillion \$ in damages
- judge finds the amount "absurd" (2011)

"The absurdity of this result is one of the factors that has motivated other courts to reject Plaintiffs' damages theory", the judge wrote.

After LimeWire lost the case last year, the trial moved into the damages phase, with hearings starting next May in an opinion (pdf) published ahead of the damages hearings, Judge Kimba Wood revealed that the record companies, seeking statutory damages against the music-sharing service, are seeking damages predicated on the "number of direct intringers per work" — leading to a damages claim of as much as \$75 trillion dollars (according to Wijkeigela total joldo IGDP is around \$56 trillion!).

#### DRM

- Digital Rights Management
- enforcing copying and distribution rules using technology
- region protection in DVDs
- copy protection in CDs
- transfer prevention on digital files
- supported by "anticircumvention" clauses in recent copyright laws

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#### **DRM** Debates

- regarding consumer rights
- regarding reverse engineering
- technically, is DRM really effective?

#### Example: Adobe vs Sklyarov



The Case of Dmitry Sklyarov

This is the first criminal lawsuit under the Digital Millennium Copyright Act
by Stephanie Ardito

Some of us who regularly write about intellectual property issues jokingly refer to publishers as the "copyright police," and contemplate being thrown into "copyright jail" for "violating" fair-use laws. Despite this imagined scenario, I never really expected that a civilian would be arrested and criminally prosecuted by the U.S. government.

#### Leading Up to Action, Arrest

On July 16, 2001, Dmitry Sklyarov, a Russian programmer, was arrested by the FBI as the copyright holder of a software program that circumvents the technology that protects against the unauthorized copying of Adobe Systems' eBook format. Sklyarov's arrest was preceded by several events. On June 22, his company, ElcomSoft (http://www.elcomsoft.com), posted a press release announcing the sale of a software program called Advanced eBook Processor (AEBPR), which removes encryption coding from Adobe Acrobat PDF files and Adobe Acrobat eBook Reader software. In part, the press release stated:

Advanced eBook Processor lets users make backup copies of eBooks that are protected with passwords, security plug-ins, various DRM (Digital Rights Management) schemes like EBX and WebBu, enabling them to be readable with any PDF viewer, without additional plug-ins. In addition, the program makes it easy to decrypt eBooks and load them onto PalmPilots and other small, portable devices. This gives users—especially users who read on airplanes or in hotels—a more convenient option than using larger notebooks with limited battery power to read their eBooks.

#### Example: Adobe vs Sklyarov

- Sklyarov develops a software that removes password protection from PDF e-books
- his company Elcomsoft sells this software
- Sklyarov is arrested when he visits USA (2001)
- Adobe and the Department of Justice sue Sklyarov and Elcomsoft
- due to public reaction, the case against Sklyarov gets dropped
- the case against Elcomsoft ends in acquittal (2002)
- fair use? (backup copy)
- first sale?

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# Norway piracy case brings activists hope

By Lisa M. Bowman Staff Writer CNET News

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Copyright jury says "not guilty"

December 17, 2002

Copyright fight comes to

July 3, 2002

Teen charged in

January 25, 2000

Internet and technology activists are hoping the acquittal of Norwegian programmer Jon Johansen in a digital piracy case signals a change in attitudes about copyright in the digital age.

The acquittal in Oslo, Norway, of 19-year-old Johansen, one of the creators of the DVD-cracking code known as DeCSS, is one of several recent setbacks for intellectual-property holders seeking to exert more control over the digital versions of their products.

"It feels a bit like the tide is turning in these copyright cases," said Cindy Cohn, an attorney with the Electronic Frontier Foundation. "It really feels like there is some santy creeping in." The EFF and others have been concerned that digital copyright law hampers legitimate research into encryption and other technological matters and stiffes consumers right.

