

# INTELLECTUAL PROPERTY

# Intellectual Property

- Describes works of the mind that are distinct and owned or created by a single person or group (any unique product of the human intellect that has commercial value)
  - Books, songs, movies
  - Paintings, drawings
  - Inventions, chemical formulas, computer programs
- Protected through
  - Copyright
  - Patent
  - Trade secret laws
- Owner controls and receive compensations for the use of their intellectual property

# Intellectual Property rights

- Legal rights which result from intellectual activity in industrial, scientific, literary and artistic fields.
- type of property that result from creations of the human mind (the intellect).
- intellectual property law
  - to reward and safeguard creators and producers of intellectual property
  - by grant of time-limited rights
  - to control the use of their products

# Justification for IP protection

- Moral argument (fairness).
  - Authors' natural/human rights over the products of their (intellectual) labour. (universal declaration of human rights) – copyright
  - To prevent unjust enrichment by reaping without sowing- Trade marks
- Economic reasons
  - To encourage/ induce creativity
  - incentive to invent new products
  - Incentive to disclose valuable technical information

# Justification for IP protection

- Without IP protection
  - Under production of IP products.
  - Because of cost.
  - i.e. public goods (cf. ujama system).
  - Undercutting by competitors.
  - Leading to market failure.

# Intellectual Property

- Key questions when considering intellectual property protection
  - What type of thing can be protected?
  - What rights are reserved for the creator of the work?
  - What rights are reserved for the public?
  - How does one obtain the protection for a work?
  - How long does it last?

# Types of IP

- Copyright and related rights- Copy right Act 2001
  - Literary, artistic and scientific works
    - Books,
    - drawings,
    - paintings,
    - computer programmes
    - music
  - Performances, broadcasts
- Automatic protection, no registration required

# Types of IP

- Patents- Industrial Property Act 2001 (IPA)
  - Inventions
    - Products/process
- Utility models- IPA
  - Innovations/improvements
    - Products/process
- Industrial designs - IPA
  - appearance of products
  - Shape, patterns



# Types of IP

- Trade marks
- Distinctive signs used
  - to identify goods or services; and
  - to distinguish goods or services of one enterprise from those of others.
- Trade Marks Act CAP 506

