



PATENT AND INNOVATION PROTECTION IN INDIA

*A legal and strategic guide
to the Indian patent framework*

FOREWORD

Patents play an important role in protecting technological innovation and supporting the commercial development of new products, processes and technologies. For businesses, research institutions, start-ups and inventors, patent protection is connected with research and development, investment, licensing, technology transfer, market entry and long-term portfolio strategy.

India has a well-established patent framework under the Patents Act, 1970 and the Patents Rules, 2003, as amended. The law governs patentability, filing and examination, opposition and revocation, ownership, enforcement and the rights available to patentees after grant. India's patent system also operates within an international framework shaped by the TRIPS Agreement, the Paris Convention and the Patent Cooperation Treaty.

Patent practice in India continues to evolve through legislative amendments, administrative reforms and judicial interpretation, including developments relating to computer-related inventions, amendments to patent specifications, disclosure obligations and prosecution procedure. At the same time, the commercial value of patents depends on decisions made throughout their lifecycle, from identifying protectable inventions and drafting appropriate claims to maintaining, licensing and enforcing the resulting rights.

This publication provides a practical overview of the Indian patent framework, including patentability, filing and prosecution, searches and drafting strategy, inventorship and ownership, amendments, opposition and revocation, enforcement, commercialisation and emerging areas of patent practice.

The objective is to provide businesses, innovators, research institutions, in-house counsel and intellectual property professionals with a clear understanding of the legal and practical considerations involved in protecting and managing inventions in India.

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1. Patent Landscape in India: Growth, Innovation and Institutional Change

India's patent landscape has expanded significantly in recent years, with growth in overall filings accompanied by a marked increase in applications originating from Indian applicants. This shift reflects the growing role of intellectual property across technology-led businesses, research institutions, universities, start-ups and domestic industry.

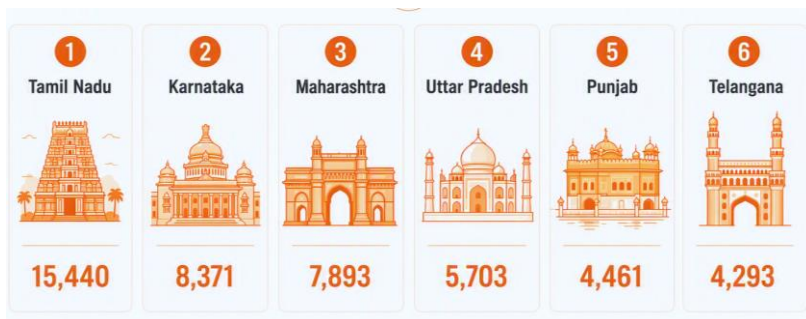
Patent Filings: 5-Year Trend

Financial Year	Total Applications	Indian Applicants
2020-21	58,503	24,326
2021-22	66,440	29,508
2022-23	82,811	43,301
2023-24	92,168	51,574
2024-25	110,375	68,201

2024-25 At A Glance

- › 110,375 patent applications filed
- › 19.75% increase in total filings over 2023-24
- › 68,201 applications filed by Indian applicants
- › 32.23% year-on-year growth in filings by Indian applicants
- › 61.79% of total filings originated from Indian applicants, compared with 55.96% in 2023-24
- › 42,174 applications were filed by foreign applicants
- › 31,940 PCT national-phase applications were filed in India
- › 33,504 patents were granted during the year
- › 10,682 of the patents granted were to Indian applicants
- › 230,480 patents were in force as on April 1, 2025
- › 50,848 patents in force belonged to Indian patentees

Leading States for Domestic Patent Filings



The increasing participation of Indian applicants is one of the most notable features of this growth. In only four years, filings by Indian applicants increased from 24,326 in 2020-21 to 68,201 in 2024-25, and domestic applicants now account for more than three-fifths of all patent applications filed in India.

Institutional Strengthening and Digitisation

The Indian Patent Office has undergone substantial procedural and administrative modernisation, including expansion of examination capacity, greater use of electronic filing and processing, virtual hearings and online access to patent records. Amendments to the Patents Rules have also sought to streamline prosecution timelines and improve the efficiency of the patent administration system.

National Innovation and IP Ecosystem

The National Intellectual Property Rights Policy, 2016 and related government initiatives have contributed to greater awareness, facilitation and commercial use of intellectual property across industry, academia and the start-up ecosystem. The Department for Promotion of Industry and Internal Trade, the Office of the Controller General of Patents, Designs and Trade Marks and the Cell for IPR Promotion and Management continue to play important roles in strengthening India's broader intellectual property framework.

2. India's Patent Legal Framework

India's patent regime is principally governed by the Patents Act, 1970 and the Patents Rules, 2003, as amended from time to time. Combined, they establish the substantive and procedural framework for the grant, protection, administration and enforcement of patent rights in India.

The Patents Act, 1970

The Patents Act, 1970 sets out the substantive law governing patent protection in India. It defines patentable inventions, identifies subject matter excluded from patentability, regulates ownership and entitlement, and provides the framework for examination, opposition, grant, revocation, compulsory licensing and enforcement.

The Act has undergone significant amendments as India's patent system has developed. Amendments introduced in 1999, 2002 and 2005 progressively aligned the Indian framework with obligations under the TRIPS Agreement and introduced important changes, including the restoration of product patent protection in areas such as pharmaceuticals and chemicals. Subsequent legislative changes have further modified the framework, including changes arising from the Tribunals Reforms Act, 2021 and the Jan Vishwas (Amendment of Provisions) Act, 2023.

