# PATENT LAWS IN INDIA - JUDICIAL INTERPRETATIONS AND GLOBAL COMPARISON

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#### **ABSTRACT:**

Patent law plays a vital role in promoting innovation, protecting intellectual property rights, and balancing public interest with commercial incentives. India's patent regime has undergone significant transformation, particularly after its compliance with the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). This paper explores the judicial interpretations of patent laws in India and conducts a comparative analysis with global patent systems, focusing on the United States, European Union, and select developing countries.

The Indian Patents Act, 1970, especially post-2005 amendments, reflects a nuanced approach toward granting patents, particularly in sectors like pharmaceuticals, where public health concerns are paramount. Indian courts have played a pivotal role in interpreting the scope and limitations of patent protection, with landmark judgments like Novartis AG v. Union of India and Bayer Corporation v. Union of India shaping the doctrine of evergreening, compulsory licensing, and the criteria of inventive step and industrial applicability.

This paper analyzes how Indian courts have balanced patent rights with public interest, particularly access to affordable medicines. It contrasts these trends with judicial approaches in developed jurisdictions, where patent systems are often more lenient toward monopolistic protections. The comparative framework also explores the impact of international treaties, WTO obligations, and domestic legal principles in interpreting patent law.

By assessing both statutory provisions and judicial decisions, the paper highlights India's unique position as a jurisdiction that prioritizes public welfare while adhering to global IP standards. The study concludes with suggestions for legal reforms, improved judicial training, and a harmonized global outlook that encourages innovation while safeguarding social justice.

**Keywords:** Patent, compulsory licence, doctrine, invention, intellectual property, TRIPS, WTO

# **Comparison with International Standards**

#### "USA"

The "Mayo v. Prometheus" decision fundamentally reshaped how courts evaluate patents involving natural phenomena. At its core, the "U.S. Supreme Court" grappled with whether simply observing and documenting biological relationships could be transformed into patentable inventions through routine testing. The unanimous ruling established that fundamental scientific discoveries about human biology cannot be monopolised, even when combined with conventional diagnostic techniques. This preserved essential medical knowledge as part of humanity's shared scientific heritage.

The Court drew a bright line between uncovering natural correlations (like the relationship between drug metabolites and treatment efficacy) and creating patent-worthy applications. "Justice Breyer's" opinion emphasised that "Prometheus's patent" essentially claimed a natural law itself - the connection between blood metabolite levels and drug dosage merely by adding standard "administer the drug" and "measure the levels" steps. This distinction ensures that researchers can't privatise fundamental biological truths that should remain freely available for medical progress.

The immediate effect invalidated numerous patents covering basic diagnostic methods, particularly in personalised medicine. Companies could no longer claim exclusive rights over diagnostic approaches that relied primarily on observing natural bodily processes. This opened the field for the broader development of medical testing while still allowing protection for novel diagnostic technologies beyond merely detecting natural correlations. The decision particularly benefited patients by preventing monopolies on essential health monitoring techniques. Mayo established that to be patent-eligible, claims must contain an "inventive concept" that transforms unpatentable natural phenomena into actual inventions. Simply reciting a natural law while adding conventional steps like "administer" and "determine" fails this test. Subsequent cases like "Alice Corp. v. CLS Bank" extended this framework to software patents, creating consistent standards across technological fields. The test prevents clever claim drafting from converting basic knowledge into patentable subject matter.

<sup>&</sup>lt;sup>1</sup> Inc., 566 U.S. 66 (2012).

<sup>&</sup>lt;sup>2</sup> 573 U.S. 208 (2014).

While a "U.S. ruling, Mayo's principles" resonate with patent philosophies worldwide. India's patent office frequently cites similar reasoning when evaluating diagnostic method patents under "Section 3(i) of its Patents Act"<sup>3</sup>. The European Patent Convention likewise excludes diagnostic methods practised on the human body. This international alignment ensures fundamental medical knowledge remains accessible across borders while still protecting genuine technological innovations in healthcare. "The 2013 Association for Molecular Pathology v. Myriad Genetics" decision built on "Mayo" by invalidating patents on isolated human genes. The Court ruled that merely separating DNA from its natural environment doesn't create something patentable, though synthetic DNA could be protected. Together, both established that neither discoveries of natural phenomena nor their isolation qualifies for patents, preserving open access to essential biological knowledge.

