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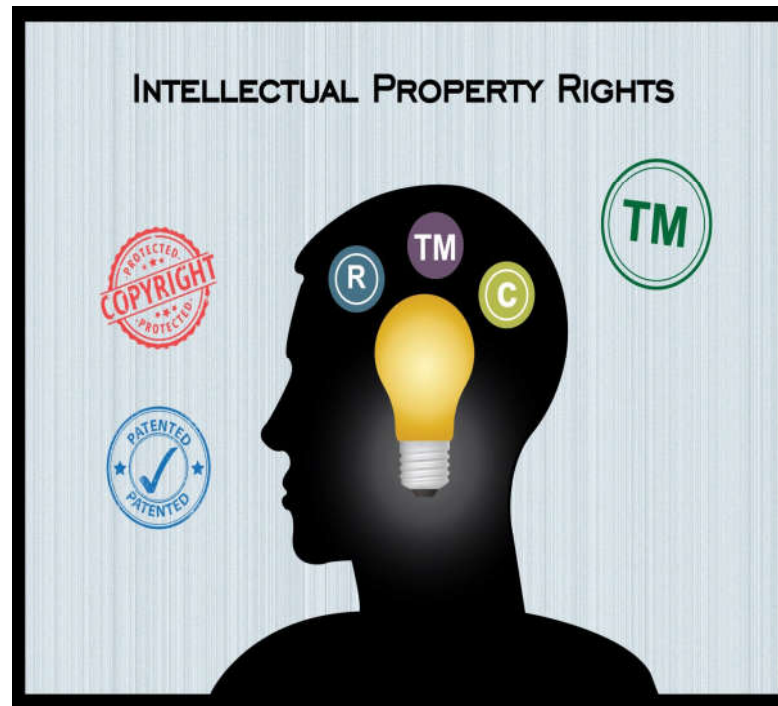
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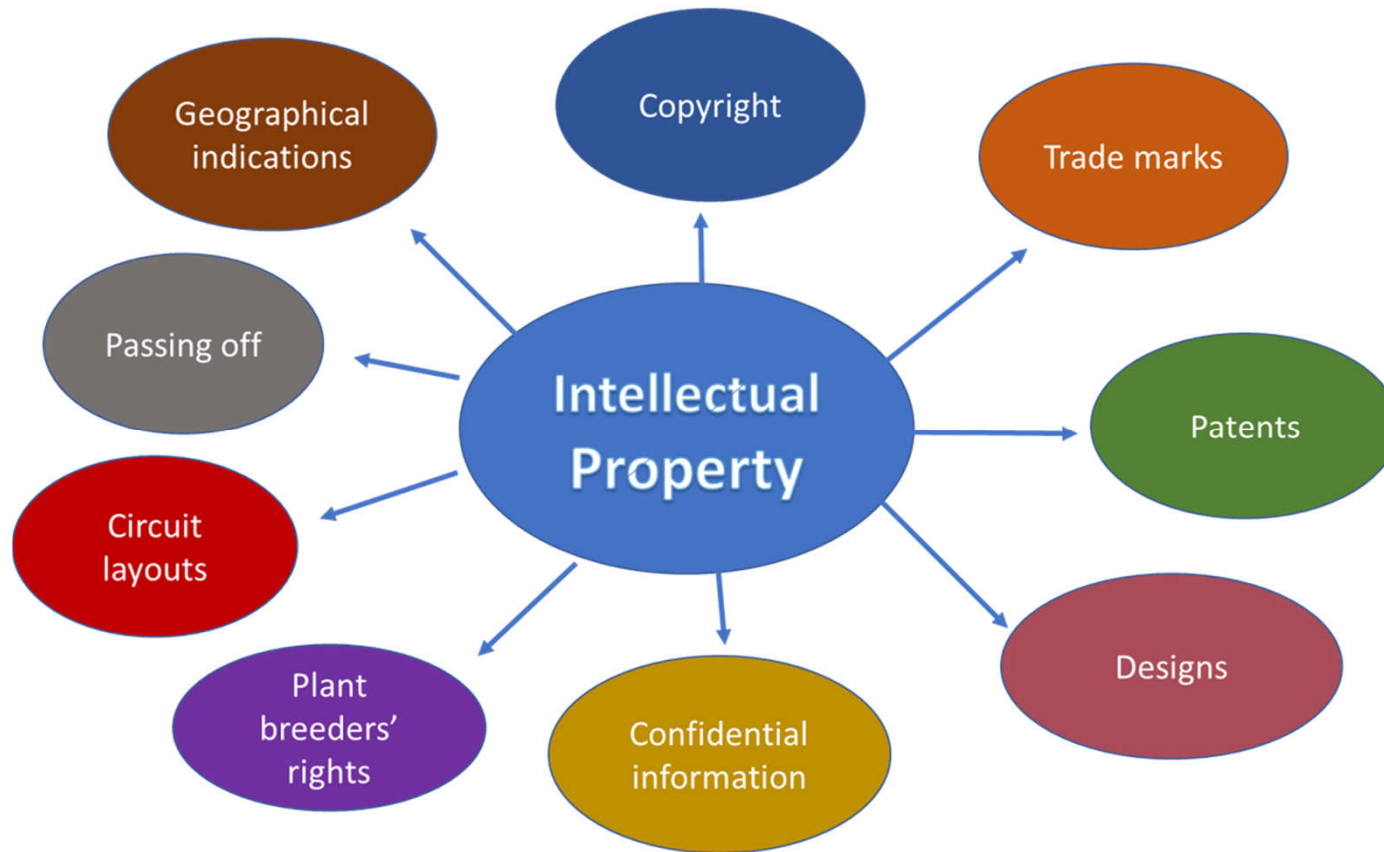
# **CSE332**

