

31 JAN 2026

NATIONAL LAW UNIVERSITY, JODHPUR

End Term Examination, August-December, 2025

Semester: UG – IX Sem (I.P.R. Hons.)

Subject: Patent Specification Drafting and Claim Construction

Time: Three Hours

Marks: 100

Instructions:

- 1. Attempt any five out of six questions.**
- 2. All questions carry equal marks.**
- 3. Use of any reference material such as Bare Acts is not permitted.**

Q.1) The Indian Patent Act, 1970, along with the Patent Rules, 2003 provide for specific rules and requirements for filing of patent application and specifications. While highlighting the relevant provisions, explain the filing requirements in respect of submission of Patent Specification, whether provisional or complete. Also emphasise upon the relevance of specification, its contents and the manner of filing specification, as indicated under Section 9 of the Act.

(Marks: 20)

Q. 2) “SmoothSkin Technologies Ltd.” holds a patent for a hair-removal device that uses a rotating helical coil which traps and plucks hair as the coil rotates. The patent claims specifically describe the coil’s spring-like structure, which expands and contracts to grasp the hair.

A competitor, DermaEase Pvt. Ltd., releases a similar hair-removal device. However, instead of a helical coil, DermaEase uses a flexible rubber rod with tiny grooves. When rotated at high speed, the rod bends slightly and catches hair between the grooves, removing it in a manner similar to SmoothSkin’s device.

SmoothSkin Technologies Ltd. brings an action of patent infringement against DermaEase Pvt. Ltd. alleging non-literal infringement on basis of doctrine of equivalents. However, DermaEase Pvt. Ltd. pleads non-infringement as their device operates on a different principle.

Examine whether DermaEase’s device should be held to infringe the patent as per the doctrine of equivalents or not. Discuss in reference to the relevant applicable principles in determining non-literal infringement claims and relevant case laws.

(Marks: 20)

Q.3) *“The specification is the primary source for construing claims; external aids may be used, but only where the intrinsic material does not provide a clear answer.”*

In view of the above given statement, explain the principles of claim construction, as applicable in India while laying emphasis on the use of intrinsic and extrinsic sources of claim construction. Cite relevant case laws in support of your answers.

(Marks: 20)

Q.4) a) Explain the relevance of the principle of 'claim differentiation' in the process of claim construction and interpretation. Suggest the limitations of the principle as well.

b) NanoAgro Labs develops a new **soil-nutrient micro-diffusion device** that releases micronutrients in controlled doses. In order to test its performance on real agricultural land, NanoAgro conducts a **three-month field trial** on the farms of **five local cultivators** in Maharashtra.

During the trial, the device is installed openly on the fields and visible to the farmers and nearby community. NanoAgro's engineers also regularly adjust the device settings to collect performance data. Farmers are *not charged* for the use of the device, and NanoAgro makes them sign a document stating that the device is being used **for testing purposes only**. Some farmers post photographs of the device on social media, commenting on how it is helping their crops.

Six months later, NanoAgro files a patent application for the device. However, a competitor, AgriTech Solutions files a pre-grant opposition claiming that the invention was publicly used and therefore lacks novelty.

In view of the 'public experimental use' exception under the Indian Patent Act, 1970, decide.

(Marks: 10 +10 = 20)

Q.5) An inventor intends to apply for a patent for his invention, the description of which is given below. Read the description of the invention below and answer the question accordingly.

Description:

The present invention relates to a portable, foldable umbrella designed to improve user convenience and safety during opening and closing operations. Traditional foldable umbrellas require manual force to lock the canopy in an open position and often use small sliding buttons that can pinch fingers or fail during heavy rain or wind. Users frequently struggle to hold the umbrella steady while also operating the locking mechanism. Additionally, existing locking systems tend to wear out over time, resulting in accidental collapse of the canopy during use.

To address these limitations, the invention provides an umbrella equipped with an auto-lock mechanism integrated into the central rod. The umbrella has a **collapsible canopy**, a **foldable rib structure**, and a **central handle** equipped with a **simple auto-lock mechanism**. When the umbrella is pushed open, a spring-biased sliding collar automatically moves upward and engages with a locking notch on the rod. This engagement occurs without requiring the user to press or manipulate any buttons during opening. The auto-lock ensures that the canopy remains firmly in place and prevents unintended collapse even in windy conditions.

To close the umbrella, the user simply presses a release button located within the handle. The button disengages the locking collar from the notch, allowing the canopy and rib structure to fold smoothly. The release button is connected to an internal latch assembly with a spring-return mechanism that resets itself after use. The handle is ergonomically shaped, covered with a rubberized grip, and sized to allow comfortable operation with one hand.

The umbrella features a collapsible rib frame made of lightweight metal or flexible composite material. The ribs fold neatly around the central rod when the umbrella is closed, allowing the entire structure to be compacted into a small, portable form suitable for handbags, backpacks, or vehicle storage. When closed, the canopy fabric wraps tightly around the frame and is secured with a strap. The design ensures minimal bulk while maintaining structural durability. The novelty of the invention lies primarily in the automatic locking mechanism, which eliminates the need for manual force or complex hand movements to secure the umbrella in an open position. The system improves user safety, avoids finger injuries, and provides a more reliable locking action even after prolonged use.

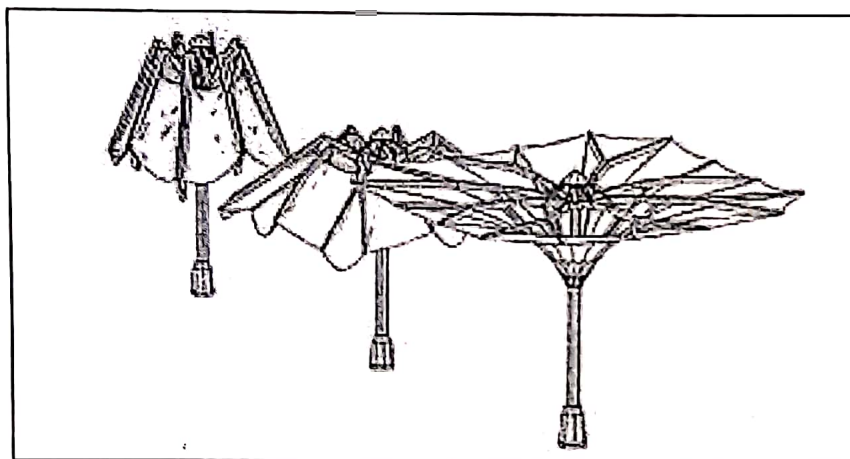


Fig. 1

Consider the above description and draft a suitable title of the invention and a minimum of 5 claims for the invention. (Identify the parts of claim in the first claim)

(Marks: 20)

Q.6) Write short notes on *any two* of the following:

- a). Dealing with Unity of Invention Objection
- b) Priority Date of claims
- c). Amendment to patent application and implications on claim construction
- d). Relevance of patent Claims and Types of Patent Claims

(Marks: 10+10=20)