"The Norwegian judges' ruling protects intellectual freedom by recognizing that once you buy a DVD movie, Hollywood no longer has a lawful right to control the way you can access that film," said Robin Gross, executive director of IP Justice, a new aroup hocino to promote balanced international intellectual-

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- Johansen is acquitted (2003)
- Johansen Apple: buying music from iTunes (2005)

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January 25, 2000

#### Example: Sony music CDs



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Business for the past three weeks been Science & Environment earlier public relations

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Sony's long-term rootkit CD woes Internet professor Michael

Geist explains why Sony's rootkit problems have significant long-term implications for the industry. Sonv BMG, the world's





Technology nightmares involving tampered Tylenol and contaminated

While in the short-term one of the world's hest-known brands has suffered enormous damage, the longer-term implications are even more significant - a fundamental re-thinking of policies toward digital locks known as technological protection measures (TPMs).

The Sony case started innocently enough with a Halloween day blog posting by Mark Russinovich, an intrepid computer Special Reports security researcher.

RELATED BBC SITES Mr Russinovich discovered his own tale of horror - Sony was SPORT using a copy-protection TPM on some of its CDs that guietly WEATHER installed a software program known as a "rootkit" on users' ON THIS DAY computers.

- Sony music CDs install a copy protection program without telling the user
- Sony apologizes, recalls CDs (2005)
- the copy protection program

#### Example: Sony music CDs



Geist explains why Sony's rootkit problems have significant long-term implications for the industry. South Asia

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Science &

Entertainment Also in the news

Video and Audio

Programmes

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Country Profiles

Sonv BMG, the world's second largest record label, has Business for the past three weeks been the subject of a corporate embarrassment that rivals Environment earlier public relations



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- Sony apologizes, recalls CDs (2005)
- the copy protection program turns out to be stolen from open source projects

http://news.bbc.co.uk/2/hi/technology/4456970.stm http://www.theregister.co.uk/2005/11/18/sony\_copyright\_infringement/

#### Example: MPAA

JANUARY 24, 2006 | BY FRED VON LOHMANN



#### MPAA: Copying Movies OK for Our Families, Not Yours

The Los Angeles Times reports that the Motion Picture Association of America (MPAA) made unauthorized copies of a new documentary, This Film Not Yet Rated, that is critical of the organization.

The copies were apparently made when the film was submitted for an MPAA rating. The film got an NC-17, a somewhat ironic outcome for a film that exposes the unfairness of the MPAA ratings system.

The MPAA made the copies because they "were concerned about the raters and their families," according to Koril Bernards. The MPAAPs vice president for corporate communications. The identities of the MPAAP ratings board have been a closely guarded secret, at least until This Film Not Net Rated did some amateur detective work to snift them out. Now that the word is out, the MPAA apparently is afraid for their families?

So copying movies is OX when it's done to protect the families of the MPAA ratings board, but not OX when it's off the families of movie finan. After all, the MPAA and it's members have said it's theft and 'plracy' for you to copy your own DVDs, whether to make a back-up-copy to protect your DVDs from being scratted by your dodler, to edit out the annoying, unskippable commercials that open many DVDs, or to skip strong language, nudky, and violence that one of the description of the

MPAA copies the movie
 "This Film Is Not Yet Rated" without permission and distributes it to its employees (2004)

#### Example: Nicolas Sarkozy

#### Nicolas Sarkozy: French President Accused Of Pirating 400 DVDs

First Posted: 03/18/10 06:12 AM ET (Updated: 05/25/11 03:15 PM ET React > Inspiring Funny Obsolete Scary Must-Have Amazing Innovative Herdy Follow > @ Nicholas Sarkozy . @ Nicolas Sarkozy . @ Sarkozy . A Visage Decouvert: Nicolas Sarkozy , Canard Enchaine , Nicolas Sarkozy Pirate DVDs , Sarkozy DVD , Sarkozy DVDs , Sarkozy Copyright, Sarkozy Pirates DVDs, French News, French-Nicolas, Sarkozy Pirate - Technology News A French paper, Le Canard Enchaine, has busted SHARF THIS STORY French President Nicolas Sarkozy for pirating 400 copies of a DVD. If the story pans out, this would be Sarkozy's second copyright infringement -- and a major embarrassment for a President famous for his three-strikesyou're-out, anti-file-sharing stance. According to the paper, Sarkozy made 400 unauthorized copies of a 52-minute documentary starring the President himself, called A visage decouvert : Nicolas Sarkozy. PC World France writes that a proud Sarkezy

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wanted to distribute the documentary to diplomats at a conference (the "17eme conférence des ambassadeurs"), but the DVD's distributor had only send 50 copies of the documentary

A few copies short? Pas de probleme!

