

**RAMA**  
**UNIVERSITY**

[www.ramauniversity.ac.in](http://www.ramauniversity.ac.in)

**FACULTY OF ENGINEERING &  
TECHNOLOGY**

**Dr. NIHARIKA SINGH**  
**Assistant Professor**  
**Dept. of Biotechnology**

A photograph of a tea plantation with rows of tea bushes under a bright, hazy sky. The tea leaves are a vibrant green, and the overall scene is bathed in soft, natural light.

**Course: B. Tech Biotechnology**  
**Sub Code: BBT-712**

**Semester: 7th**  
**Sub Name: Bioethics, Biosafety & IPR**

**Dr. NIHARIKA SINGH**  
**Assistant Professor**  
**Dept. of Biotechnology**

# WHAT IS INTELLECTUAL PROPERTY RIGHTS

## INTELLECTUAL PROPERTY

Intellectual property is the product or creation of the mind. It is different from other properties in term that

it is “intangible”. Hence it needs some different way for its protection.

## INTELLECTUAL PROPERTY RIGHTS

IPR is the body of law developed to protect the creative people who have disclosed their invention for the benefit of mankind. This protects their invention from being copied or imitated without their consent.

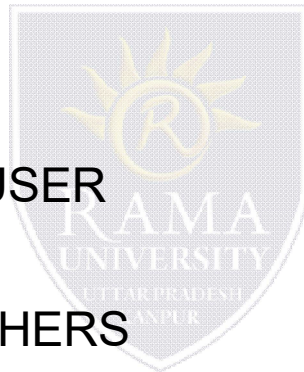
### Basic Form :

- ✓ Intangible
  - ✓ Territorial
  - ✓ Statutory/Common law Provisions
-

## IP IS AN INTANGIBLE PROPERTY

### ➤ SET OF RIGHTS:

- ✓ Right to EXCLUSIVE USER
- ✓ Right to PREVENT OTHERS
- ✓ Right to ASSIGN, TO LICENSE
- ✓ INHERITABLE Right



# COPYRIGHT

## MEANING OF COPYRIGHT :

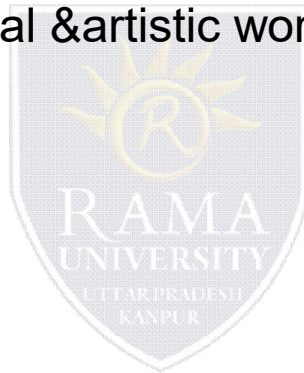
### ➤ Right To

- ✓ reproduce the work ( including Storing )
- ✓ issue copies of the work
- ✓ perform work in public
- ✓ communicate the work to the public
- ✓ make translation
- ✓ make adaptation
- ✓ sell or give on hire



➤ Copyright subsists in original-

- ✓ literary, dramatic, musical & artistic works
- ✓ cinematographic films
- ✓ sound recordings
- ✓ which are either first published in India



## Range Of Copyright Protection:

Product Packaging

Scenic Arrangement

Paintings

Sculpture

Drawings ( maps,..)

Engravings

Photographs

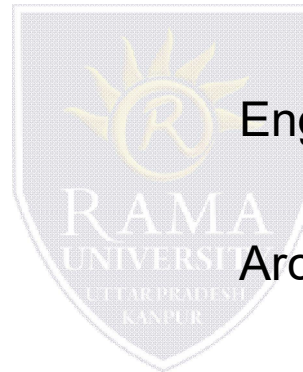
Architectural Works

Computer Software

Research Papers

Computer databases

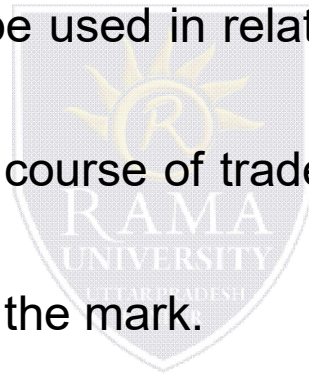
Choreographic work



# TRADE AND SERVICE MARKS

## WHAT IS A TRADE MARK ?

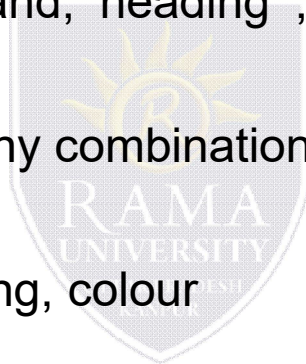
A mark used or proposed to be used in relation to goods for the purpose of indicating a connection in the course of trade between the goods and some person having the right to use the mark.