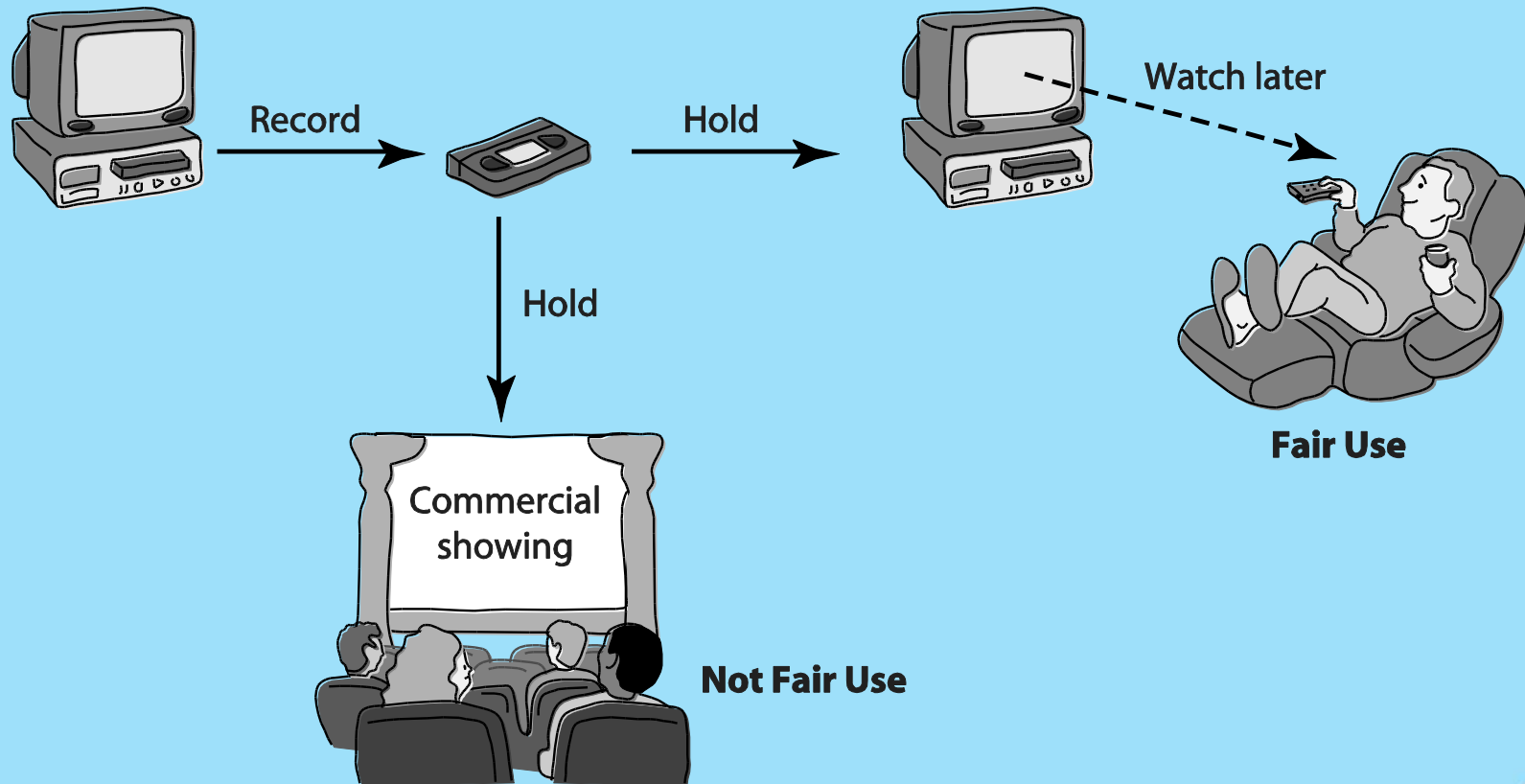
# Copyright

- Exclusive right to distribute, display, perform, reproduce an original work in copies or prepare derivative works based on the work
- **Copyright infringement:** Violation of the rights secured by the owner of a copyright