The President's office decided to make up for the difference by pirating a few hundred copies They even went so far as to doctor up a new DVD

jacket, replacing the original DVD maker's name and logo ("Galaxie Presse") with a line crediting the President's "AV service" ("Service audiovisuel de la presidence de la Republique".)

Sarkozy's first copyright-infringement strike came after the President repeatedly used a song by the band MGMT at his rallies without asking the band's permission.

- Sarkozy's party uses a song by the band MGMT without permission in election campaigns (2009)
- Presidential Office prints a documentary about Sarkozy on copy DVDs (2009)

## **Topics**

- 1 Intellectual Property
  - Introduction
  - Theories
- 2 Copyrights
  - Introduction
  - Regulations
  - DRM
  - License Agreements
- 3 Patents
  - Introduction
  - Software Patents

#### Product or Service

- is software a product or a service?
- $\blacksquare$  mass sales  $\rightarrow$  product
- $lue{}$  personal sales ightarrow service
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- the risk costs can be distributed in sales
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## Proprietary Model

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#### End User License Agreements

- what if the consumer doesn't agree? (preinstalled software)
- activation, hardware changes
- reverse engineering: none, or as much as local law permits
- no warranty
- no liability

## Free/Open Source Model

- ability to customize
- speedier updates
- protection from problems of the vendor

#### GNU General Public License - GPL

- use: no restriction
- distribute: no restriction (including selling)
- modify: no restriction
- distribute modified: along with source code
- no warranty
- no liability

#### Other Free/Open Licenses

- BSD: any license on the modified software
- Lesser GPL, Apache, Mozilla, . . .
- dual licensing: MySQL, Qt
- for documentation: GNU Free Documentation License
- for creative works: Creative Commons

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# Open Source Initiative (OSI)

- dağıtım özgürlüğü
- kaynak kodun açıklığı
- değişikliklere izin
- özgün kaynak kodunun bütünlüğü
- kişi ve gruplara karşı ayrımcılık yapılmaması
- iş alanlarına karşı ayrımcılık yapılmaması
- lisansın dağıtımı
- lisansın ürüne özel olmaması
- lisansın başka yazılımları kısıtlamaması
- lisansın teknolojiden bağımsız olması

### Example: First sale



# US court says software is owned, not licensed

Software company Autodesk has failed in its bid to prevent the second-hand sale of its software. In a long-running legal battle it has not been able to convince a court that its software is merely licensed and not sold.



Like many software publishers Autodesk claims that it sells only licences to use its software and that those who pay for it do not necessarily have the right to sell it on. It sued Timothy Vernor, who was selling legitimate copies of Autodesk software on eBay, for copyright infringement.

The US District Court for the Western District of Washington has backed Vernor, though, in his claim that he owned the software and had the right to sell it on.  a US court decides that software is sold, not licensed (2009)

http://www.out-law.com/page-10421

### Example: Liability



 British High Court rejects that software cannot be sued for poor performance (2010)

customer's own business requirements, the Court said.

