

A top-down view of a collaborative workspace. Several people are gathered around a table, their hands and arms visible as they work. The table surface is covered with hand-drawn diagrams and sketches. A large central yellow circle contains a lightbulb icon. To its left, a green circle contains a magnifying glass icon. To its right, a blue circle contains an eye icon. Below the central circle, there are two gears and the word "DESIGN" written in capital letters. To the left of the central circle, there are two overlapping circles labeled "A" and "B", with the word "RESEARCH" written below them. To the right of the central circle, there is a red circle and a blue circle. In the bottom right corner, there is a green circle containing a computer monitor icon. The overall scene suggests a creative and collaborative environment focused on intellectual property and innovation.

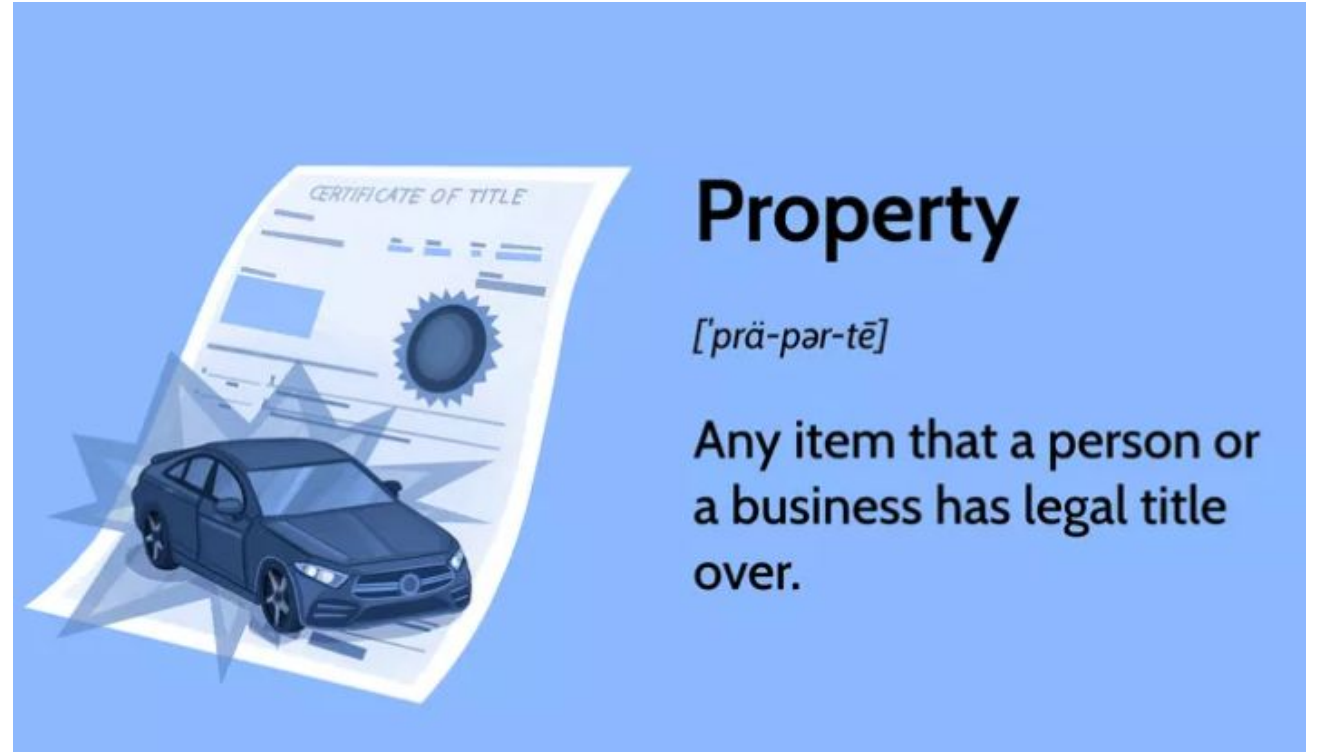
INTELLECTUAL PROPERTY RIGHTS

Meaning of Property

- Property refers to anything that can be owned, possessed, or controlled, whether tangible (land, house, car) or intangible (ideas, inventions, literary works).

Origin: The concept of IP dates back to ancient guilds, royal charters, and literary privileges, but it was systematized during the Industrial Revolution. In India, the modern framework developed during colonial times, with the Patents and Designs Act of 1911.

Nature: Intellectual Property (IP) is intangible, arising from human creativity and innovation. It grants creators exclusive rights to use and commercialize their creations, protecting them from unauthorized use.



Tangible Assets

**Equipment
Machinery
Buildings
Vehicles
Stock
Land
Cash**



**You Can
Touch It**

Intangible Assets

**Trademarks
Franchises
Copyrights
Licenses
Goodwill
Patents
Brands**



**You Can't
Touch It**

Difference Between Tangible and Intangible Property

Aspect	Tangible Property	Intangible Property
Meaning	Physical assets that can be touched, seen, and felt.	Non-physical assets that cannot be touched but have value.
Form	Material/physical in nature.	Abstract/immaterial in nature.
Examples (India)	Land, house, car, machinery, gold.	Patents (e.g., ISRO's satellite technology patent), Trademarks (Amul logo), Copyright (Bollywood films)
Ownership Proof	Documented through deeds, receipts, registration papers.	Documented through legal registrations like Copyright Act, Patents Act, Trademarks Act.
Depreciation/Valuation	Value decreases due to wear and tear, usage, or obsolescence.	Value depends on innovation, reputation, or market demand; may increase over time.
Transferability	Can be physically delivered or transferred.	Transferred through licensing, assignment, or sale of rights.
Protection Law in India	Governed mainly by property and contract laws.	Governed by Intellectual Property Rights (IPR) laws and TRIPS compliance.

WHAT IS INTELLECTUAL PROPERTY?