## What is a MARK ?

1. It includes a device, brand, heading, label, ticket, name, signature, word, letter, numeral or any combination thereof.
2. Shape of goods, packaging, colour
3. Sound, Smell – are also marks – but recognised in India



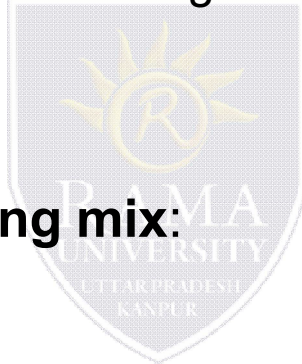
# FUNCTIONS OF A TRADEMARK

## Traditional Role:

distinguish the products of one manufacturer from those of another  
indicate the source or origin of the goods represent the goodwill of the  
manufacturer

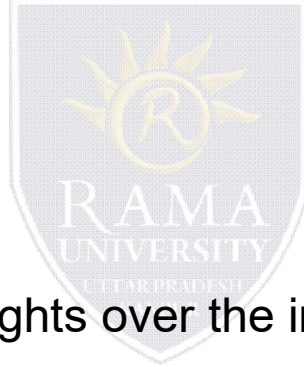
## TM as a part of the marketing mix:

- ✓ Guarantee of QUALITY
- ✓ Guarantee of AUTHENTICITY
- ✓ Create a feeling of TRUST
- ✓ Aid to Branding



# PATENT

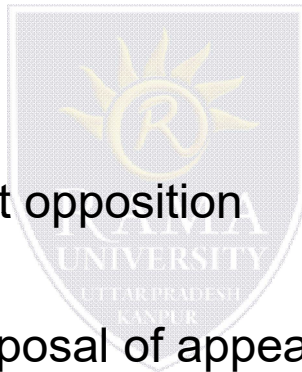
- A patent is a grant from the government which confers on the guarantee for a limited period of time the exclusive privilege of making, selling and using the invention for which a patent has been granted.



- Purpose of getting a patent
    - ✓ To enjoy the exclusive rights over the invention.
    - ✓ The patent is to ensure commercial returns to the inventor for the time and money spend in generating a new product.
-

## Patent Law - Salient Features

- Both product and process patent provided
- Term of patent – 20 years
- Examination on request
- Both pre-grant and post-grant opposition
- Fast track mechanism for disposal of appeals
- Provision for protection of bio-diversity and traditional knowledge
- Publication of applications after 18 months with facility for early publication
- Substantially reduced time-lines



## TYPES OF PATENTS

### **Utility Patent:**

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title. E.g: (functional) toys, coatings, tools, machines, good for 20 years

### **Plant Patent:**

Whoever invents or discovers and asexually reproduces any distinct and new variety of plant, including cultivated spores, mutants, hybrids, and newly found seedlings, other than a tuber propagated plant or a plant found in an uncultivated state.

### **Design Patent:**

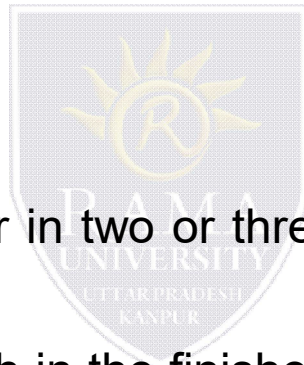
Whoever invents any new, original, and ornamental design for an article of manufacture may obtain a patent. E. g: (non-functional) a decoration, apparel, jewellery

---

# INDUSTRIAL DESIGNS

A registered design includes:

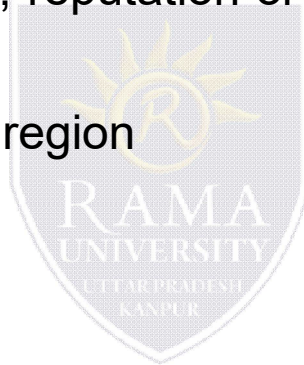
- ✓ features of shape, configuration, pattern, ornament or composition of lines or colours,
- ✓ Applied to any article either in two or three dimensions or in both forms by any industrial process which in the finished article appeal to and are judged by the eye.