# **INDUSTRY ETHICS AND LEGAL ISSUES**

# Intellectual property rights

- Intellectual Property Rights (IPR) are legal rights.
- It protect and encourage the development and distribution of new products and services.
- IPRs are granted to people over their creations.
- Such as inventions, designs, trademarks, and creative content.





- “A patent is a legal document that gives the inventor exclusive rights to their invention for a period of time.”
- It protects the invention from being made, used, or sold without the inventor's permission.

**1. Utility Patents** (inventions, machines)

➤ **20 years from filing date.** Ex- first touchscreen technology

**2. Design Patents** (design of product)

➤ **15 years** from the grant date. Ex- **Coca-Cola bottle shape**, UI/UX elements, icons

**3. Plant Patents** (for new plant varieties)

➤ **20 years** from filing date. Ex- **disease-resistant apple variety**

Example in Computer Science - Google's PageRank Algorithm(1998-2018)

MP3 Audio Compression(1989-2018)

RSA Encryption Algorithm(1983-2000)





## What Happens After a Patent Expires?

- ✓ The invention becomes **public property**.
- ✓ Any company or individual can use, sell, or improve upon the invention **without permission**.
- ✓ Prices of patented products may drop as **competition increases**.

**Example:** The **Aspirin patent** by Bayer expired long ago, allowing multiple companies to produce generic versions, making it widely available at a lower cost.

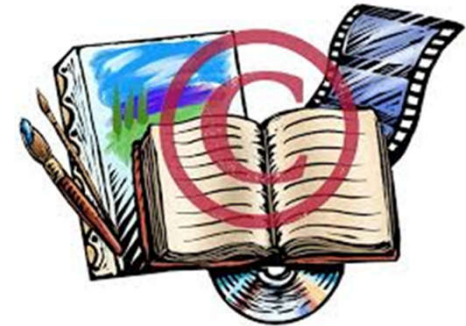
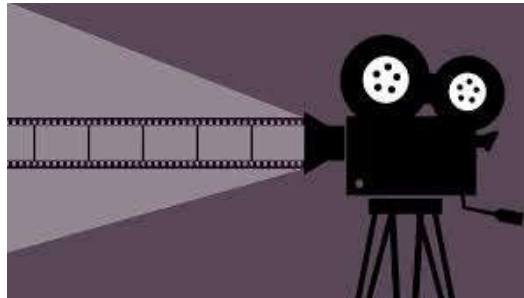
## Can a Patent Be Extended?