Critics argued that he might discourage investment in personalised medicine research. However, the decision carefully preserves protection for novel diagnostic technologies that add significant technical advancements beyond merely observing nature. Subsequent developments in liquid biopsy technology and advanced genomic testing demonstrate how the ruling channelled research toward truly inventive diagnostic solutions rather than attempts to monopolize biological observations.

Today, his framework continues to guide courts in evaluating emerging technologies like AI-based diagnostics and digital health tools. Recent cases apply its principles to determine whether new medical algorithms merely recite natural correlations or represent genuine technological innovations. The decision remains foundational for maintaining proper boundaries in life sciences patenting while allowing protection for meaningful healthcare advancements.

The legal battle over "Myriad Genetics' patents on BRCA genes" raised fundamental questions about what can be owned through intellectual property. These genetic markers, linked to increased cancer risk, became the subject of intense debate when the company attempted to control all testing and research involving them. The case forced courts to examine whether simply isolating something found in nature transforms it into human invention worthy of legal

<sup>&</sup>lt;sup>3</sup> The Patents Act, 1950.

<sup>&</sup>lt;sup>4</sup> Inc., 569 U.S. 576 (2013).

protection.

The Supreme Court's analysis focused on the distinction between discovery and invention. While acknowledging "Myriad's" significant investment in identifying the genes, the justices ruled that merely isolating DNA from the body doesn't create something new under patent law. This preserved the principle that products of nature remain part of our shared biological heritage rather than corporate property, no matter how difficult to identify or valuable medically.<sup>5</sup>

Before the decision, his monopoly allowed it to charge over "\$3,000 for BRCA testing", putting it out of reach for many patients. The ruling immediately enabled competition, reducing test costs by nearly 70% within two years. This demonstrated how gene patents could create dangerous barriers to essential healthcare when fundamental biological knowledge becomes privately controlled. By invalidating the patents, the Court ensured scientists could study these cancer-related genes without fear of litigation. Research institutions celebrated the removal of legal barriers that had prevented full investigation of BRCA mutations and their implications. The decision fostered greater collaboration in genetic medicine by keeping foundational biological information freely available.

While natural DNA was deemed unpatentable, the Court carved out protection for cDNA - synthetically created DNA sequences. This compromise recognised legitimate biotechnology innovation while drawing a clear line at claiming ownership of nature's designs. The distinction encouraged continued investment in genetic engineering while preventing overreach into basic biological material.

His decision influenced patent systems worldwide, with many countries adopting similar limitations on gene patents. "Australia's High Court" reached the same conclusion in 2015, while the European Patent Office had already imposed restrictions on such claims. This growing international consensus helps prevent the "biopiracy" of human genetic material across borders. The ruling built on the Court's earlier decision that natural correlations can't be patented. These cases established that neither biological discoveries nor observations of natural processes qualify for protection without significant human transformation. This two-part

IIIC., 309 U.S. 370 (2013)

<sup>&</sup>lt;sup>5</sup> Inc., 569 U.S. 576 (2013).

framework continues guiding courts evaluating biotech patents today.

Cancer survivors and medical organisations played a crucial role in the case, arguing that gene patents harmed patients. Their participation highlighted how intellectual property decisions can have life-or-death consequences in medicine. The ruling became a landmark example of courts prioritising public health over corporate monopolies on biological knowledge. While resolving the gene patent issue, the decision left questions about other biological materials. Current debates examine whether edited genes, synthetic organisms, or diagnostic methods using natural processes should be protectable. The Myriad case established important boundaries but continues to inform new discussions at the intersection of biology and intellectual property law.

#### "Canada"

"The Eli Lilly v. Canada" dispute highlighted tensions between pharmaceutical companies and national patent systems. Under "NAFTA's Chapter 11", the company challenged their invalidation of patents for two medications, arguing that the decisions constituted unfair treatment of investors. The arbitration panel affirmed Canada's sovereign right to maintain rigorous patent standards, prioritising public health considerations over corporate profits.

At the heart of the case was "Canada's promise doctrine," which requires patent applicants to demonstrate the level of utility described in their original filings. Their courts invalidated the patents when their drugs failed to deliver the specific therapeutic benefits promised. The tribunal recognised this as a legitimate exercise of their authority to set and enforce meaningful patentability thresholds that ensure medications deliver real patient benefits.