The Patents Rules, 2003

The Patents Rules, 2003 prescribe the procedural requirements governing patent applications and proceedings before the Indian Patent Office. They deal with filing requirements, forms and fees, publication, examination, expedited examination, hearings, amendments, oppositions, renewals and other procedural matters. The Rules have been amended periodically to simplify procedures, support electronic filing, introduce differential treatment for certain categories of applicants and improve the efficiency of patent prosecution.

Key Recent Procedural Reforms

The Patents (Amendment) Rules, 2024, notified on March 15, 2024, introduced significant changes to patent prosecution and procedural

compliance in India. One of the principal changes was the reduction of the period for filing a Request for Examination from 48 months to 31 months from the filing or priority date. Applications filed before the commencement of the 2024 Rules continue to be governed by the earlier examination timeline. The amendments also clarified the framework for divisional applications, expressly permitting one or more further applications for inventions disclosed in a provisional or complete specification, or in a further application filed under Section 16.

The amendments also revised the disclosure requirements relating to corresponding foreign applications under Section 8 and Form 3. The Controller may use accessible and available databases to consider information relating to applications filed outside India and may, where required, direct the applicant to furnish a fresh Form 3 within two months. The Rules also provide greater flexibility for condoning delay or extending the period for filing Form 3 in specified circumstances. In addition, the requirement for filing statements of working in Form 27 was substantially rationalised, with such statements now required once for every period of three financial years instead of annually, subject to the prescribed filing period and extension provisions.

Several other procedural changes were introduced to improve flexibility and streamline patent administration. Rule 138 was amended to permit the Controller, upon a request in Form 4 and subject to the applicable requirements, to extend specified procedural timelines or condone delay for a period of up to six months. The amendments also introduced a procedure under Rule 70A and Form 8A enabling inventors to request a certificate of inventorship for a patent in force, and introduced Form 31 for claiming the benefit of the statutory grace period available under Section 31. Taken together, the 2024 amendments represent an important procedural modernisation of Indian patent practice, with a greater emphasis on streamlined compliance, digital access to information and flexibility in managing prosecution deadlines.

Administration of the Patent System

The patent system is administered by the Office of the Controller General of Patents, Designs and Trade Marks through the Indian Patent Office. The Controller exercises statutory powers relating to examination,

hearings, oppositions, amendments, compulsory licensing and other proceedings under the Patents Act and Rules.

3. India in the International Patent Framework

The Indian patent system operates within a wider international framework that establishes common principles for patent protection, enables applicants to claim priority and pursue protection across jurisdictions, and facilitates international patent search and examination. India participates in several major international patent treaties administered through the World Trade Organization and the World Intellectual Property Organization.

Key International Framework

TRIPS Agreement: India has been a Member of the World Trade Organization since January 1, 1995 and is bound by the Agreement on Trade-Related Aspects of Intellectual Property Rights. TRIPS establishes minimum standards for patent protection among WTO Members, including principles relating to patentable subject matter, rights conferred by patents, a minimum 20-year patent term and enforcement. India implemented its TRIPS obligations through a series of amendments to the Patents Act, including the significant amendments of 1999, 2002 and 2005.

Paris Convention: India acceded to the Paris Convention for the Protection of Industrial Property on September 7, 1998, and the Convention entered into force for India on December 7, 1998. For patents, one of its most important features is the right of priority, which allows an applicant who has filed a first patent application in one Convention country to claim that priority when filing corresponding applications in other Convention countries within 12 months.

Patent Cooperation Treaty: India acceded to the Patent Cooperation Treaty on September 7, 1998, and the Treaty entered into force for India on December 7, 1998. PCT enables applicants to initiate the process of seeking patent protection in multiple Contracting States through a single international application. It does not result in the grant of an

“international patent”, and the decision to grant protection ultimately remains with the respective national or regional patent offices.

India also plays an active role within the PCT system. The Indian Patent Office has functioned as an International Searching Authority and International Preliminary Examining Authority since October 15, 2013, enabling it to conduct international searches and preliminary examinations for eligible PCT applications.

Budapest Treaty: India acceded to the Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure on September 17, 2001, and the Treaty entered into force for India on December 17, 2001. The Treaty is relevant to inventions involving microorganisms where complete disclosure cannot adequately be made through a written description alone. A deposit made with a recognised International Depositary Authority may satisfy the deposit requirement for patent procedures in Contracting States, subject to the applicable patent law requirements.

Strasbourg Agreement and International Patent Classification: India acceded to the Strasbourg Agreement concerning the International Patent Classification on July 7, 2025, and the Agreement entered into force for India on July 7, 2026. The Agreement establishes the International Patent Classification, or IPC, which provides a common hierarchical system for classifying patents and patent applications according to their fields of technology.

The IPC facilitates prior art searching, patent examination, technology analysis and retrieval of patent information across jurisdictions. India’s accession formally integrates it into the Special Union established under the Strasbourg Agreement and strengthens its participation in the international patent classification framework.

These international arrangements allow Indian and foreign applicants to coordinate patent protection across jurisdictions, claim priority, use international filing and search mechanisms, and operate within harmonised systems of patent classification and procedure.