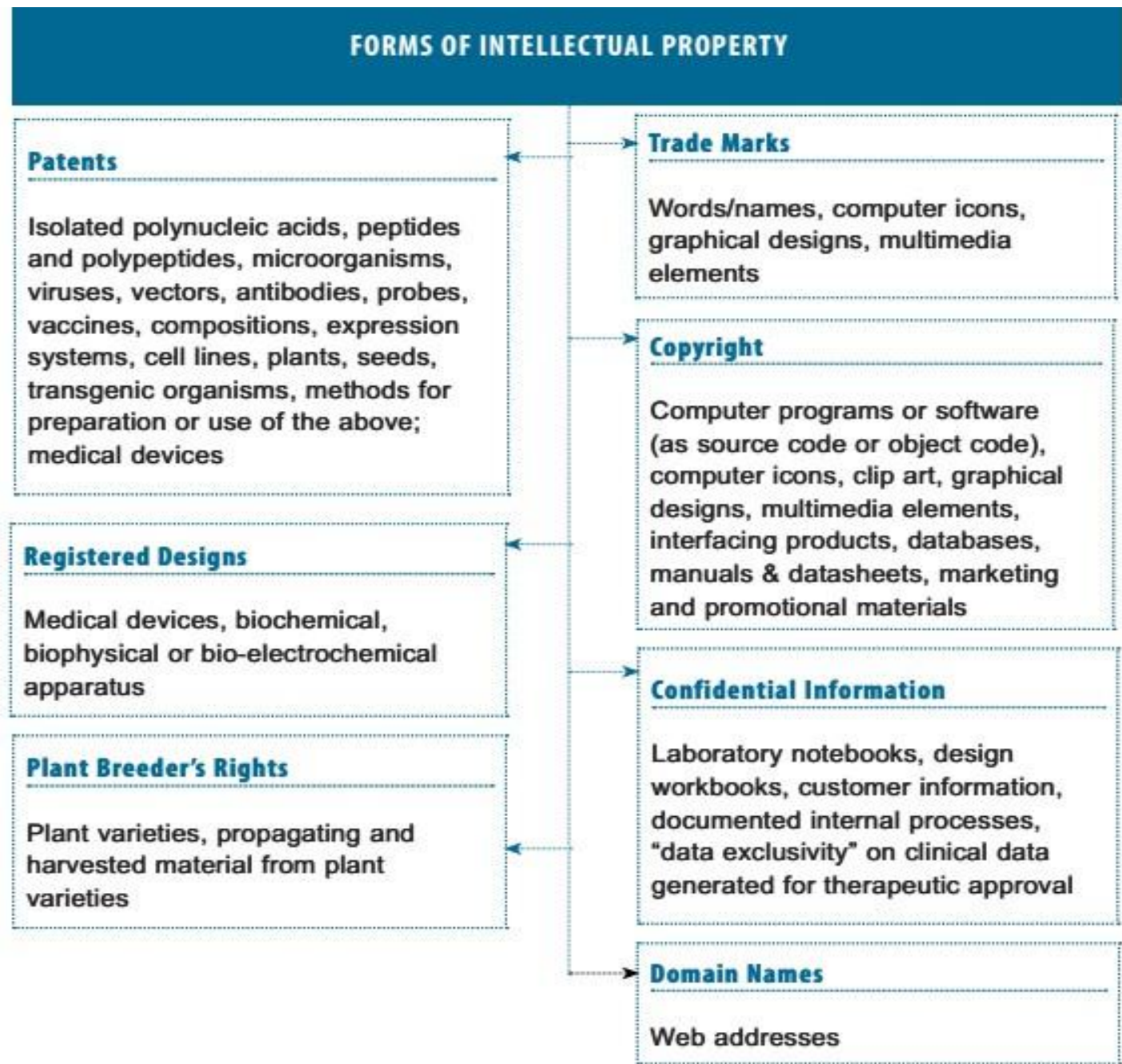
- Intellectual property refers to creations of the mind: inventions; literary and artistic works; and symbols, names and images used in commerce.
- The Convention Establishing the World Intellectual Property Organisation 1967 (WIPO) defines IP as “rights relating to:
 - Literary, artistic and scientific works
 - Performances of performing artists, phonograms and broadcasts
 - Inventions in all fields of human endeavor
 - Scientific discoveries
 - Industrial designs
 - Trademarks, services marks and commercial names and designations
 - Protection against unfair competition,
 - All other rights resulting from intellectual activity in the industrial, scientific,

Intellectual property is divided into two categories:

Industrial Property includes patents for inventions, trademarks, industrial designs and geographical indications

Copyright covers literary works (such as novels, poems and plays), films, music, artistic works (e.g., drawings, paintings, photographs and sculptures) and architectural design.

FORMS OF INTELLECTUA L PROPERTY.....



Provision of IPR under TRIPS and WTO

- First recognized in the Paris Convention for the Protection of Intellectual Property (1883) and Berne Convention for the protection of literary and artworks (1886). Both treaties are administered by the World Intellectual Property Organization (WIPO).
- TRIPS (Trade-Related Aspects of Intellectual Property Rights): An international legal agreement administered by the WTO (1995), setting minimum standards for IPR protection across member nations.
- WTO Role: Ensures global compliance, dispute settlement, and uniformity in protection of IP rights.
- India's Adaptation: India amended laws such as the Patents Act, 1970 (to allow product patents in pharmaceuticals), Copyright Act, 1957, and Trademarks Act, 1999 to comply with TRIPS.

WHY PROMOTE AND PROTECT INTELLECTUAL PROPERTY?

First, the progress and well-being of humanity rest on its capacity to create

and invent new works in the areas of technology and culture.








Second, the legal protection of new creations encourages the commitment of additional resources for further innovation.

Third, the promotion and protection of intellectual property spurs economic growth, creates new jobs and industries, and enhances the quality and enjoyment of life.

WHAT IS A PATENT?

- A patent is the right granted by the government of a country to the patent owner allowing the patent owner to exclude others from commercially exploiting an invention within that country.
- A patent is an exclusive right granted for an invention –a product or process that provides a new way of doing something, or that offers a new technical solution to a problem.
- A patent provides patent owners with protection for their inventions. Protection is granted for a limited period, generally 20 years.

Comparison of Patent Types

Use	Utility Patent	Design Patent	Plant Patent
	Functional inventions 	Ornamental designs 	New plant varieties 
Cost	Moderate to high	Lower	Moderate
Duration	20 years	10 years	20 years
Example	Fleet tracking system 	Drink bottle shape 	 Hybrid rice variety

New invention

It is defined as any invention or technology which has not been anticipated by publication in any document or used in the country or elsewhere in the world before the date of filing of patent application with complete specification, i.e. the subject matter has not been fallen in public domain or that it does not form part of the state of the art.



CONDITIONS TO BE SATISFIED BY AN INVENTION TO BE PATENTABLE

1. Novelty: A novel invention is one, which has not been disclosed, in the prior art where prior art means everything that has been published, presented or otherwise disclosed to the public on the date of patent.

- For an invention to be judged as novel, the disclosed information should not be available in the 'prior art'.