**Patents can be extended** under special conditions,

- **Pharmaceutical patents** (extended for up to **5 years**).
- **COVID-19 vaccines** received patent extensions in some countries

# Copyright

- **Automatic Protection** - no registration is needed
- **Covers Original Works** - Protects books, music, movies, software, paintings, etc.
- **Time-Limited** - creator's lifetime + 50 to 100 years
- **Exclusive Rights** - The creator controls reproduction, distribution



## Things take place under copyrights

- Novels
- Art
- Poetry
- Musical lyrics and compositions
- Films
- Website content



Example:

1. **J.K. Rowling's Harry Potter books** are copyrighted. No one can **reproduce or sell copies** without permission.
2. If you compose a song, **only you can authorize** its use in movies or advertisements.
3. Streaming platforms like **Netflix** buy copyright licenses to legally stream movies.
4. **Microsoft Windows** is copyrighted, meaning **copying or distributing it without a license** is illegal.



# Copyright Infringement & Consequences

If someone **uses copyrighted work without permission**, it is called **copyright infringement** and can lead to:

- **Legal action** (lawsuits, fines, or penalties).
- **Content removal** (DMCA takedown notices on YouTube, websites, etc.).
- **Loss of profits** for the original creator.

**Example:** YouTube removes videos that **use copyrighted music without permission**.

## Can you tell me the difference between Patent and Copyright?





# Trademark

- A **trademark** is a unique **sign, symbol, word, logo, or design** that distinguishes a company's products or services from those of others. It helps customers **identify and trust** a brand.

## Key Features:

- ✓ Unique Identifier
- ✓ Legally Protected
- ✓ Registered for Protection
- ✓ Can Be Renewed Indefinitely

## Examples of Trademarks

- 📌 Logos
- 📌 Brand Names
- 📌 Slogans
- 📌 Unique Packaging
- 📌 Sounds





## How Trademark Protection Works

- A company **registers** its trademark with the relevant authority (e.g., **USPTO** in the U.S., **EUIPO** in Europe).
- Once approved, the owner has **exclusive rights** to use the trademark.
- **Others cannot use a similar mark** for similar products/services, or they risk legal action.

## Why Are Trademarks Important?

- ✓ Brand Recognition
- ✓ Prevents Copying
- ✓ Builds Trust
- ✓ Adds Business Value

## Trademark Infringement

- Legal lawsuits (paying damages or stopping sales).
- Product bans (removal from stores or online platforms).
- Reputation damage (customers may lose trust).

📌 **Example:** In 2019, PayPal sued a company using a similar logo, claiming it could confuse customers.



- **USPTO (United States Patent and Trademark Office)** – Handles trademark registration and protection in the **United States**.
- **EUIPO (European Union Intellectual Property Office)** – Manages trademarks for the entire European Union.
- **WIPO (World Intellectual Property Organization)** – Provides **international trademark protection** under the **Madrid System**.
- **IP India (Intellectual Property India Office)** – For **India**.
- **CIPO (Canadian Intellectual Property Office)** – For **Canada**.

# Trade-Secret

- A **trade secret** is **confidential business information**. Unlike patents or trademarks, a trade secret is **not registered** but is protected as long as it remains a secret.
- **Secrecy**: The information is not generally known or accessible to competitors
- **Commercial value**: The information gives the business an economic advantage. If competitors learn the secret, the business may lose its advantage.
- **Reasonable efforts**: The business takes steps to keep the information secret

## How Are Trade Secrets Protected?

- ✓ Non-Disclosure Agreements (NDAs)
- ✓ Restricted Access
- ✓ Physical & Digital Security
- ✓ Legal Action Against Theft





## Examples of Trade Secrets in Real Life

### Coca-Cola's Secret Formula

- It has been **kept secret for over 100 years** and **never patented** to avoid public disclosure.