# GEOGRAPHICA INDICATIONS (GI)

## Protection Given To :

- ✓ indications which identify goods as originating from/manufactured in a particular territory where a given quality, reputation or other characteristics of the goods is essentially attributable to that region

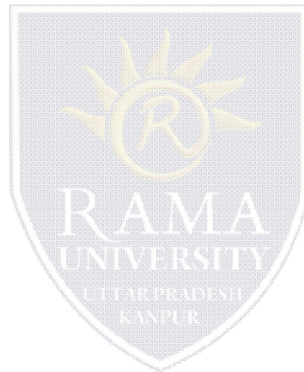


## Objectives of GI:

- ✓ Customers must not be misled
  - ✓ Marking must not mislead
  - ✓ No Dilution
  - ✓ Economic prosperity
-

## Examples of GI:

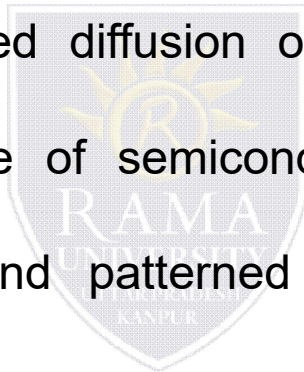
- ✓ Darjeeling Tea
- ✓ Basmati Rice
- ✓ Paithani Saris
- ✓ Kolhapuri Chappals
- ✓ Scotch Whisky
- ✓ Rockford Cheese
- ✓ Champagne





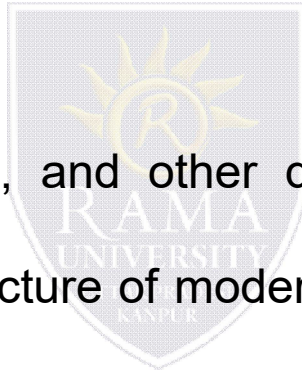
# INTEGRATED CIRCUITS

An integrated circuit or monolithic integrated circuit (also referred to as IC, chip, or microchip) is an electronic circuit manufactured by lithography, or the patterned diffusion of trace elements into the surface of a thin substrate of semiconductor material. Additional materials are deposited and patterned to form interconnections between semiconductor devices.



## USES OF INTEGRATED CIRCUITS

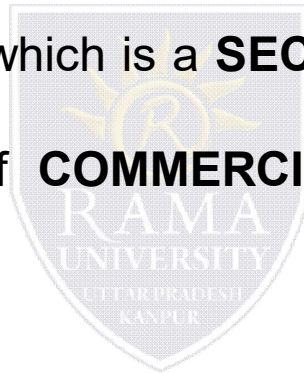
- Integrated circuits are used in virtually all electronic equipment today and have revolutionized the world of electronics.
- Computers, mobile phones, and other digital home appliances are now inextricable parts of the structure of modern societies, made possible by the low cost of producing integrated circuits.



## TRADE SECRETS

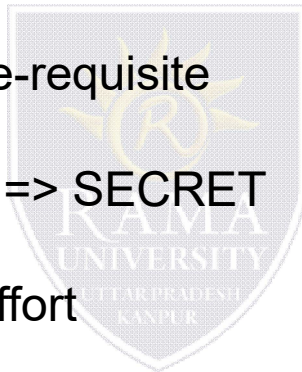
### UNDISCLOSED INFORMATION ALSO KNOWN AS TRADE SECRETS.

Trade Secret is an information which is a **SECRET** has been **INTENTIONALLY** treated as such is capable of **COMMERCIAL** application and involves an **ECONOMIC** interest



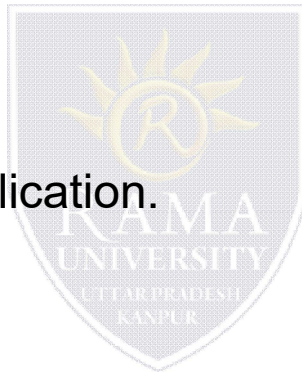
## CHARACTERISTICS OF TRADE SECRET

- Concept of 'sufficiently developed'
- No necessity of Novelty
- Inventiveness not a pre-requisite
- Important requirement => **SECRET**
- Exercise of Skill and Effort
- Desire of Confidentiality



Under the Indian Patent Law, a “Patentable invention” must be,-

- ❖ a new product or process;
- ❖ non-obvious;
- ❖ useful; and
- ❖ capable of industrial application.

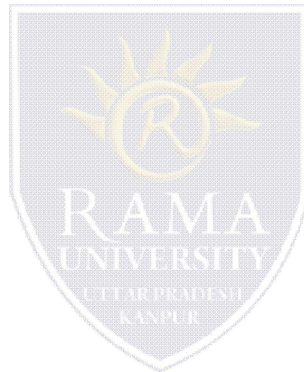


## **Novelty:**

Novelty (newness) in an invention depends upon the state of prior art, i.e., the existing knowledge and similar inventions already known in the particular field. There will be no novelty, if there has been prior publication and prior use of same or an identical invention. In other words, the invention must involve any innovation 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. The subject matter must not have fallen in the public domain.