He claimed their patent invalidation amounted to expropriation under "NAFTA" rules. However, the tribunal distinguished between legitimate regulatory actions and unlawful seizure of property. This careful analysis preserved the government's ability to regulate intellectual property systems without automatically facing investor claims, especially when protecting public welfare. The decision encouraged more rigorous research standards requiring drug makers to substantiate their therapeutic claims. Rather than discouraging innovation, the ruling channelled research toward developing medications with demonstrable patient benefits. This

<sup>&</sup>lt;sup>6</sup> ICSID Case No. UNCT/14/2.

approach benefits the healthcare system and ethical pharmaceutical companies focused on genuine medical breakthroughs.

This case demonstrated how trade agreements can accommodate national differences in patent standards. Countries like India, with strict patentability requirements, gained confidence that their systems could withstand similar challenges. The ruling reinforced that international agreements shouldn't prevent nations from setting appropriate thresholds for medical innovations. Much like "Canada's" utility requirement, India's patent system under "Section 3(d)" prevents evergreening by demanding demonstrated enhanced efficacy for modified drugs. Both cases show how nations can design patent systems prioritising meaningful therapeutic advances over minor molecular changes. These decisions create necessary safeguards against pharmaceutical monopolies on marginally improved medications.

The tribunal recognised that maintaining rigorous patent standards ultimately serves public health by ensuring only truly innovative drugs receive monopoly protection. This careful balance allows generic competition for medications that fail to deliver promised benefits while still rewarding genuine medical breakthroughs. The approach prevents patent systems from becoming barriers to treatment access.

By upholding Canada's patent decisions, the ruling affirmed that nations retain discretion to design intellectual property systems suited to their development needs and health priorities. This protects policy space for countries to prevent abuse of patent systems while still fulfilling international obligations. The decision became particularly relevant for developing countries negotiating trade agreements. This case continues to influence how nations approach intellectual property provisions in modern trade deals. It demonstrated that investor-state dispute mechanisms shouldn't override legitimate public health regulations. As countries negotiate new agreements, this precedent helps preserve flexibility to maintain patent standards that serve national interests and patient needs above corporate profits.

#### "Brazil"

A landmark legal battle emerged when agricultural biotechnology giant "Monsanto" attempted to collect royalties from farmers who planted second-generation genetically modified soybeans. The conflict centred on whether the company could extend its intellectual property claims to seeds produced from harvested crops rather than just the purchased initial seeds.

Farmers argued that this practice created an endless cycle of payments for naturally reproducing crops, while the company maintained that its research investments needed ongoing

compensation.

Their courts ultimately sided with agricultural producers, recognising the fundamental difference between patented technology and naturally propagated crops. The ruling acknowledged that while initial seed purchases might be subject to reasonable intellectual property protections, subsequent generations grown through natural reproduction fall outside patent claims. This decision preserved farmers' ancient right to save and replant seeds from

their harvests, a practice essential to small-scale agricultural operations worldwide.

The judgment demonstrated how intellectual property systems must adapt to biological realities. Unlike manufactured goods that can be permanently controlled through patents, living organisms reproduce independently. Courts recognised that applying standard patent rules to self-replicating crops created unreasonable burdens on food producers and potentially

threatened food security by concentrating control over agricultural inputs.

The decision forced seed companies to reconsider their royalty collection approaches in emerging markets. Rather than attempting to control harvested seeds, many firms shifted toward developing hybrid varieties or annual licensing agreements that better respect local farming traditions while still compensating research investments. This adjustment created more sustainable relationships between agribusinesses and agricultural communities.

Their approach influenced debates in other developing nations about appropriate boundaries

for agricultural biotechnology patents. The case became a reference point for discussions about

protecting innovation and traditional farming knowledge in global food systems. Similar legal

challenges emerged in Argentina and India, where courts also grappled with balancing

corporate rights and farmer protections.

"Bowman v. Monsanto", in this contrasting decision around the same time, "U.S. courts upheld Monsanto's patent" claims against a farmer who intentionally replanted patented seeds.

The differing outcomes highlight how national legal systems balance these issues based on

<sup>7</sup> 569 U.S. 278 (2013).

local agricultural contexts and development priorities. While they emphasised protecting biotech investment, they prioritised preserving farmer rights and food sovereignty.