### Google's Search Algorithm

- The **exact algorithm** Google uses to rank websites is a trade secret.

### KFC's Secret Blend of Herbs & Spices

- It is **locked in a vault** and **only a few employees** know the full recipe.

### Apple's Product Designs & Manufacturing Processes

- Apple **keeps its product designs, supply chain details, and software strategies secret** to stay ahead of competitors.

# Geographical Indication

- A **Geographical Indication (GI)** is a name, sign, or symbol that is used to identify products that come from a **specific geographical location** and have **unique qualities, reputation, or characteristics** due to that location.

## Key Features


- ✓ Links a Product to Its Origin 📌
- ✓ Certifies Authenticity & Quality ✅
- ✓ Helps Producers to Market Their Products 💰
- ✓ Prevents Misuse of Famous Product Names 🚫





## Examples of Geographical Indications (GI) Worldwide:

Darjeeling Tea (India) 

Champagne (France) 

Roquefort Cheese (France) 

Kanjeevaram Silk Sarees (India)

Alphonso Mango (India) 

Kona Coffee (Hawaii, USA) 

# Design

- It protects the visual appearance of a product or part of it.
- Design rights protect the unique look of a product, including its shape, color, pattern, texture, and materials.
- These rights do not protect functionality but focus purely on aesthetics.

## What Do Design Rights Protect?




- ◆ Shape
- ◆ Color
- ◆ Pattern
- ◆ Texture
- ◆ Material Appearance







## Examples

- ✓ Apple iPhone Design 
- ✓ Coca-Cola Bottle 
- ✓ Nike Sneakers 
- ✓ Automobile Designs 

## How Are Design Rights Protected?

- ◆ **Registered Design Rights** 
- Companies can **register** their product's design to get **legal protection**.
- Example: **EUIPO (Europe), USPTO (USA), Indian Design Act, 2000.**



# Plant varieties

Plant Variety Rights (PVRs), also known as **Plant Breeders' Rights (PBRs)**, provide **legal protection** to plant breeders, preventing others from **reproducing, producing, marketing, selling, importing, or exporting** their plant varieties without permission.

## How PVRs Work:

- **Unauthorized Reproduction Prevention:** Others **cannot clone, breed, or propagate** the plant variety without the breeder's consent.
- **Exclusive Production & Sales Rights:** The breeder has the **sole right to commercially produce and sell** the plant variety.
- **Marketing & Branding Protection:** Only **licensed companies** can market and distribute the plant under its official name.
- **Import & Export Control:** The breeder controls the **international trade** of the variety.





## Why PVRs Are Important?

1. **Encourages Agricultural Innovation** 🌱 – Breeders invest time and resources into **developing superior crops**.
2. **Ensures Fair Compensation** 💰 – Breeders **profit** from their research and hard work.
3. **Improves Crop Quality** 🍏 – Leads to the **creation of high-yield, pest-resistant, and climate-tolerant varieties**.
4. **Boosts Global Food Security** 🌍 – Helps **increase food production and sustainability**

## Examples of PVR-Protected Plants:

- ✓ **Hybrid Corn & Rice** – Developed for **higher yield and disease resistance**.
- ✓ **Pink Lady Apples** 🍏 – A **trademarked and protected** apple variety.
- ✓ **BT Cotton** 🌱 – Genetically modified cotton with **pest resistance**.
- ✓ **Seedless Grapes & Watermelon** 🍇 🍉 – Developed to provide **better taste and quality**.



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## **Next Topic Copy Types of Trademarks**