## **Non-obviousness:**

The invention must be non-obvious to a person skilled in the art to which the invention relates.



## **Usefulness:**

The invention, besides being new and non-obvious, must also be useful. If the invention can not be put to any beneficial use of the mankind, it can not be patented.

---

# PATENTABLE INVENTIONS

## Invention must

- ❖ Relates to a **process or product** or both
- ❖ Be new (**novel**)
- ❖ Involves an **inventive step**
- ❖ Be capable of **industrial application**
- ❖ Not fall under **section 3 and 4**

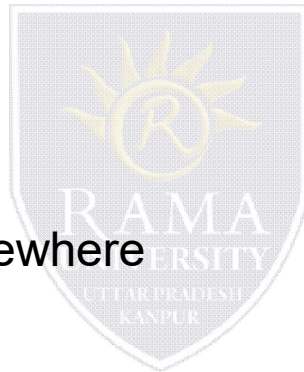




## “NEW” MEANS.....

**Invention must not be**

- ❖ Published in India or elsewhere
- ❖ In prior public knowledge or prior public use with in India
- ❖ Claimed before in any specification in India



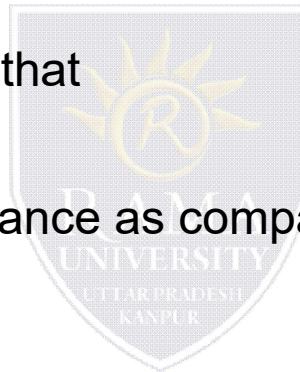
## **Inventive step means...**

**A feature of an invention that**

- ❖ Involves technical advance as compared to the existing knowledge..

## **Industrial application means...**

- ❖ Invention is capable of being made or used in any kind of industry.



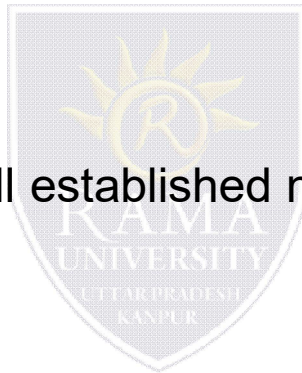
## Section 3 exclusions

### Section 3(a)

- ❖ Inventions contrary to well established natural laws

### Examples

- ❖ Machine that gives more than 100% performance
- ❖ Perpetual machine

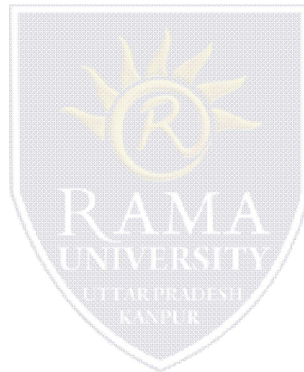


## Section 3(b)

### Commercial exploitation or primary use of inventions, which is

❖ Contrary to

- ✓ public order or
- ✓ Morality



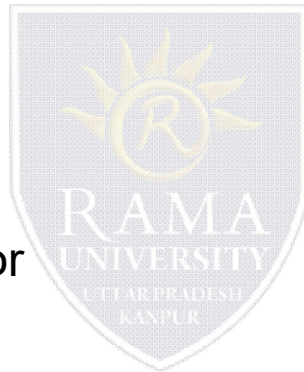
### Examples

- ✓ Gambling machine
  - ✓ Device for house-breaking
-

## Section 3(b)

### Commercial exploitation or primary use of inventions , which

- ❖ Causes serious Prejudice to
  - ✓ health or
  - ✓ human, animal, plant life or
  - ✓ to the environment

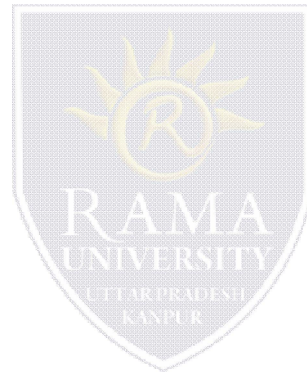


### Examples

- ✓ Biological warfare material or device, weapons of mass destruction
  - ✓ Terminator gene technology,
  - ✓ Embryonic stem cell
-

## Non Patentable Inventions

- ❖ Inventions falling within Section 20(1) of the Atomic Energy Act, 1962 are not patentable



- ❖ **Examples**

- ✓ Inventions relating to compounds of Uranium, Beryllium, Thorium, Plutonium, Radium, Graphite, Lithium and more as notified by Central Govt. from time to time.