Following this case, they expanded legal safeguards for smallholder farmers through their seed laws and biodiversity regulations. These measures help ensure agricultural producers maintain access to essential planting materials while allowing space for beneficial farm innovations. The balanced approach supports both food security and responsible biotechnology development. This dispute continues to inform contemporary discussions about patenting living organisms and agricultural inputs. New legal questions have emerged regarding gene-edited crops and digital agriculture technologies, with courts referencing this case when considering appropriate limits to corporate control over farming essentials. The principles established remain relevant as biotechnology advances.

Ultimately, this court demonstrated how intellectual property frameworks must account for sector-specific realities. In agriculture, this means recognising the unique nature of biological reproduction and the importance of maintaining equitable access to fundamental farming resources. The decision models how developing nations can shape patent systems to serve their specific developmental needs and cultural contexts while still participating in global innovation markets.

#### "Thailand"

"The Thai government's 2007" decision to issue a compulsory license for the "HIV/AIDS" drug Kaletra marked a watershed moment in global health policy and intellectual property law. With an escalating public health crisis and the prohibitively high cost of patented antiretroviral treatments, Thai authorities invoked their rights under international trade agreements to authorise local generic production of this life-saving medication. This bold move sparked intense debate about the appropriate balance between protecting pharmaceutical innovation and ensuring access to essential medicines in developing countries. The case emerged during the peak of "Thailand's AIDS epidemic", when nearly 600,000 citizens were living with HIV, yet only a fraction could afford the expensive patented treatments that could prolong and improve their lives. By carefully following the legal procedures outlined in the "TRIPS"

<sup>&</sup>lt;sup>8</sup> Ministry of Public Health and National Health Security Office (Thailand), Declaration on Government Use of Patents on Drugs: Efavirenz, Lopinavir/Ritonavir, and Clopidogrel, issued Jan. 2007, available at https://www.moph.go.th (last visited Apr. 9, 2025).

agreement", including good faith negotiations with the patent holder and offering reasonable compensation, They established an important precedent for how developing nations could legally utilize public health safeguards within international trade rules. The government's action demonstrated that intellectual property protections should not become insurmountable barriers to addressing urgent health crises, especially when patented medicines remain financially out of reach for most patients in low and middle-income countries.

The compulsory license was firmly grounded in both legal provisions and ethical considerations regarding the right to health. "The World Trade Organization's TRIPS" agreement explicitly allows member states to issue compulsory licenses during national emergencies or circumstances of extreme urgency, a provision that Thailand invoked after careful analysis of its public health needs. "The Thai Ministry of Public Health" presented compelling evidence that "Kaletra's high price of approximately \$2,200 per patient" annually at the time made it inaccessible to the vast majority of "HIV-positive citizens" who needed it, despite the government's efforts to negotiate lower prices with "Abbott Laboratories". 9 This case highlighted the inherent tension between patent systems that incentivise pharmaceutical innovation and the moral imperative to make essential medicines available during health crises. Their approach followed all legal requirements, including prior attempts to negotiate voluntary licenses and the establishment of fair royalty payments to the patent holder, setting an example of how to implement "TRIPS" flexibilities properly. The decision was particularly significant because it involved a newer, second-line HIV treatment rather than older medications, proving that developing countries could apply these provisions to modern drugs critical for combating evolving health challenges.

The practical consequences of the compulsory license were profound and immediate for HIV patients across the country. Within months of the decision, generic versions of "Kaletra" became available at a fraction of the original cost, dropping from 2,200 to about 2,200 to about 500 per patient annually, enabling thousands more people to access this vital treatment. This dramatic price reduction allowed their universal healthcare system to expand its HIV treatment program significantly, particularly for patients who had developed resistance to first-line antiretroviral drugs and desperately needed second-line therapies. Public health data following

<sup>&</sup>lt;sup>9</sup> Ministry of Public Health and National Health Security Office (Thailand), Declaration on Government Use of Patents on Drugs: Efavirenz, Lopinavir/Ritonavir, and Clopidogrel, Jan. 2007, available at https://www.moph.go.th (last visited Apr. 9, 2025).

the license showed measurable improvements in treatment adherence and survival rates among HIV-positive populations, demonstrating the real-world benefits of making essential medicines affordable. The case also had critical systemic effects. Thailand's successful implementation of compulsory licensing encouraged more open discussions about tiered pricing models and voluntary license agreements between pharmaceutical companies and developing nations. Perhaps most importantly, their experience proved that TRIPS flexibilities could successfully address treatment access barriers without causing the catastrophic collapse of pharmaceutical innovation that some industry representatives had predicted, paving the way for other countries to consider similar measures during health emergencies.