2. Inventiveness (Non-obviousness)

- A patent application involves an inventive step if the proposed invention is not obvious to a person skilled in the art i.e., skilled in the subject matter of the patent application.
- The prior art should not point towards the invention implying that the practitioner of the subject matter could not have thought about the invention prior to filing of the patent application.
- The complexity or the simplicity of an inventive step does not have any bearing on the grant of a patent.

3. Usefulness:

- An invention must possess utility for the grant of patent.
- No valid patent can be granted for an invention devoid of utility.

•ISRO's Patents and Technology Transfer

•**Background:** ISRO not only develops space technology but also transfers its innovations for civilian use.

Examples:

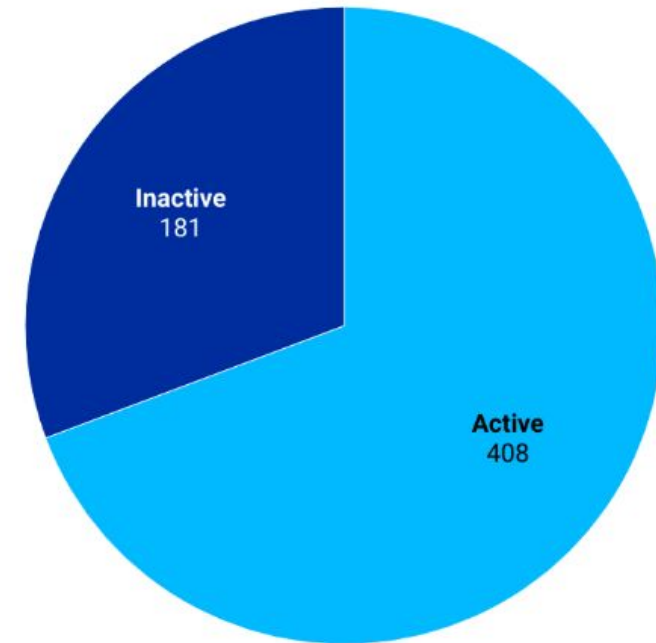
- **Heat-resistant materials** used in space launch vehicles adapted for defense and automotive industries.
 - **Water purification systems** originally designed for space missions were commercialized, benefiting rural communities with affordable drinking water solutions.
 - **Telemedicine technology** developed by ISRO connects remote rural hospitals with super-specialty hospitals.
- These patents and technology transfers have boosted **Make in India**, reduced imports, and created commercial opportunities for private industries.

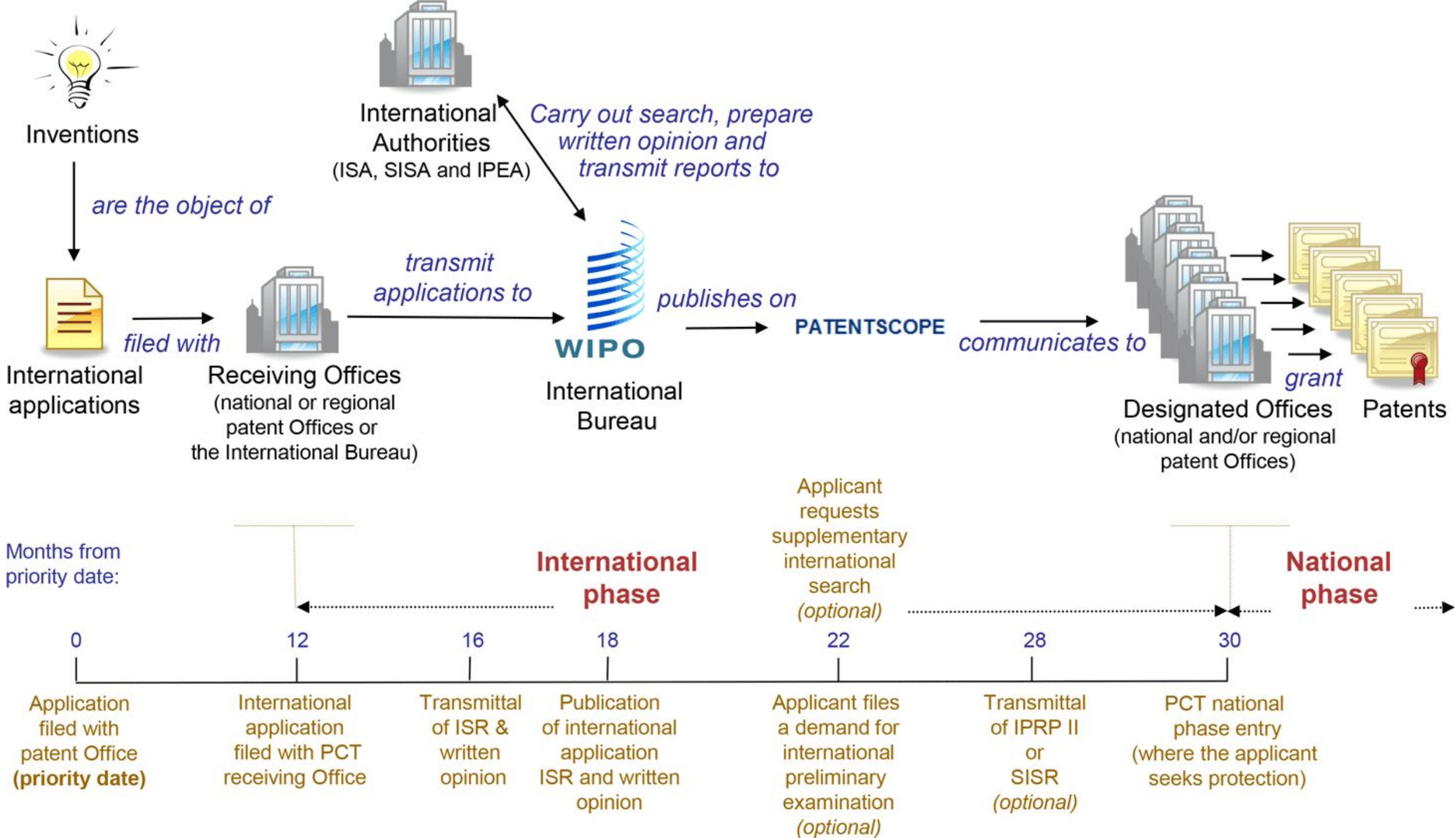
ISRO Patents Statistics

- ISRO has filed a total of 589 patents worldwide, which are grouped into 480 separate patents. Out of these, 408 patents are still active, meaning around 69% of ISRO's patents are currently being used.