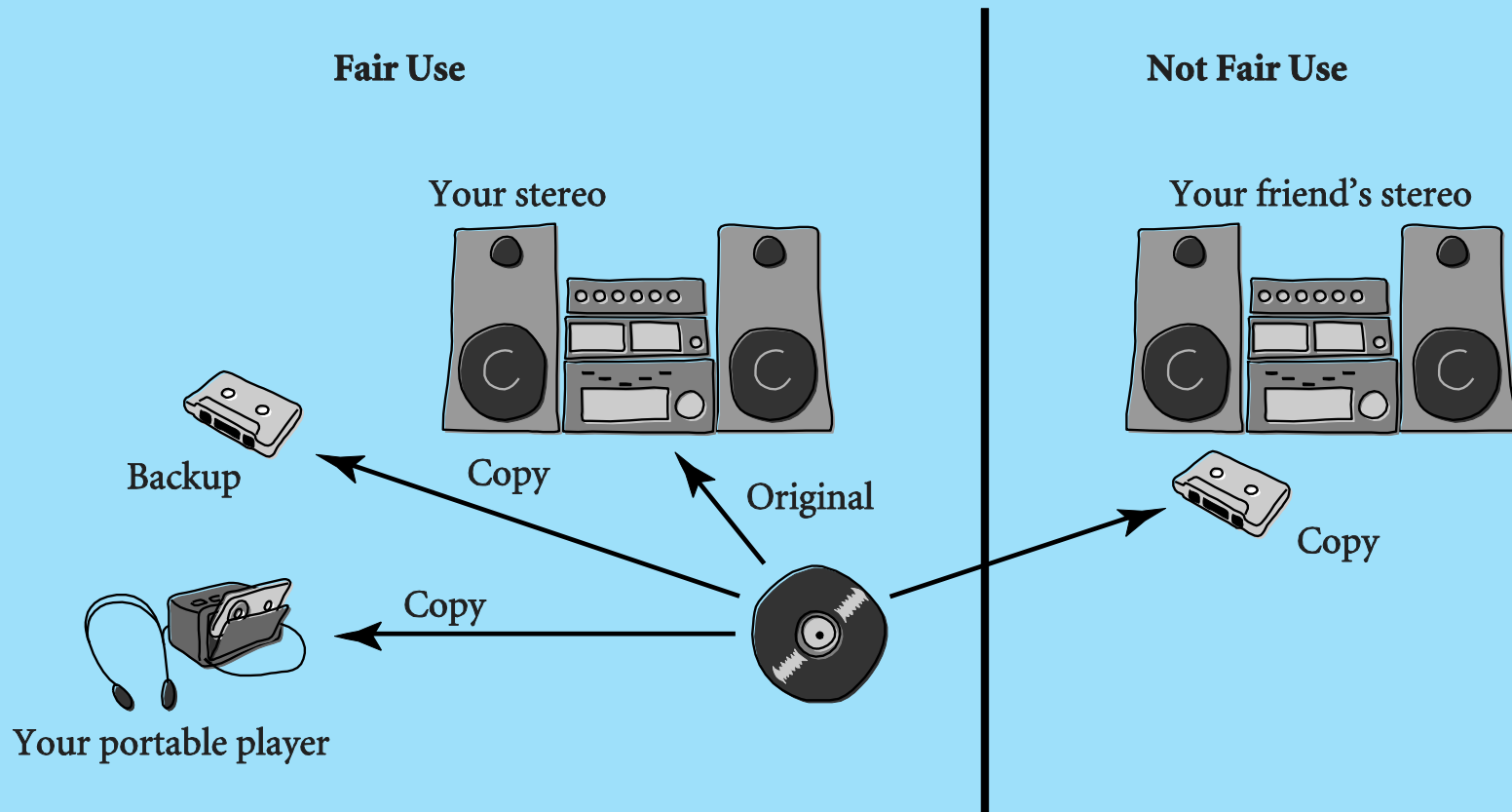
# Copyright

- **Fair use doctrine**
  - Allows portions of copyrighted materials to be used without permission
  - Depends on purpose, character, nature, relation, and effect of the copyrighted work
- **Software copyright protection**
  - Proving infringement requires showing resemblance that could be explained only by copying

# Time Shifting



# Space Shifting



# Violations of Software Copyrights

- Copying a program to give or sell to someone else
- Preloading a program onto the hard disk of a computer being sold
- Distributing a program over the Internet

# Counterfeit CDs = Lost Profits



© Reuters/CORBIS

# Summary of the WTO TRIPS (Trade-Related Aspects of Intellectual Property Rights) Agreement

Form of Intellectual Property	Key Terms of Agreement
Copyright	<ul style="list-style-type: none"><li>• Computer programs are protected as literary works</li><li>• Authors of computer programs and producers of sound recordings have the right to prohibit the commercial rental of their works to the public</li></ul>
Patent	<ul style="list-style-type: none"><li>• Patent protection is available for any invention whether a product or process</li><li>• Does not permit discrimination on basis of place of invention</li></ul>
Trade secret	<ul style="list-style-type: none"><li>• Must be protected against breach of confidence and other acts that are contrary to honest commercial practices</li></ul>



# Patents

Patents are the only mechanism for protecting technical ideas

Patents are property, they have value (\$) and investors like to see them

Patents are a negative right i.e. they detail what cannot be done by others

# Patents

- **Patent infringement:** Unauthorized use of another's patent
- Laws for granting patents
  - Patenting in Kenya (see additional info. provided on BB)
- Following cannot be patented
  - Abstract ideas
  - Laws of nature
  - Natural phenomenon