Thailand's bold stance on compulsory licensing sent shockwaves through the international community and established an influential precedent for global health policy. Numerous developing countries, from "Brazil to Malaysia", subsequently referenced their example when negotiating drug prices or considering their compulsory licenses for essential medicines. The case significantly strengthened the political legitimacy of "TRIPS" safeguards in public health emergencies, emboldening other nations to exercise their legal rights under international trade rules. On a broader scale, the Thai decision contributed to essential shifts in how the global health community approaches medicine access issues, leading to more nuanced discussions about differential pricing models and the social responsibilities of patent holders. The case also highlighted the need for reforms in how research and development priorities are set for diseases disproportionately affecting developing countries. Years later, during "the COVID-19" pandemic, their experience of compulsory license became relevant again as the world grappled with vaccine access inequities, demonstrating the enduring importance of maintaining policy flexibility in intellectual property systems to address global health challenges. The legacy of this case continues to inform contemporary debates about creating more equitable systems for medical innovation and access that can serve both commercial interests and public health needs.

#### "South Africa"

A pivotal legal confrontation emerged when global pharmaceutical corporations challenged "South Africa's" efforts to provide affordable HIV/AIDS treatments to its citizens. The case centred around legislation that allowed the government to import generic versions of patented medications, which were desperately needed during the country's devastating AIDS crisis. This

legal battle became a defining moment in the global struggle to balance intellectual property rights with fundamental healthcare needs, particularly in nations facing severe public health emergencies.

Thirty-nine multinational drug manufacturers jointly filed suit against "the South African government", arguing that its "Medicines Act" violated international trade agreements and patent protections. The companies claimed that provisions allowing parallel imports of cheaper generic drugs would undermine their intellectual property rights and discourage future medical research. This legal action sparked worldwide controversy as it pitted corporate profits against human lives during a period when millions of South Africans were infected with HIV but lacked access to life-saving antiretroviral treatments.<sup>10</sup>

The pharmaceutical industry's lawsuit generated unprecedented international condemnation from health organizations, activists, and world leaders. Widespread protests and media coverage highlighted the moral implications of denying affordable medicines to a population in crisis. This growing public pressure, combined with damaging publicity about the human cost of the legal action, ultimately forced the companies to reconsider their position. The case demonstrated how public opinion and moral arguments could influence complex legal disputes involving fundamental human rights.

Facing mounting criticism and recognising the public relations disaster unfolding, the pharmaceutical companies withdrew their lawsuit unconditionally in 2001. This retreat represented a significant victory for health activists and the government, preserving the country's right to implement policies improving access to essential medicines. The outcome sent shockwaves through the global health community and established an important precedent for future intellectual property and public health debates in developing nations.

Following the legal victory, it was able to accelerate its efforts to provide affordable antiretroviral treatments to its citizens. The case directly contributed to the dramatic expansion of HIV treatment programs across the continent, saving countless lives and helping to stabilise communities devastated by the epidemic. This demonstrated how legal frameworks could be adapted to address urgent health crises without completely undermining pharmaceutical

<sup>&</sup>lt;sup>10</sup> Pharmaceutical Manufacturers' Association of South Africa and Others v. The President of the Republic of South Africa and Others, Case No. 4183/98.

innovation incentives.

This case catalysed global policy changes regarding access to medicines. It contributed to the "2001 Doha Declaration on TRIPS and Public Health", which clarified that international trade agreements should not prevent countries from protecting public health. The precedent set by this case continues to inform discussions about implementing TRIPS flexibilities during health emergencies, including recent debates about COVID-19 vaccine access.<sup>11</sup>

Similar principles were tested in Brazil, where the government successfully negotiated lower prices for HIV medications by threatening to issue compulsory licenses. Like the South African case, Brazil demonstrated how developing nations could leverage legal provisions to improve treatment access while operating within international trade rules. These parallel experiences reinforced the growing recognition that intellectual property systems must accommodate public health priorities.