ISRO Patent Portfolio

Worldwide Legal Trends





Some creations cannot be patented under most IP laws:

Scientific Discoveries & Natural Phenomena

e.g., discovery of gravity, new planet

Abstract Ideas & Mathematical Methods

e.g., Pythagoras theorem, algorithms alone

Methods of Treatment

e.g., surgical or therapeutic procedures

Business Methods & Computer Programs *per se*

e.g., stock trading method, standalone software code

Literary & Artistic Works

protected by copyright, not patent

Plant/Animal Varieties & Biological Processes

e.g., a new rose breed, cloning techniques

Inventions Against Public Order or Morality

e.g., devices for illegal activities



Patents protect inventions, not discoveries or abstract creations.

WHAT IS COPYRIGHT?

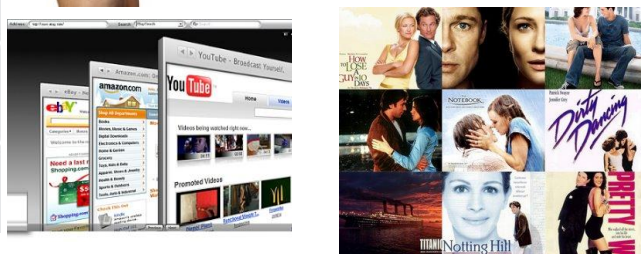
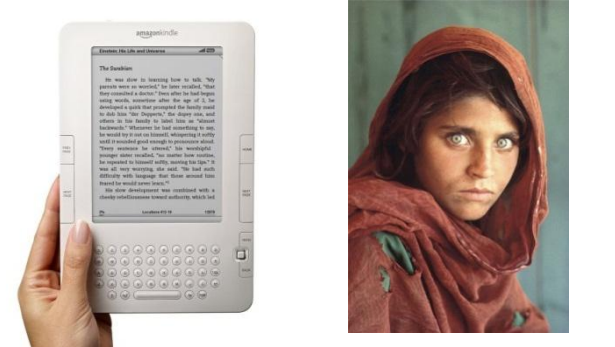
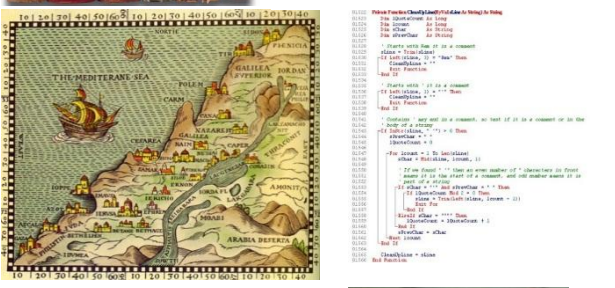
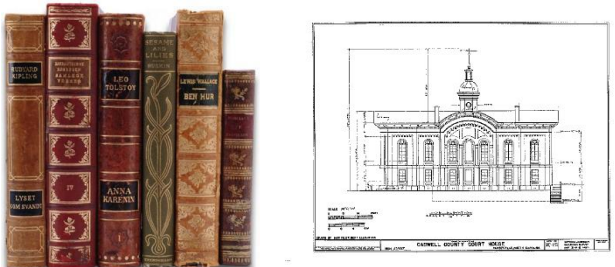


- Copyright protects against unauthorized reproductions and public dissemination of an original work.
- Copyright protects the particular expression of an idea – not the idea itself.
- 'Original' does not mean the work needs to be particularly creative or ingenious. A work is 'original' where the work is created independently and skill, labour and judgment is applied to it.

ENTITLEMENT TO COPYRIGHT

- It is of a type protected by copyright under the Act.
- It is recorded in some form – e.g. in writing, by a sound recording, on a computer disk, or in a printed form.
- The work meets the requisite degree of originality. A work is original if adequate skill, labour and judgment are spent on creating it.

Category of work	Examples
Literary works	All written works, including reports, lyrics, poems, books, software, database
Artistic works	Photographs, drawings, paintings, sculptures, architecture, graphs, computer icons
Dramatic works	Plays, screenplays, choreographic works
Musical works	All works with written musical notation, including sheet music, operas.
Cinematographic works	All works generating moving images, including films, computer games.
Sound recordings	All works with recorded sound, including CDs, DVDs, mp3, podcasts
Broadcasts	Television and radio broadcasts
Published editions	Publisher's typeface and layout of a published work



RIGHTS GRANTED BY COPYRIGHT

- Can copy the work
- Issue copies of the work to the public
- Rent or lend the work to the public
- Perform, show or play the work in public
- Communicate the work to the public – this includes broadcasting of a work and also electronic transmission and make an adaptation of the work or do any of the above in relation to an adaptation



DURATION OF COPYRIGHT PROTECTION

- **Literary, Dramatic, Musical and Artistic Works:** The life time of the author plus a period of 70 years from the end of the year in which the author dies.

Computer generated works: 50 years from the date of creation of the work. A work is deemed to be computer generated where there is “no human author”.

③ **Sound recordings:** 50 years from the end of year in which it was made or published.

③ **Broadcasts**— 50 years from the end of the year of broadcast.

③ **Typographical arrangement of published editions:** 25 years from
the year of first publication

WHAT IS A TRADEMARK?

- A trademark is a distinctive sign that identifies certain goods or services produced or provided by an individual or a company.
- Trademark protection ensures that the owners of marks have the exclusive right to use them to identify goods or services, or to authorize others to use them in return for payment.
- The period of protection varies, but a trademark can be renewed indefinitely upon payment of the corresponding fee.



- Trademarks may be one or a combination of words, letters and numerals.
- They may consist of drawings, symbols or three dimensional signs, such as the shape and packaging of goods.
- In some countries, non-traditional marks may be registered for distinguishing features such as holograms, motion, color and non-visible signs (sound, smell or taste).