# Trade Secrets

- Business information that:
  - Represents something of economic value
  - Has required effort or cost to develop
  - Has some degree of uniqueness or novelty
  - Is generally unknown to the public
  - Is kept confidential
- May be compromised when employees leave firm

# Advantages of Trade Secret Laws

- No time limitations on the protection of trade secrets
- No need to file an application, make disclosures to any person or agency, or disclose a trade secret to outsiders to gain protection
- Trade secrets cannot be ruled invalid by the courts

# Trademark, Service Mark

- Trademark: Identifies goods
  - Service mark: Identifies services
  - Company can establish a “brand name”
  - Does not expire
  - Companies advertise to protect their trademarks
  - Companies also protect trademarks by contacting those who misuse them
- (see sample cases on BB)

# Trademark Infringement

- **Trademark**
  - Logo, package design, phrase, sound, or word that enables a consumer to differentiate one company's products from another's
  - Can be renewed forever, so long as a mark is in use
  - Kenyan Trade Mark Act (see document on BB)

# IP Institutions in Kenya - Registration

- KIPI
  - Patents, Utility Models, Industrial Designs, Technovations
  - Trade marks
- Kenya Copyright Board
  - Copyright and related rights
- KEPHIS
  - Plant Breeders Rights

# IP Institutions in Kenya-Dispute resolution

- Anti-Counterfeit Agency (ACA)
  - Enforcement of IP rights
- Industrial Property Tribunal
  - Disputes in relation to Patents, Utility Models, Industrial Designs, Technovations
- Department of Weights & Measures
  - Enforcement (False trade description (Trade Marks ))
- Competition Authority/Communication Authority
  - abuse of IP rights
- Courts
  - All IP disputes



# IP Institutions in Kenya- Others

- Collective Management Organizations (CMOs)
  - MCSK- Music Copyright Society of Kenya (Musicians)
  - PRiSK- Performers Rights Society of Kenya (performers)
  - KAMP- Kenya Association of Music Producers (producers)
  - KOPIKEN- The Reproduction Rights Society of Kenya (Publishers)

# Regional IP organizations

- African Regional Intellectual Property Organization – Harare
  - Created by Lusaka agreement of 1976
  - 19 (English speaking) Member states, including Kenya
  - Administers
    - Harare Protocol - Registration of Patents, utility models, industrial designs
    - Banjul Protocol – Registration of Trade marks
    - Swakopmund Protocol- Registration of Traditional Knowledge and Folklore
    - Arusha protocol – Registration of plants breeders rights
    - Kenya has only ratified Harare protocol
- African Intellectual Property Organization (OAPI)- Yaoundé, Cameroon
  - Registration of Patents, trade marks
  - 19 French speaking member states
  - No national offices

# Regional IP organizations

- European Patent Office- Munich, Germany
  - Grant of Patents
  - 27 Members states
- Office for the harmonization of internal Market (OHIM)- Alicante Spain
  - Trade marks and industrial designs

# Plagiarism and Actions to Combat Student Plagiarism

- **Plagiarism:** Act of stealing someone's ideas or words and passing them off as one's own
- Actions
  - Students should understand what constitutes plagiarism and why they need to cite sources
  - Students should know how to document Web pages
  - Major writing assignments should be scheduled in portions
  - Incorporate detection software and services

# Partial List of Plagiarism Detection Services and Software

Name of service	Web site	Provider
iThenticate	<a href="http://www.ithenticate.com">www.ithenticate.com</a>	iParadigms
Turnitin	<a href="http://www.turnitin.com">www.turnitin.com</a>	iParadigms
SafeAssign	<a href="http://www.safeassign.com">www.safeassign.com</a>	Blackboard
Glatt Plagiarism Services	<a href="http://www.plagiarism.com">www.plagiarism.com</a>	Glatt Plagiarism Services
EVE Plagiarism Detection	<a href="http://www.canexus.com/eve">www.canexus.com/eve</a>	CaNexus