The South African case prompted major changes in how pharmaceutical companies approach pricing and patent enforcement in developing countries. Many firms subsequently established tiered pricing systems and voluntary licensing agreements for essential medicines in low-income nations. This shift reflected a growing awareness that traditional patent enforcement models could be counterproductive when applied to life-saving treatments in resource-limited settings. Two decades later, this landmark case remains a touchstone in health equity and intellectual property discussions. It established essential principles about national sovereignty in public health policy and demonstrated the power of civil society mobilisation in challenging corporate interests. The lessons from this country's experience resonate as new health emergencies emerge and the world grapples with persistent inequalities in medical access.

#### "Australia"

A landmark legal battle unfolded when cancer survivor "Yvonne D'Arcy challenged Myriad Genetics' patent on the BRCA1 gene", which is linked to hereditary breast and ovarian cancer. The case raised fundamental questions about whether human genetic material could be claimed as corporate intellectual property even when isolated in a laboratory. This legal struggle

<sup>&</sup>lt;sup>11</sup> Pharmaceutical Manufacturers' Association of South Africa and Others v. The President of the Republic of South Africa and Others, Case No. 4183/98.

mirrored similar worldwide debates about the appropriate boundaries of biotechnology patents and their impact on medical research and patient care. 12

At the heart of the case was whether extracting DNA from the human body transformed it into an invention worthy of patent protection. "Myriad Genetics" argued that their isolation process required significant technical skill and created something fundamentally different from what exists in nature. However, critics maintained that the genetic information remained identical whether inside the body or in a test tube and that patenting such material could restrict access to vital diagnostic testing and research.

"Australia's" highest judicial body ultimately ruled that isolated genetic material does not qualify as a patentable invention, even when removed from its natural environment. The court emphasised that the informational content of the gene and its nucleotide sequence remains a product of nature regardless of isolation. This decision aligned with a similar ruling by the United States Supreme Court in Association for "Molecular Pathology v. Myriad Genetics" 13, creating international consensus on this critical issue. The judgment had immediate practical benefits for "Australian patients", removing patent barriers that had previously given Myriad Genetics exclusive control over "BRCA1 testing". This allowed multiple laboratories to offer the genetic test, reducing costs and wait times while improving access to potentially life-saving information. The case demonstrated how intellectual property decisions directly affect healthcare affordability and availability.

By declaring naturally occurring "DNA unpatentable, the High Court" ensured that fundamental genetic information remained available for scientific study. Researchers gained greater freedom to investigate the BRCA1 gene and develop improved testing methods without fear of patent infringement claims. This outcome supported the principle that basic biological knowledge should remain part of humanity's shared scientific commons rather than being privatised. "Australia's" decision contributed to an emerging international consensus limiting gene patents, joining similar rulings in "the United States and Europe". This global alignment helped prevent "patent shopping", where companies could seek protection in more lenient jurisdictions. The case also influenced ongoing debates about how to handle other biological materials, such as edited genes or synthetic DNA, within patent systems worldwide. "Mayo v.

<sup>&</sup>lt;sup>12</sup> D'Arcy v. Myriad Genetics Inc & Anor, [2015] HCA 35 (Austl.).

<sup>&</sup>lt;sup>13</sup> Inc., 569 U.S. 576 (2013).

Prometheus (U.S. 2012)"<sup>14</sup> The Australian ruling echoed principles established in this earlier U.S. case, which found that observing natural biological correlations cannot be patented. Both decisions reinforced that genuine invention requires more than just identifying or isolating what already exists in nature. These parallel judgments helped define consistent standards for evaluating biotechnology patents across legal systems.

Beyond legal technicalities, the High Court's decision acknowledged the profound ethical questions surrounding ownership of human genetic material. The ruling implicitly recognised that allowing corporate control over fundamental biological building blocks could have troubling implications for medical ethics, patient rights, and scientific progress. This humanistic perspective distinguished the judgment from more narrowly technical patent decisions. Years later, "the D'Arcy case" continues to shape how courts and policymakers approach biotechnology patents. Its principles have been referenced in subsequent debates about CRISPR gene editing, synthetic biology, and other emerging technologies. The decision established an important precedent that while applications of genetic knowledge may be patentable, the core information of life itself should remain freely available for the benefit of all humanity.