4. Patentability in India: Standards and Statutory Exclusions

An invention must satisfy the requirements of the Patents Act, 1970 before patent protection can be granted in India. Patentability depends not only on whether an invention is new, but also on whether it involves an inventive step, is capable of industrial application and does not fall within the categories excluded from patent protection under Sections 3 and 4 of the Act.

Core Requirements for Patentability

- **Novelty:** An invention must be new and should not have been anticipated by information made available to the public before the relevant priority date. Prior publication, public use or other disclosure anywhere in the world may affect novelty. Maintaining confidentiality before filing and conducting appropriate prior art searches are therefore important parts of patent strategy.
- **Inventive Step:** The invention must involve a feature that constitutes a technical advance over existing knowledge or has economic significance, or both, and must not be obvious to a person skilled in the art. The assessment considers the invention as a whole against the relevant prior art and asks whether the claimed development represents more than a routine or predictable modification of what was already known.
- **Industrial Applicability:** The invention must be capable of being made or used in an industry. This requirement ensures that patent protection is directed towards inventions capable of practical application rather than purely speculative or abstract concepts.

Statutory Exclusions under Section 3

Even where an invention appears to satisfy the basic requirements of novelty and inventive step, it may remain excluded from patentability under Section 3 of the Patents Act. Important exclusions include:

- frivolous inventions or inventions contrary to well-established natural laws;
- inventions contrary to public order or morality, or seriously prejudicial to human, animal or plant life, health or the environment;
- mere discoveries of scientific principles, abstract theories or substances occurring in nature;
- certain new forms, new uses or new properties of known substances that do not satisfy the requirements of Section 3(d);
- mere admixtures and certain arrangements or rearrangements of known devices;
- methods of agriculture or horticulture;
- methods of medical, surgical, curative, prophylactic, diagnostic, therapeutic or other treatment;
- plants and animals, subject to the statutory exceptions;
- mathematical methods, business methods, computer programmes per se and algorithms;
- aesthetic creations, schemes or rules for performing mental acts or playing games, presentations of information, topographies of integrated circuits and traditional knowledge.

Section 3(d) and Pharmaceutical Patentability

Section 3(d) has particular significance in pharmaceutical patent practice. It limits patent protection for new forms of known substances unless the statutory requirements relating to enhancement of known efficacy are satisfied. The provision seeks to distinguish patentable pharmaceutical innovation from changes to known substances that do not meet the required threshold.

Computer-Related Inventions

Section 3(k) excludes mathematical methods, business methods, computer programmes per se and algorithms. The application of this exclusion to computer-related inventions has developed through Patent Office practice and judicial interpretation, with increasing focus on the technical nature and effect of the claimed invention. Computer-related inventions and recent developments in this area are considered separately later in this publication.

Patentability must be assessed as a combination of positive statutory requirements and statutory exclusions. A technically sophisticated invention is not necessarily patentable, and an effective filing strategy requires consideration of both the prior art and the manner in which the invention falls within the framework of the Patents Act.

5. Inventorship, Ownership and Entitlement

Correctly identifying the inventor, applicant and owner of a patent is fundamental to the validity and commercial value of patent rights. These roles may belong to different persons, especially where inventions are developed in employment, research collaborations, commissioned projects or start-up environments.

Who Can Apply for a Patent?

Under the Patents Act, 1970, an application for a patent may be made by:

- the true and first inventor;
- the assignee of the true and first inventor; or
- the legal representative of a deceased person who was entitled to apply.

In corporate and institutional filings, the applicant is frequently an assignee, although the individual inventor or inventors must still be correctly identified.

Inventorship and Ownership

Inventorship is based on contribution to the conception of the invention. A person who merely follows instructions, provides administrative assistance or finances the development of an invention does not become an inventor on that basis alone.

Ownership is a separate legal question, as rights in an invention may be transferred to another person or organisation through assignment or other legally recognised arrangements. Clear documentation of the chain of title is therefore important before filing and throughout the commercial life of a patent.

Employee Inventions

Where an invention is created in the course of employment, ownership should be considered in light of the employment agreement, the nature of the employee's duties and the contractual arrangements governing intellectual property created during employment. Businesses should ensure that employment and invention-assignment provisions clearly address ownership, disclosure obligations and the execution of documents required for patent filing.

Joint Inventorship and Co-Ownership

Where two or more individuals contribute to the inventive concept, they may qualify as joint inventors. Joint inventorship should reflect an actual contribution to the claimed invention rather than general participation in the project.

Co-ownership concerns ownership of the patent rights rather than inventorship itself. Where rights are held jointly, the respective interests of the co-owners and their ability to use, license, assign or enforce those rights should be clearly documented.

Research Institutions, Universities and Startups

Collaborative research frequently involves universities, research institutions, start-ups, employees, consultants and external partners. Such arrangements should address ownership of background and newly created intellectual property, filing responsibility, allocation of costs, commercialisation rights and revenue sharing.

For startups in particular, a clear chain of title to core technology can become important during investment, licensing, collaboration and due diligence. Establishing ownership at an early stage can therefore prevent disputes and preserve the commercial value of the patent portfolio.

6. Patent Search, Analytics and Filing

Patent search is an important part of patent strategy as it helps inventors and businesses assess the existing technological landscape before committing resources to drafting, filing, product development or commercialisation. Patent searches can also support portfolio management, competitive intelligence and risk assessment at different stages of the innovation lifecycle.