Source Line: Course Technology/Cengage Learning

# Reverse Engineering

- Process of taking something apart in order to understand it, build a copy of it, or improve it
  - Applicable for both hardware and software
- Violates copyright and trade secret laws
- Software license agreements forbid reverse engineering

# Open Source Code

- Program whose source code is made available for use or modification, as users or other developers see fit
- Produces better software than the traditional closed model
- Reasons for developing open source code
  - Respect
  - Reputation
  - Recovering maintenance cost
  - Hassle of license and marketing

# Open-Source Definition

- No restrictions preventing others from selling or giving away software
- Source code included in distribution
- No restrictions preventing others from modifying source code
- No restrictions regarding how people can use software
- Same rights apply to everyone receiving redistributions of the software (copyleft)



# Criticisms of Proprietary Software

- Increasingly harsh measures being taken to enforce copyrights
- Copyrights are not serving their purpose of promoting progress
- It is wrong to allow someone to “own” a piece of intellectual property

# Commonly Used Open Source Software

Open source software	Purpose
7-Zip	File compression
Ares Galaxy	Peer-to-peer file sharing
Audacity	Sound editing and special effects
Azureus	Peer-to-peer file sharing
Blender 3D	3D modeling and animation
eMule	Peer-to-peer file sharing
Eraser	Erasing data completely
Firefox	Internet browsing
OpenOffice	Word processing, spreadsheets, presentations, graphics, and databases
Video Dub	Video editing

Source Line: Course Technology/Cengage Learning

*Education to take you places*

# Beneficial Consequences of Open-Source Software

- Gives everyone opportunity to improve program
- New versions of programs appear more frequently
- Eliminates tension between obeying law and helping others
- Programs belong to entire community
- Shifts focus from manufacturing to service

# Crititque of the Open-Source Software Movement

- Without critical mass of developers, quality can be poor
- Without an “owner,” incompatible versions may arise
- Relatively weak graphical user interface
- Poor mechanism for stimulating innovation (no companies will spend billions on new programs)

# Competitive Intelligence

- Legally obtained information that is gathered to help a company gain an advantage over its rivals
  - Ways of obtaining such information?
- Integrated into a company's strategic plans and decision making
- Not same as industrial espionage
  - **Industrial espionage:** Use of illegal means to obtain business information not available to the general public

# Cybersquatting

- **Cybersquatters:** Register domain names for famous trademarks or company names to which they had no connection
  - Hope that the trademark's owner would eventually buy the domain name for a large sum of money
- Tactics to circumvent cybersquatting - Register all possible domain names
  - .com, .edu, .gov, .int, .mil, .net, .org, arpa, .aero, .biz, .coop, .info, .museum, .name, .pro, .asia, .cat, .mobi, .tel, .travel, and .xxx

# Internet Corporation for Assigned Names and Numbers (ICANN)

- Nonprofit corporation responsible for managing the internet's domain name system
  - Current trademark holders are given time to assert their rights in the new top-level domains before registrations are opened to the general public
- Has a **Uniform Domain Name Dispute Resolution Policy**

# Discussion Questions

- What is a cross-licensing agreement? How do large software companies use such agreements? Do you think it is fair to small software development firms? Why or why not?
- Identify and briefly discuss three key advantages that trade secret law has over the use of patents and copyrights in protecting intellectual property. Are there any drawbacks with the use of trade secrets to protect intellectual property?



# Discussion Questions

- You are interviewing for the role of human resources manager for a large software developer. Over the last year, the firm has lost a number of high-level executives who left the firm to go work for competitors. During the course of your interview, you are asked what measures you would put in place to reduce the potential loss of trade secrets from executives leaving the firm. How would you respond?