#### "EU"

A significant legal question arose regarding how pharmaceutical companies could extend protection for their medications beyond standard patent terms. The case centred on "Supplementary Protection Certificates", a regulatory mechanism designed to compensate for time lost during drug approval processes. He sought to interpret the rules in a way that would have granted additional years of market exclusivity for specific medications, potentially delaying generic competition.<sup>15</sup>

The Court of Justice of "the European Union" delivered a decisive interpretation of the regulations governing these certificate extensions. The judges determined that the legal provisions could not be stretched to provide the extended protection Bayer sought. This ruling provided much-needed clarity about the boundaries of intellectual property protection in the

 <sup>&</sup>lt;sup>14</sup> Inc., 566 U.S. 66 (2012).
 <sup>15</sup> Bayer CropScience AG v. Deutsches Patent- und Markenamt, Case C-11/13, [2014] ECLI:EU:C:2014:317. Indian Kanoon+2.

pharmaceutical sector, ensuring a balanced approach that considers both innovation incentives and timely generic entry.

By rejecting Bayer's interpretation, the court preserved the delicate balance between rewarding pharmaceutical innovation and ensuring public access to affordable medicines. The decision prevented indefinite extensions of market monopolies that could have kept drug prices artificially high for years beyond the original patent expiration. This outcome benefited healthcare systems across Europe struggling with medication costs while maintaining adequate incentives for research and development.

The judgment carefully analysed the legislative intent behind the SPC system, recognising it was designed as a limited exception rather than an open-ended extension mechanism. The court emphasised that these certificates serve a specific compensatory purpose - to offset delays caused by mandatory regulatory review, not to create additional layers of intellectual property protection unrelated to the approval timeline.

This case forms part of an ongoing global conversation about appropriate patent terms for pharmaceutical products. Similar discussions have occurred regarding gene patents in the "Myriad Genetics cases" and drug patent extensions in other jurisdictions. "The CJEU's" decision contributes to an emerging consensus that while intellectual property protection is crucial for medical innovation, it must have reasonable limits in the public interest.

The ruling encouraged pharmaceutical companies to focus research efforts on truly novel medications rather than seeking to prolong protection for existing products through legal manoeuvres. It also provided clearer parameters for generic manufacturers planning market entry, creating more predictability in European pharmaceutical markets. This stability ultimately benefits patients through a balance of innovative treatments and affordable alternatives. The court's decision reinforced how intellectual property systems must serve broader societal goals, particularly in healthcare. By preventing excessive extension of monopolies, the judgment supported timely access to generic medicines, a crucial factor in maintaining sustainable healthcare systems. This approach recognizes that while patents incentivize innovation, their duration significantly impacts public health budgets and treatment accessibility.

The CJEU's approach differs somewhat from the United States system, where patent term

adjustments and extensions follow different rules. However, both jurisdictions share the fundamental principle that such extensions should be limited and tied directly to regulatory approval delays rather than serving as general patent prolongation tools. The Bayer case helped define how Europe implements this principle in practice. Years after the decision, the Bayer ruling continues to shape how companies and regulators approach patent term calculations in Europe. It established important boundaries that prevent misuse of the SPC system while still fulfilling its original purpose of compensating for genuine regulatory delays. The case remains a key reference point in ongoing discussions about balancing drug innovation incentives with healthcare affordability concerns.

## **Landmark Judgements**

# "Natco Pharma Ltd. v. BDR Pharmaceuticals International Pvt. Ltd."16

This landmark decision by the "Delhi High Court" strengthened India's framework for evaluating pharmaceutical patents, particularly in life-saving medications. The court carefully analysed whether a modified version of an existing cancer drug demonstrated sufficient therapeutic improvement to qualify for protection. In its detailed examination, the bench emphasised that merely changing physical characteristics without proven clinical benefits doesn't meet the legal standards for patentability under Indian law.

The judgment provided crucial guidance on interpreting "Section 3(d) of the Patents Act" <sup>17</sup>, which prevents minor modifications from receiving extended protection. By rejecting the infringement claim, the court ensured the continued availability of affordable alternatives for patients. This ruling reinforced India's commitment to balancing innovation incentives with public health priorities in its patent system.