Patentability and Prior Art Searches

Prior art includes publicly available information relevant to assessing the novelty and inventive step of an invention. A patentability or prior art search conducted before filing can help identify earlier technologies, refine the scope of the invention and assess whether pursuing patent protection is commercially and legally appropriate.

Key Patent Searches

Knock-Out or Screening Search: A preliminary search conducted at the ideation stage to identify clear prior art and assist in deciding whether further development or detailed searching is justified.

Novelty or Patentability Search: Conducted before drafting or filing to assess whether the proposed invention appears to satisfy novelty and inventive step requirements in light of the available prior art.

Landscape, White-Space and State-of-the-Art Search: Used to understand technology trends, major applicants, areas of concentrated patent activity and potential gaps or opportunities within a particular field.

Competitor and Technology Watch: An ongoing monitoring exercise used to track new patent filings, competitor activity and technological developments relevant to a business or research programme.

Freedom to Operate Search: Conducted before commercial launch or market entry to identify relevant active patent rights in target jurisdictions and assess potential infringement risks.

Validity or Invalidity Search: Used to identify prior art that may affect the validity or enforceability of a granted patent, especially in opposition, revocation or litigation proceedings.

Infringement Search: Used to identify potentially unauthorised use of technology covered by an existing patent portfolio.

Patent Analytics and Competitive Intelligence

Patent analytics can convert filing and publication data into broader commercial and technological insights. Analysis of filing trends, applicants, inventors, jurisdictions and technology clusters may help businesses identify emerging areas of research, potential collaborators, licensing opportunities, competitor activity and areas of high or low patent concentration.

Integrating Searches with Filing Strategy

Patent searches should be aligned with the stage and commercial objective of the innovation. Early patentability searches can inform drafting and filing decisions, landscape analysis can guide research and investment strategy, and FTO analysis can support product launch and market-entry decisions. Used together, search and analytics tools can help businesses make more informed decisions about where to innovate, what to protect and how to manage patent-related risks.

7. Drafting Patent Specifications and Claims

A patent specification translates an invention into a legal document that both discloses the technology and defines the scope of protection sought. The quality of the specification can affect examination, amendment, validity, enforcement and the commercial value of the resulting patent. Effective drafting therefore requires close coordination between the technical disclosure and the legal scope of the claims.

Structure of a Patent Specification

Under the Patents Act, 1970, a complete specification must sufficiently describe the invention and the manner in which it is to be performed. Its principal components generally include:

- Title of the invention
- Field and background of the invention
- Summary or statement of the invention
- Detailed description and embodiments
- Drawings, where required
- Claims defining the scope of protection
- Abstract

The description should enable a person skilled in the relevant art to understand and perform the invention and should disclose the best method of performing it known to the applicant. Where biological material is involved, additional disclosure or deposit requirements may also apply.

Claims and Scope of Protection

The claims define the legal boundaries of the invention and are therefore among the most important parts of the specification. Independent claims generally set out the broader inventive concept, while dependent claims introduce additional features or limitations and can provide useful fallback positions during prosecution.

Claims should be clear, concise and supported by the description. Excessively broad claims may face objections based on prior art, lack of

support or insufficiency, while unnecessarily narrow claims may limit the commercial value of the patent even where protection is granted.

Drafting for Prosecution and Enforcement

A specification should be prepared not only for filing, but with the complete patent lifecycle in mind. The description should provide sufficient technical detail, alternative embodiments and appropriate variations to support the claims and permit legally permissible amendments if objections arise during prosecution. Features described differently across the claims, description and drawings can create uncertainty regarding the intended scope of the invention. Drafting should also avoid unnecessary limitations that may unintentionally restrict claim scope.

Common Drafting Risks

Common problems in patent specifications include:

- inadequate technical disclosure;
- claims unsupported by the description;
- inconsistent terminology;
- failure to describe meaningful alternatives or embodiments;
- unnecessary limitations in the claims;
- discrepancies between drawings and written disclosure; and
- insufficient disclosure to support amendments during prosecution.

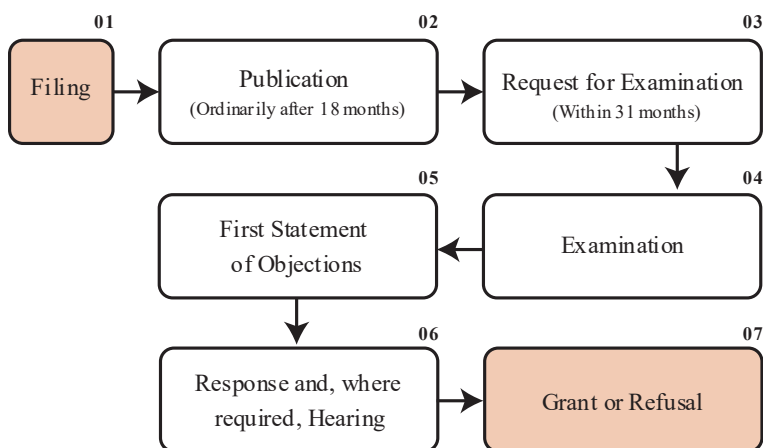
Claim Construction and Interpretation

Patent claims are interpreted in the context of the complete specification and from the perspective of a person skilled in the relevant art. The description and drawings can therefore play an important role in understanding technical terms and determining the meaning and scope of the claims.