Trademarks

Word Mark



Device Marks



(Signs, Symbols,
Logos)

Collective Marks



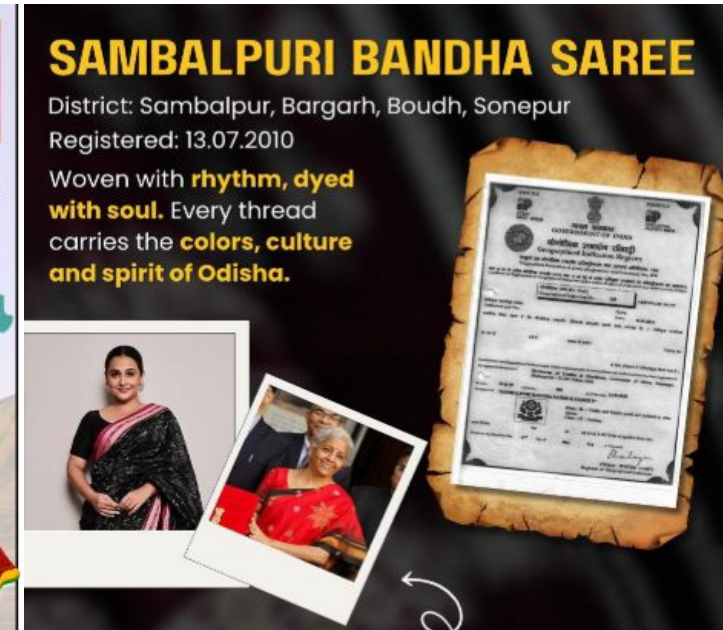
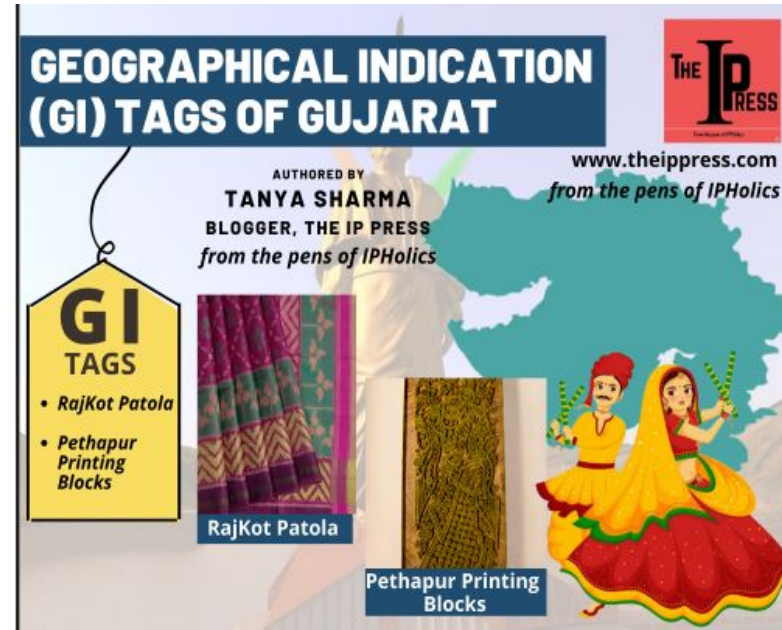
Certification



Marks

WHAT IS A GEOGRAPHICAL INDICATION?

- A geographical indication is a sign used on goods that have a specific geographical origin and possess qualities or a reputation due to that place of origin.
- Most commonly, a geographical indication consists of the name of the place of origin of the goods.
- The use of geographical indications is not limited to agricultural products.
- Total 644 GI Tags in India as of 2024-25 list



PLANT BREEDER'S RIGHTS

- Plant Breeder's Rights (and Plant Variety Rights in other countries) are exclusive commercial rights to breeders of certain new varieties of plants or fungi.
- In India, plant breeders' rights are protected under the Protection of Plant Varieties and Farmers' Rights (PPV&FR) Act, 2001, granting breeders exclusive rights to produce, sell, market, distribute, import, or export their registered plant varieties.
- These also include the right to license their variety and take civil action against infringers.
- The law balances breeder protection with specific rights for farmers, such as allowing them to save, use, sow, exchange, and share their farm-saved seeds.

IMPORTANCE OF PLANT VARIETIES ACT



BENEFITS TO THE INDIAN ECONOMY

(PPV&FR ACT, 2001)