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- functional: applicable in industry
- not obvious
- even if someone else invents it independently, they cannot use it
- clients can also be sued for infringement

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- "'software is mathematics"

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### Example: Benson

- Benson applies for a patent for an algorithm that converts
   BCD numbers into binary numbers
- patent office rejects, Benson sues
- court decides that this algorithm isn't patentable (1972)

#### Patent Problems

- patents granted although they should not be eligible
- using patents to stop competitors from using the idea
- holders can stop each other and block technology: patent pools
- "fair, reasonable, and non-discriminatory" licensing for critical patents (FRAND)
- getting patents just to sue for infringement (patent trolling)
- keeping the patent hidden or not enforcing it until the technology becomes widely used

#### Patent Problems

- patents are now used as weapons
- many companies getting patents for protection
- the system has diverged from the original goal of promoting innovation
- on the contrary, it hinders start-ups and small companies

## Example: Amazon - One-click shopping

- Amazon gets a patent for one-click shopping (1999)
- sues Barnes and Noble
- patent office re-examines the patent, rejects parts of it (2007)
- accepts modified patent application (2010)
- Bilski case: Appeals Court makes it more difficult to get business process patents (2008)

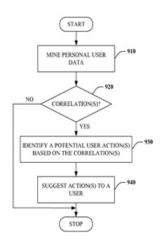
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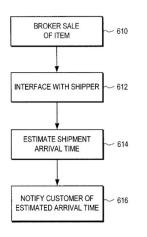
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## Example: Microsoft - Personal data mining



- Microsoft: personal data mining (2010)
- Microsoft buys 800 patents from AOL (2012)

## Example: Google - Shipment arrival estimation



■ Google: when will the shipment arrive? (2011)

## Example: Apple vs Samsung - Google

#### PCWorld » Blogs » Today @ PCWorld

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#### Apple to Samsung: Don't Make Thin or Rectangular Tablets or Smartphones

By Melanie Pinola, PCWorld Dec 5, 2011 8:50 AM

Apple proffers design advice on how Samsung could avoid stepping on Apple's design patent toes, in a legal brief filed as part of its ongoing patent infringement lawsuit against its competitor.

Some of the alternative design options Apple has suggested for Samsung seem so farcical you'd think you were reading *The Onion*: Don't make tablets or smartphones with overall rectangular shapes or rounded corners, make tablets with front surfaces that aren! completely fail. It voluther in the appearance of the devices and more.

Apple iPad

When Apple sued Samsung in April, the company claimed Samsung had 'slawshly' copied the distinctive designs of the iPhone and iPad, thereby violating Apple intellectual property rights. In its rebuttal, Samsung argues that there are only so many ways you could design devices like the Galaxy S and Galaxy Tab.

Apple obviously doesn't think so. To defend its claim that Samsung had other design options, Apple had to provide examples of design alternatives.

- Apple stops a Samsung tablet from being sold in Germany (2011)
- Motorola stops Apple users from using "push email" in Germany (2012)
- HTC sues Apple with patents obtained from Google (2011)

 $\verb|https://www.pcworld.com/article/245493/apple_to_samsung_dont_make_thin_or_rectangular_tablets_or_samsunphones.html|$ 

http://www.theregister.co.uk/2012/02/24/apple\_patent\_motorola/http:

//www.bloomberg.com/news/2011-09-07/htc-sues-apple-alleging-infringement-of-four-u-s-patents.html

### Example: Microsoft vs Eolas



Microsoft has settled a long-running patent infringement suit with Eolas and the University of California in a case which has been running since 1999. Microsoft will make an undisclosed payment to Eolas.

Eolas had claimed that Microsoft's internet browser internet Explorer violated a patent held by it. The dispute centred on the embedding of items within a web page. Microsoft has since changed that element of its browser.

Eolas won \$521m in 2003 but Microsoft appealed and won the right to a retrial. It said that it expected the damages to be changed.

- Eolas patent: running applications from within browser
- sues Microsoft (1999)
- settles out-of-court (2007)
- Eolas later sues Apple ve Google (2010)
- loses (2012)

http://www.theregister.co.uk/2007/08/31/microsoft\_eolas\_settlement/ http://www.wired.com/threatlevel/2012/02/interactive-web-patent/

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## Example: Compuserve - GIF image format

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### References

### Required Reading: Tavani

■ Chapter 8: Intellectual Property Disputes in Cyberspace