Careful drafting at the filing stage is consequently important not only for obtaining a patent, but also for preserving flexibility during prosecution and establishing a clear and defensible scope of protection if the patent is later licensed, challenged or enforced.

8. Patent Filing and Prosecution in India

Patent protection in India may be pursued through different filing routes depending on the applicant's earlier filings, international strategy and the nature of the invention. Once filed, the application proceeds through publication, examination and prosecution before the Indian Patent Office.



Principal Filing Routes

Ordinary Application: An ordinary application is filed directly in India without claiming priority from an earlier foreign patent application. It may be accompanied by a provisional or complete specification, depending on the stage of development of the invention.

Convention Application: A convention application may be filed in India by claiming priority from an earlier application filed in a convention country. The Indian application must ordinarily be filed within 12 months from the date of the first qualifying application.

PCT National Phase Application: An international application filed under the Patent Cooperation Treaty and designating India may enter the

Indian national phase within 31 months from the priority date. The PCT route enables applicants to defer national filings while preserving the possibility of pursuing protection in multiple jurisdictions.

Divisional Application: A divisional application may be filed before grant in respect of an invention disclosed in an earlier provisional or complete specification. It may be filed voluntarily or in response to an objection that the claims of the earlier application relate to more than one invention.

Patent of Addition: A patent of addition may be sought for an improvement in or modification of an invention disclosed in the complete specification of the main invention, subject to the requirements of the Patents Act.

Publication of the Application

Patent applications are ordinarily published after 18 months from the filing date or priority date, whichever is earlier. An applicant may request earlier publication in the prescribed manner. Following publication, the applicant obtains certain provisional rights, although infringement proceedings cannot be instituted until the patent is granted.

Request for Examination

Examination is not automatic, and a Request for Examination must be filed in Form 18 within 31 months from the filing date or priority date, whichever is earlier, for applications governed by the current Rules. Applications filed before the commencement of the Patents (Amendment) Rules, 2024 continue to be governed by the earlier examination timeline. Eligible applicants may also request expedited examination in Form 18A under Rule 24C, subject to the prescribed conditions.

Examination and First Statement of Objections

Once examination is requested and the application is taken up for examination, the Patent Office assesses compliance with the Patents Act and Rules, including novelty, inventive step, industrial applicability,

statutory exclusions, sufficiency of disclosure, claim clarity and procedural requirements. Where objections arise, the Controller issues a First Statement of Objections setting out the requirements that must be addressed by the applicant.

Response, Hearing and Grant

The application must ordinarily be put in order for grant within six months from the date on which the First Statement of Objections is issued. This period may be extended by up to three months upon a timely request in the prescribed form and payment of the applicable fee.

The applicant may respond through written submissions, amendments and supporting material. Where objections remain unresolved, the Controller may provide an opportunity for a hearing. If the statutory and procedural requirements are ultimately satisfied, the patent is granted and the grant is published in the Patent Office Journal.

9. Amendments, Disclosure and Procedural Compliance

Patent prosecution does not end with the filing of an application, and applicants and patentees must continue to comply with requirements relating to amendments, information concerning corresponding foreign applications and, after grant, statements regarding the working of patented inventions. These obligations can affect prosecution, validity and the continued management of patent rights.

Amendment of Patent Applications and Specifications

Sections 57 to 59 of the Patents Act, 1970 govern amendments to patent applications, specifications and related documents. Section 59 places substantive limits on the nature and scope of amendments that may be permitted.

An amendment may generally be made only by way of disclaimer, correction or explanation and for the purpose of incorporating an actual fact. An amendment to a complete specification cannot introduce matter that was not in substance disclosed or shown in the specification before

amendment, and an amended claim must fall wholly within the scope of a claim contained in the specification before amendment. A specification should contain sufficient technical detail, alternatives and embodiments to support amendments that may become necessary during prosecution without introducing new subject matter or impermissibly enlarging the scope of protection.

Disclosure of Foreign Applications

Section 8 requires applicants to provide prescribed information relating to corresponding applications for the same or substantially the same invention filed outside India. The required statement and undertaking are submitted in Form 3.

Under the current Rules, the initial statement and undertaking must be filed within 6 months from the filing of the Indian application. The applicant must also keep the Controller informed of the required details relating to foreign applications within 3 months from the issuance of the first statement of objections.

The 2024 amendments permit the Controller to use accessible and available databases when considering information relating to foreign applications. Where necessary, the Controller may require the applicant to furnish a fresh Form 3 within 2 months from the communication of such direction. These changes have reduced some of the administrative burden of repeatedly providing information already available through patent databases.

Statements of Working - Form 27

Section 146 of the Patents Act and Rule 131 require patentees and licensees to furnish information regarding the working of patented inventions in India through Form 27.

Following the 2024 amendments, patentees and licensees must file Form 27 once for each three-year period, beginning with the financial year immediately following the year in which the patent was granted. The statement must ordinarily be furnished within 6 months from the expiry of each three-year period. The revised framework also permits a single Form 27 to cover multiple related patents where the prescribed

conditions are satisfied, providing greater flexibility in managing patent portfolios.

Procedural Deadlines

The Patents Rules prescribe timelines for a wide range of acts during prosecution and post-grant proceedings. Rule 138 provides the Controller with power to extend specified periods or condone delays for up to 6 months upon a request made in Form 4.