Encourages R&D in agriculture through exclusive rights to plant breeders



Boosts exports of high-yield Indian varieties



Reduces dependency on foreign seeds and tech

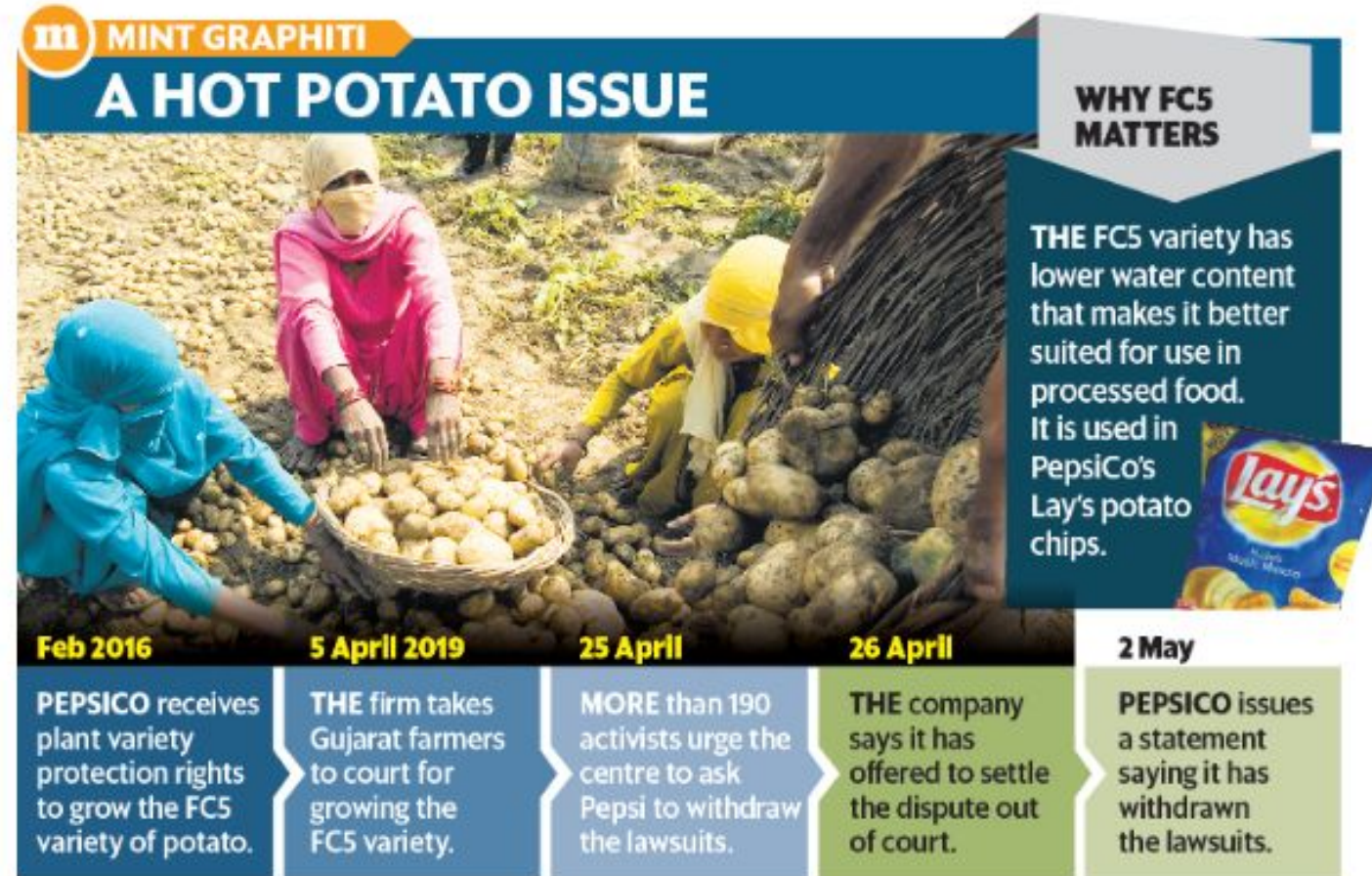


Recognizes and rewards traditional Indian varieties



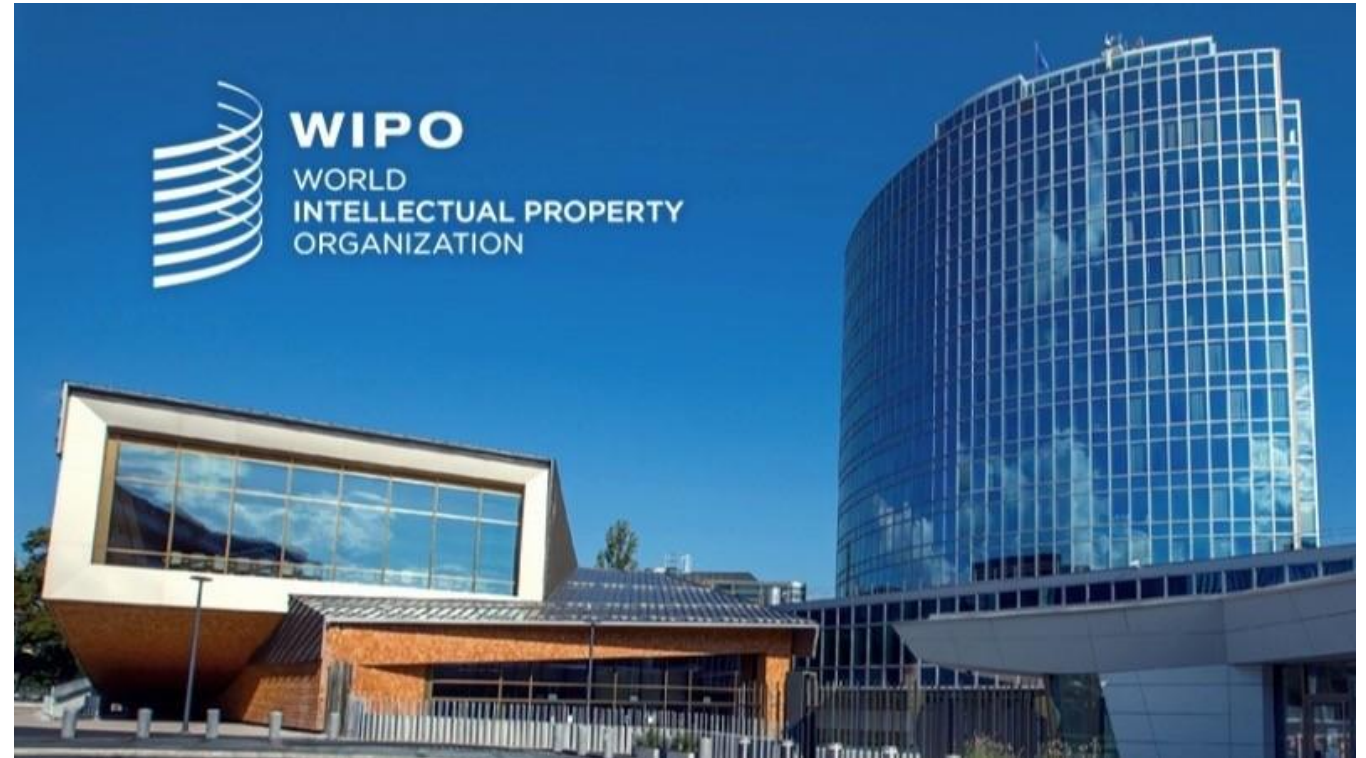
Attracts private investment in the agri-tech and biotech sectors

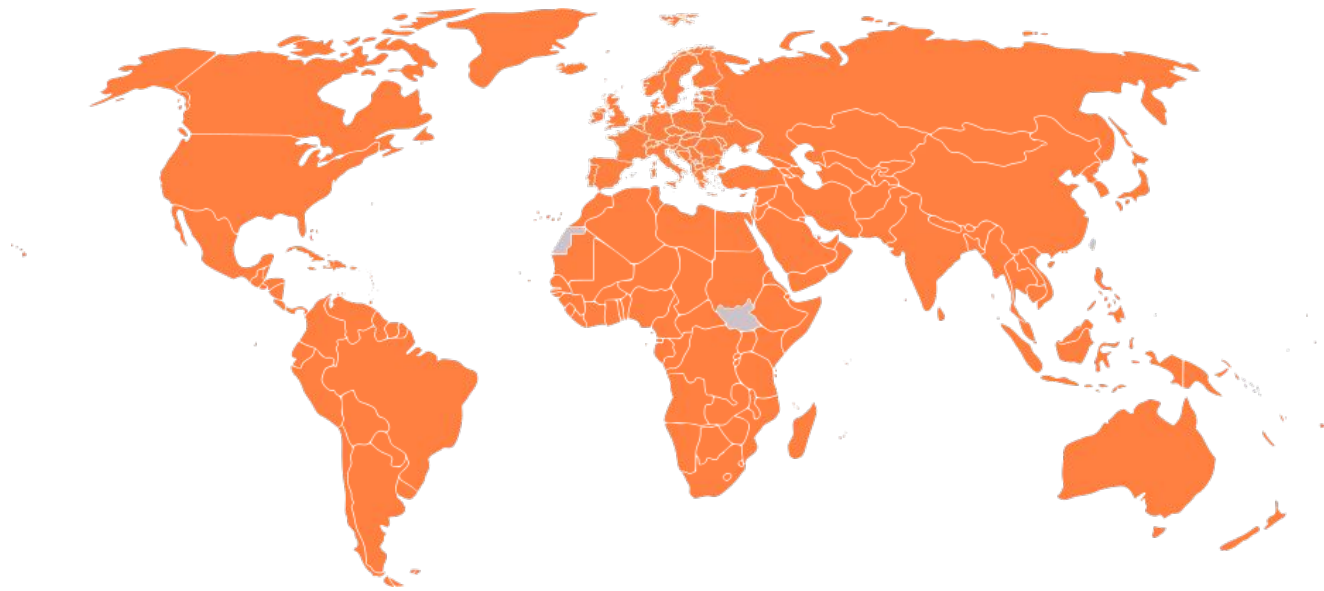
- Plant Breeder's Rights (PBR) protection extends not only to plant varieties, but also to reproductive material of the variety and to other varieties which are considered to be “essentially derived” from the protected variety.
- In some limited circumstances rights may also extend to material which is harvested from the plant variety.
- Traditionally bred plants, Algae, fungi, and transgenic plants may be protected as a “plant variety”.



WORLD INTELLECTUAL PROPERTY ORGANIZATION

- WIPO was established by the WIPO Convention in 1967 and entered
- into force in 1970, specialized agency of the United Nations.
- rights of creators and owners of intellectual property are protected worldwide, and that inventors and authors are therefore recognized and rewarded
- WIPO works closely with its Member States and other constituents





- WIPO has **193 member states** (almost all UN members).
- Only a few countries are **not members**.
- Notable non-members: **Eritrea, South Sudan, Palau, Micronesia, Marshall Island, Nauru, Kiribati, Vatican City**.

- WIPO also services global registration systems for trademarks, industrial designs and appellations of origin, and a global filing system for patents.
- WIPO plays a key role in helping these systems to evolve through treaty negotiation; legal and technical assistance; and training in various forms, including in the area of enforcement.
- WIPO is a largely self-financed organization, funds come from international registration and filing systems, as well as through its publications and arbitration and mediation services.



Trade Secret

['trād 'sē-krət]

Secret practices and processes that give a company a competitive advantage over its competitors.



Formula for Coca-Cola



The Big Mac Special Sauce



KFC Chicken Recipe



WD-40 Formula



WHAT IS AN INDUSTRIAL DESIGN?

- An industrial design refers to the ornamental or aesthetic aspects of an article.
- A design may consist of three-dimensional features, such as the shape or surface of an article, or two-dimensional features, such as patterns, lines or color.
- From technical and medical instruments to watches, jewelry and other luxury items; from house wares and electrical appliances to vehicles and architectural structures; from textile designs to leisure goods.

SHAPE	PATTERN
CONFIGURATION	ORNAMENTATION



Designs / Industrial Design Patent/Design Patent

Governing Laws

- Industrial designs in India fall under *Designs Act, 2000* and *Designs Rules, 2001* (effective 11 May 2001)
- Earlier law (*Act of 1911*) repealed
- Amendments in 2008 & 2014 (added *Small Entity* category along with natural persons/others)

What is an Industrial Design?

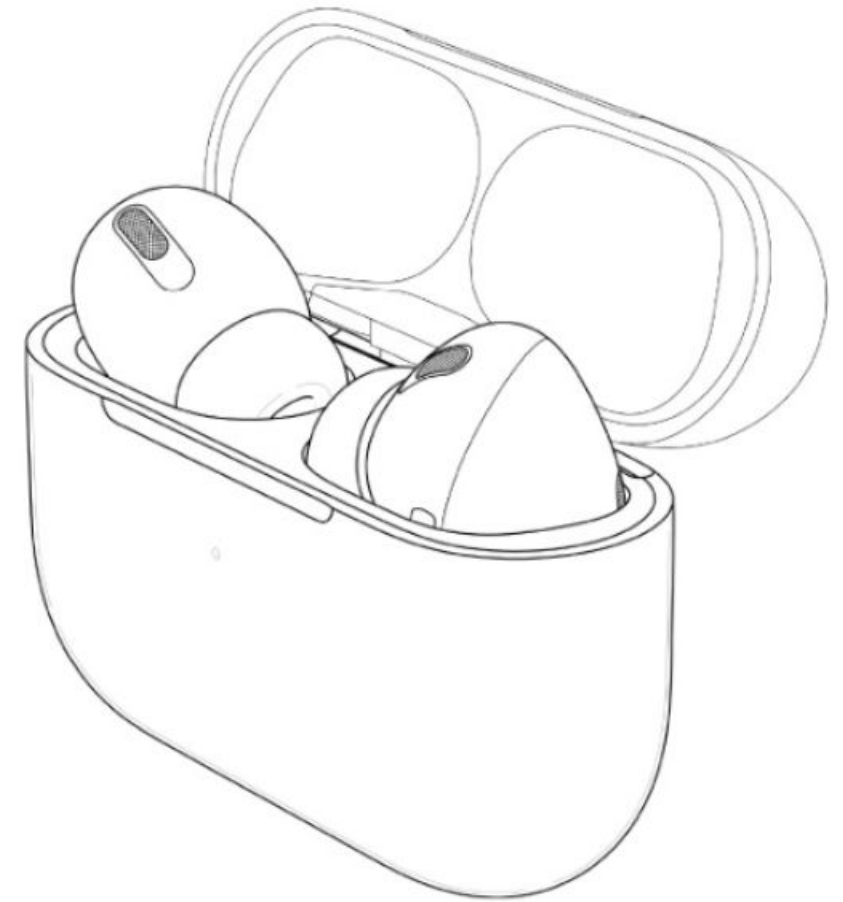
Protection for **novel and original features** in:

- ❖ Shape or configuration
- ❖ Patterns, ornamentation, lines, colours

Evaluated purely by **visual appeal** of the final article

Quality Certification

- Design registration process accredited with *ISO 9001:2008*
- Certificate granted by **BSI** (13 April 2015)
- Valid till March 2018 (annual CAV audits)
- Covers registration, protection, and maintenance of designs under the Act



Source: HongKong IP Office Design No: 2015722.2M003

India → Correct term is Design (governed by the *Designs Act, 2000*). The law does not use the word *patent*. So, it's officially called Registered Design or Industrial Design.