10. Opposition and Revocation of Patents

The Patents Act, 1970 provides mechanisms through which the grant or validity of a patent may be challenged both before and after grant. Pre-grant and post-grant opposition proceedings are governed principally by Section 25, while Section 64 provides a broader mechanism for revocation of a granted patent.

Pre-Grant Opposition

After publication of a patent application and before grant, any person may file a representation for opposition under Section 25(1). The grounds include wrongful obtaining of the invention, prior publication or prior claiming, lack of novelty or inventive step, non-patentable subject matter, insufficiency of disclosure, failure to comply with prescribed foreign filing disclosures and specified issues relating to biological material and traditional knowledge.

Under the current Rules, the Controller first considers whether the representation establishes a prima facie case. Where such a case is made out, the applicant is notified and may file its statement and evidence in support of the application. After considering the material and hearing the parties where requested, the Controller may reject the opposition, require amendment of the specification or refuse the grant. No patent may be granted before the expiry of 6 months from publication of the application under Section 11A.

Post-Grant Opposition

A post-grant opposition may be filed under Section 25(2) by a person interested within 1 year from the date of publication of the grant of the patent. The statutory grounds substantially correspond with those available at the pre-grant stage.

Following a post-grant opposition, the Controller constitutes an Opposition Board to examine the notice of opposition and supporting documents and make recommendations. After considering the Board's recommendations and hearing the parties, the Controller may maintain the patent, require amendment or revoke it.

Revocation under Section 64

A granted patent may also be challenged through revocation proceedings under Section 64. A petition may be brought before the High Court by a person interested or the Central Government, and revocation may also be sought through a counterclaim in a patent infringement suit.

The statutory grounds are extensive and include, among others:

- earlier claiming or lack of novelty;
- lack of inventive step;
- lack of industrial applicability;
- lack of entitlement to apply for the patent;
- wrongful obtaining;
- insufficiency or lack of clarity in the complete specification;
- claims that are not sufficiently supported by the disclosure;
- subject matter excluded from patentability under the Act;
- failure to comply with specified disclosure obligations;
- prior secret use in India in circumstances covered by the Act;
- and
- anticipation by traditional knowledge.

11. Post-Grant Patent Rights, Maintenance and Statutory Limitations

Grant of a patent creates exclusive statutory rights, but those rights must be maintained throughout the patent term and remain subject to limitations built into the Patents Act, 1970. Effective post-grant management therefore involves not only preserving the patent through timely renewals but also understanding the circumstances in which third-party use may be permitted by law.

Patent Term and Exclusive Rights

A patent in India ordinarily remains in force for 20 years from the date of filing of the application. In the case of a PCT national phase application, the term is calculated from the international filing date. Subject to the provisions of the Patents Act, a granted patent gives the patentee the exclusive right to prevent unauthorised making, using, offering for sale, selling or importing of the patented product. For a patented process, the rights extend to preventing unauthorised use of the process and specified commercial dealings in products obtained directly through that process.

Renewal and Maintenance

Renewal fees are payable to keep a granted patent in force. The fees become due in respect of each year beginning from the third year of the patent term and continue through the remaining term. Renewal fees falling due before grant may be paid within the prescribed period following grant. Thereafter, timely docketing and payment are essential because failure to pay the applicable renewal fee can result in the patent ceasing to have effect.

Restoration of Lapsed Patents

Where a patent has ceased to have effect because a renewal fee was not paid within the prescribed period, an application for restoration may be made within 18 months from the date on which the patent ceased to have effect.

Restoration is not automatic, and the applicant must satisfy the statutory requirements relating to the failure to pay the renewal fee, and the application is subject to examination and publication. Interested persons may oppose restoration, and the Controller may impose conditions intended to protect persons who began using the invention during the period in which the patent had ceased to have effect.

Compulsory Licensing

Patent rights are also subject to the compulsory licensing provisions of the Patents Act. After three years from the date of grant, a person interested may apply for a compulsory licence on specified grounds, including that:

- the reasonable requirements of the public with respect to the patented invention have not been satisfied.
- the patented invention is not available to the public at a reasonably affordable price, or
- the patented invention is not worked in the territory of India.

In deciding such an application, the Controller considers factors including the nature of the invention, the time elapsed since grant, steps taken by the patentee to make full use of the invention, the applicant's ability to work the invention and relevant public-interest considerations. The Act also contains special provisions enabling compulsory licensing or other governmental measures in circumstances such as national emergency, extreme urgency and public non-commercial use.

Statutory Exceptions to Patent Rights

The exclusive rights conferred by a patent are not absolute. Section 107A recognises specified acts that do not constitute patent infringement. The regulatory-use exception permits the making, constructing, using, selling or importing of a patented invention solely for uses reasonably related to the development and submission of information required under laws regulating the manufacture, construction, use, sale or import of products.

Section 107A also provides a parallel-import exception in respect of patented products imported from a person duly authorised under the law to produce and sell or distribute the product.

12. Patent Enforcement and Remedies in India

A granted patent gives its proprietor the right to prevent unauthorised exploitation of the patented invention during the term of protection. Enforcement generally requires an assessment of the scope of the patent claims, the allegedly infringing product or process, the validity of the patent and the statutory defences available under the Patents Act, 1970.

Assessing Patent Infringement

For a patented product, infringement may arise where an unauthorised person makes, uses, offers for sale, sells or imports the patented product in India. In the case of a patented process, the patentee may prevent unauthorised use of the process and specified commercial dealings in a product obtained directly through that process.