International (WIPO / Europe) → Commonly called Industrial Design.

USA → The term is Design Patent (since in the US, both utility and design are granted as “patents”).

Design Patent Examples



Electric Lighter
D780,515
TYL, Inc.



Container
D850,902
Blue Apron, LLC



Shoe
D819,323
Reebok International Limited



Zipper Puller
D829,600
Thule, Inc.



Toy
D807,967
Bioserie



Electronic Device
D842,853
Apple Inc.



Sensor Module
D772,736
SZ DJI TECHNOLOGY CO., LTD.



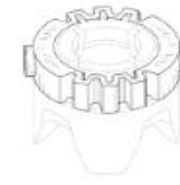
Connector
D827,686
KUKA Roboter GmbH



Receptacle Holder
D855,826
GEN-PROBE INCORPORATED



Retail Fixture
D867,035
Apple Inc.

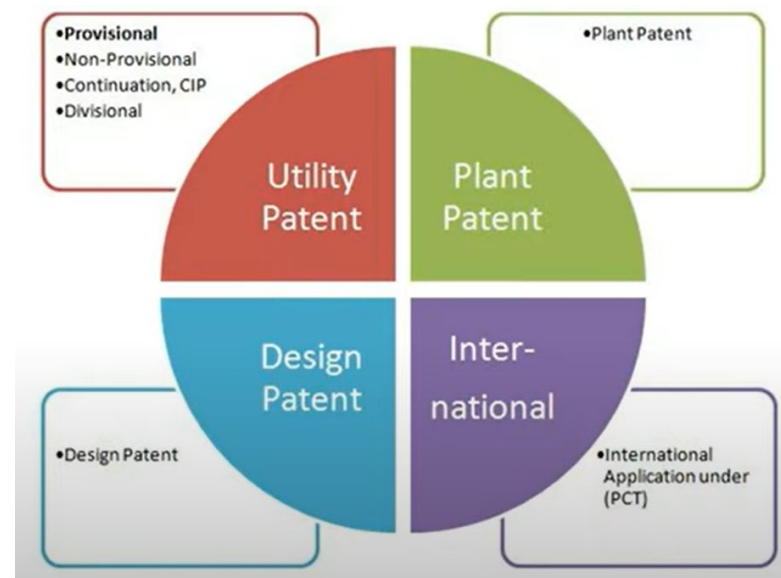
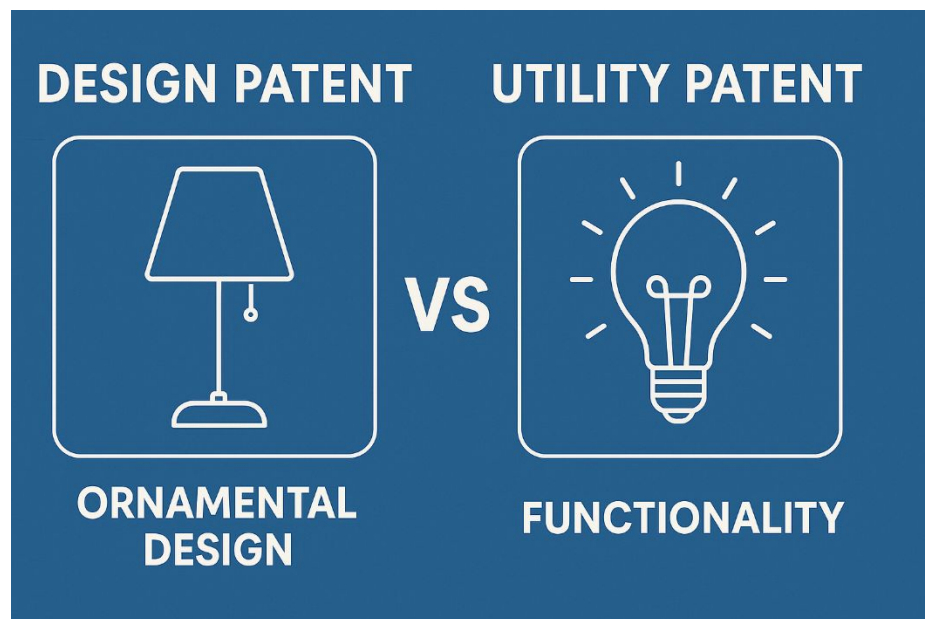


Multipart Collar
D852,951
West Pharmaceutical Services, Inc.



**Display Screen or Portion Thereof
with Graphical User Interface**
D812,093
salesforce.com, inc.

Aspect	Utility Patent	Design Patent /Industrial Design
What it Protects	Function, working, or process of an invention	Appearance, shape, configuration, surface pattern, ornamentation
Focus	How it works	How it looks
Law in India	Patents Act, 1970	Designs Act, 2000
Term of Protection	20 years (from filing date)	10 years + 5 years (renewal)
Examples (Global)	Engine mechanism, software algorithm, water purifier system	Coca-Cola bottle, iPhone design, car headlamp styling
Examples (Indian)	Tata Nano engine technology, water filter process	Titan watch dial, Amul butter pack, Royal Enfield fuel tank





Traditional Knowledge (TK) – Overview

- Knowledge, skills & practices of indigenous/local communities
- Passed **orally** across generations
- Integral to culture, spirituality & environment
- Fields: agriculture, ecology, medicine, biodiversity, art, technology



Ways of Expression

- Oral traditions: tales, songs, proverbs, rituals
- Cultural expressions: dances, paintings, carvings
- Practices: Ayurveda, Yoga, Unani, Siddha, Naturopathy
- Resource management: agriculture, forests, sacred groves



India's Initiatives

- TKDL (2001) – Digital database, blocked patents (e.g., Colgate claim)
- Biological Diversity Act, 2002 – Biodiversity Management Committees
- Ministry of AYUSH (2014) – Promotion of Indian medicine systems
- National IPR Policy, 2016 – Recognition of TK in IP framework
- Indian Knowledge Systems (IKS) – At AICTE, CoE at IIT Kharagpur

Aspect	Traditional Knowledge	Conventional IPR
Ownership	Community-based	Individual/organization
Mode of Transfer	Oral traditions, practices	Written, documented
Protection Need	Prevent misappropriation (biopiracy)	Encourage innovation & monopoly rights
Examples	Ayurveda, Yoga, Tribal art, Basmati rice	New drug molecule, new machine design



“Innovation is the soul of
engineering,
but protecting your ideas
through IPR is what
transforms creativity into
lasting impact”!!



Thank You