The assessment of infringement begins with the patent claims. The claims are interpreted in the context of the complete specification to determine the scope of the protected invention, following which the allegedly infringing product or process is compared against the claimed features. Patent infringement therefore requires both legal claim construction and a careful technical comparison.

Jurisdiction and Validity Challenges

Under Section 104 of the Patents Act, a patent infringement suit cannot be instituted before a court inferior to a District Court having jurisdiction. Depending on the applicable jurisdictional framework, patent disputes may also be heard by High Courts exercising original commercial jurisdiction.

Section 107 allows a defendant to rely on grounds available for revocation under Section 64 as defences in an infringement action. Where the defendant files a counterclaim seeking revocation of the patent, Section 104 requires the suit and counterclaim to be transferred to the High Court for decision.

Process Patent Infringement

Establishing infringement can be more difficult where the patented invention concerns a manufacturing or technical process that is carried out within the defendant's facilities. Section 104A addresses this evidentiary difficulty in specified circumstances. Where the statutory requirements are satisfied and the patentee first establishes that the defendant's product is identical to the product directly obtained by the patented process, the Court may require the defendant to prove that the process used to obtain that product is different from the patented process. The provision also requires the Court to take account of the protection of manufacturing and commercial secrets when considering the evidence.

Interim Relief

A patentee may seek interim protection during the pendency of infringement proceedings where continued use of the patented invention could cause harm before final determination of the dispute. In considering an interim injunction, courts generally examine whether the claimant has established a *prima facie* case, whether the balance of convenience favours the grant of relief and whether irreparable injury is likely to result if protection is withheld.

Patent disputes often involve substantial questions of validity and technical evidence at the interim stage, and the strength of the patent, prosecution history, prior art and nature of the alleged infringement may therefore assume considerable importance.

Final Remedies

Section 108 provides the principal remedies available in a successful patent infringement action. The Court may grant:

- an injunction restraining further infringement;
- damages or an account of the infringer's profits; and
- seizure, forfeiture or destruction of infringing goods and materials or implements predominantly used in creating the infringing goods, where appropriate.

Evidence and Technical Expertise

Patent litigation frequently requires detailed examination of scientific or technical material, prior art, experimental evidence and competing expert opinions. Section 115 also permits the Court to appoint an independent scientific adviser where assistance is required on questions of fact or opinion involving technical matters.

13. Patent Commercialisation, Licensing and Technology Transfer

A patent can have commercial value beyond the exclusive right to prevent unauthorised use of an invention. Depending on the technology and business model, patent rights may support licensing, technology transfer, collaboration, investment, acquisition and other commercial arrangements. Effective commercialisation requires both a clear chain of title and contractual terms that accurately define the rights being transferred or made available.

Assignment and Transfer of Patent Rights

A patent or an interest in a patent may be transferred through assignment, transmission or other legally recognised arrangements. Under Section 68 of the Patents Act, an assignment of a patent or of a share in a patent, a mortgage, licence or creation of another interest in a patent must be in writing and duly executed.

Section 69 provides for registration of assignments, licences and other interests in the Register of Patents. Appropriate recordal is important because the Register provides the formal record of ownership and interests affecting the patent, and failure to register an instrument may affect its admissibility as evidence of title or interest, subject to the statutory exceptions.

Patent Licensing

Licensing allows a patent owner to authorise another party to use the patented technology without transferring ownership of the patent itself. The commercial structure of a licence will depend on the technology,

markets involved and relationship between the parties. Licensing arrangements may include:

- exclusive, sole or non-exclusive rights;
- territorial or field-of-use limitations;
- upfront fees, royalties or milestone-based payments;
- sublicensing rights;
- performance or commercialisation obligations;
- rights relating to improvements and future developments; and
- provisions governing enforcement, confidentiality and termination.

A well-structured licence should identify the relevant patents and technology clearly and address the commercial and operational responsibilities of both parties.

Technology Transfer and Collaboration

Patent rights frequently form part of broader technology transfer arrangements involving technical know-how, confidential information, software, designs, manufacturing processes, research data or other intellectual property. The patent licence or assignment should therefore be considered together with the practical information and assistance required to implement the technology.

Collaborative research and development arrangements should also address ownership of existing intellectual property, ownership of inventions created during the collaboration, responsibility for patent filing and prosecution, access rights, commercialisation and the allocation of licensing revenue.

Patents in Investment and Transactions

Patent portfolios may be relevant in investments, acquisitions, joint ventures and other commercial transactions. Due diligence should extend beyond confirming that patents have been granted and should consider matters such as:

- ownership and chain of title;
- scope and remaining term of the patents;

- prosecution and renewal status;
- existing licences and encumbrances;
- pending oppositions, revocation proceedings or litigation;
- important prior art or validity risks; and
- the relationship between the patents and the products or technologies generating commercial value.

14. Emerging Technologies and the Future of Patent Protection in India

The Indian patent practice is being shaped by technologies that do not always fit neatly within traditional categories of patent examination. Computer-related inventions, artificial intelligence, biotechnology, pharmaceuticals, quantum technologies and standard-essential patents are among the areas in which statutory interpretation, Patent Office practice and judicial guidance continue to develop.

Computer-Related Inventions and Emerging Digital Technologies

Section 3(k) of the Patents Act excludes mathematical methods, business methods, computer programmes per se and algorithms from patentability. The application of this exclusion has evolved through judicial decisions and Patent Office practice, with increasing emphasis on whether the claimed invention demonstrates a technical effect or technical contribution rather than merely implementing an abstract idea through software.

The Guidelines for Examination of Computer Related Inventions, 2025 reflect this development and incorporate recent judicial principles relating to technical effect, technical contribution and the absence of any general requirement for novel hardware. The Guidelines also specifically address technologies such as artificial intelligence, machine learning, deep learning, blockchain and quantum computing.

For applicants, the practical focus remains on the substance of the claimed invention. A digital or software-based invention is not patentable merely because it uses advanced technology, and the specification should

clearly identify the technical problem, technical implementation and resulting technical effect.

Artificial Intelligence

Artificial intelligence creates patent issues at several levels, including patentability of AI-based inventions, sufficiency of disclosure, the role of algorithms and the manner in which technical contribution is demonstrated. The 2025 CRI Guidelines contain dedicated guidance on examination of AI, machine learning and deep learning inventions and recognise that abstract mathematical or computational models remain excluded unless they are applied in a manner that produces a patentable technical contribution.

The Indian Patent Office has also begun using AI within patent administration itself. On August 7, 2026, it published Guidelines for the Use of Artificial Intelligence in Patent Examination Procedures, reflecting the increasing role of AI-assisted tools in patent search and examination. These guidelines relate to the use of AI in examination and should be distinguished from the separate legal question of whether an AI-based invention is patentable.

Biotechnology and Pharmaceutical Patents

Patentability in biotechnology and pharmaceuticals continues to involve complex interaction between novelty, inventive step, sufficiency of disclosure and the statutory exclusions under Sections 3(c), 3(d), 3(i) and 3(j), among others.

On September 4, 2026, the Indian Patent Office published separate Draft Guidelines for Examination of Pharmaceutical Applications for Patent and Draft Guidelines for Examination of Biotechnology Applications for Patent for stakeholder comments. These documents remain in draft form and do not replace the statutory provisions or existing binding law, but they indicate an ongoing effort to update examination practice in technology-intensive sectors.

Developments in these areas are likely to remain important for inventions involving biologics, diagnostics, genetic technologies, therapeutic platforms and new pharmaceutical products, where both technical disclosure and statutory exclusions require careful consideration.

Standard-Essential Patents and FRAND Licensing

Standard-essential patents have become progressively significant in sectors such as telecommunications and connected technologies. Where a patent is essential to the implementation of an industry standard, licensing commitments on fair, reasonable and non-discriminatory terms may become central to both commercial negotiations and enforcement.

Indian courts have developed substantial jurisprudence on SEP essentiality, infringement, interim protection and FRAND licensing. As connected devices, communications standards and interoperability requirements expand, SEP licensing is likely to remain an important intersection between patent rights, technology standards, competition and commercial negotiation.

Future Direction

The direction of Indian patent practice suggests increasing emphasis on technology-specific examination guidance, digital administration and judicial interpretation of patentability standards in emerging fields. For businesses and innovators, this makes early coordination between research teams, patent professionals and commercial decision-makers highly important.

Emerging technologies do not operate outside the established patent framework. Their protection continues to depend on the fundamental requirements of patentability, disclosure, claim scope and statutory exclusions, but the manner in which those principles are applied will continue to evolve with technology and judicial practice.

LexOrbis Patent Practice

Area	Services Offered
Patent Filing and Prosecution	Advice on patentability and filing strategy; preparation and filing of Indian patent applications; ordinary, convention, PCT national phase, divisional and patent of addition filings; prosecution, responses to examination objections and representation at hearings before the Indian Patent Office.
Patent Drafting and Strategy	Preparation and review of provisional and complete specifications, claims and amendments; assessment of claim scope, technical disclosure and filing strategy for Indian and international patent portfolios.
Patent Searches and Analytics	Patentability and prior art searches, freedom-to-operate analysis, validity and invalidity searches, patent landscape studies, competitive intelligence, technology mapping and portfolio analytics.
International and PCT Filings	Coordination of Indian and international patent filings, PCT strategy, national phase entry, convention priority claims and management of multi-jurisdictional patent portfolios.
Opposition and Revocation	Advice and representation in pre-grant and post-grant opposition proceedings, patent revocation matters, validity challenges and related proceedings before the Patent Office and courts.
Patent Enforcement and Litigation	Advice on patent infringement, claim interpretation, validity and enforcement strategy; representation in infringement, revocation and related patent disputes before the appropriate courts.
Patent Portfolio Management	Management of patent portfolios, prosecution and renewal monitoring, restoration of lapsed patents, post-grant compliance, portfolio reviews and

	strategic assessment of commercially important patent rights.
Licensing and Technology Transfer	Advice on patent assignments, licensing, technology transfer, research and development collaborations, commercialisation structures and recordal of patent ownership and interests.
Emerging Technologies and Sector-Specific Patents	Advice on computer-related inventions, artificial intelligence, software-enabled technologies, biotechnology, pharmaceuticals, telecommunications and other technology-intensive patent matters.
SEP and FRAND	Advice on standard-essential patents, essentiality and infringement analysis, FRAND licensing, licensing negotiations and related enforcement and commercial strategy.
Patent Due Diligence and Transactions	Review of ownership, chain of title, patent scope, prosecution and renewal status, licences, encumbrances, validity risks and disputes in connection with investments, acquisitions, collaborations and other commercial transactions.



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