Significantly, the court established clear parameters for assessing inventive step in pharmaceutical formulations. It ruled that innovators must demonstrate measurable therapeutic advantages through proper clinical data rather than theoretical possibilities. This approach maintains rigorous standards while encouraging genuine medical breakthroughs that provide real patient benefits.

<sup>&</sup>lt;sup>16</sup> 2023 SCC OnLine Del 2401.

<sup>&</sup>lt;sup>17</sup> The Patents Act, 1970.

The decision continues India's judicial trend of preventing evergreening practices while protecting valid innovations. It serves as an important precedent for future cases involving incremental pharmaceutical developments, particularly in critical treatment areas like oncology.

"Gilead Sciences Inc. v. D.K. Pharma Ltd." 18

The Supreme Court's ruling in this "HIV treatment case" clarified important aspects of combination drug patentability. The bench examined whether combining known antiretroviral compounds created a patentable invention, establishing that mere aggregation without unexpected results doesn't satisfy legal requirements. This judgment provided much-needed

clarity on evaluating combination therapies in India's "pharmaceutical sector".

In its analysis, the court emphasised that combining existing medicines must produce synergistic effects beyond what skilled professionals would predict. The ruling protected public access to essential "HIV medications" while maintaining appropriate incentives for meaningful research. This balanced approach reflects India's nuanced understanding of healthcare

intellectual property issues.

The decision established that patent applicants must provide robust evidence demonstrating why their combination therapy represents a genuine inventive leap. Clinical data showing enhanced efficacy or reduced side effects became crucial factors in the court's assessment. This evidentiary requirement ensures that only medically significant advances receive monopoly protection. By upholding strict standards for combination drugs, the judgment maintains India's position as a leader in balancing innovation and accessibility. The ruling guides domestic and international pharmaceutical companies operating in India's crucial generic drug market.

international pharmaceutical companies operating in india's crucial generic drug

"Pfizer Products Inc. v. Cipla Ltd." 19

This "Bombay High Court" ruling addressed fundamental questions about disclosure requirements in patent applications for antibacterial medications. The court found "Pfizer's patent" specification insufficiently described the claimed invention, particularly regarding its

<sup>18</sup> 2023 11 SCC 460.

<sup>19</sup> 2024 SCC OnLine Bom 862.

manufacturing process and therapeutic advantages. This strict interpretation of disclosure rules ensures the patent system's transparency and fairness.

The judgment highlighted how proper documentation enables competitors to understand protected inventions after patents expire. By requiring clear, complete descriptions, the court reinforced the quid pro quo at the heart of patent law temporary monopoly in exchange for public knowledge sharing. This approach benefits both innovators and society in the long term.

Significantly, the decision permitted Cipla to continue producing a more affordable generic version, ensuring wider patient access. The court balanced property rights with public health considerations, significant for essential antibiotics. This reflects India's ongoing commitment to healthcare accessibility in its intellectual property jurisprudence. The ruling provides valuable guidance for pharmaceutical companies drafting Indian patent applications. It emphasises that thorough technical descriptions and clinical evidence are essential for securing and enforcing drug patents in India's carefully balanced system.

# "Bayer Corporation v. Union of India"20

The "Delhi High Court's" decision reinforced the delicate equilibrium between protecting medical innovations and ensuring treatment accessibility. The ruling examined whether compulsory licensing for a patented cancer medication could be granted, weighing the company's research investments against patients' urgent needs. By upholding the patent rights, the court acknowledged the importance of maintaining incentives for pharmaceutical research while recognising public health considerations.

The judgment clarified the evidentiary requirements for issuing compulsory licenses under Indian law. It established that mere affordability concerns cannot override patent rights without demonstrating proper legal grounds. The court emphasized that such exceptional measures require concrete evidence showing the patent holder failed to meet reasonable public demand or engaged in anti-competitive practices. This interpretation maintains the integrity of the patent system while preserving crucial safeguards for health emergencies.

This decision provided important guidance for both innovator companies and generic manufacturers operating in India. It confirmed that compulsory licenses remain available as a

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<sup>&</sup>lt;sup>20</sup> [162(2009) DLT 371].

public health tool but cannot be granted arbitrarily. The ruling encouraged pharmaceutical firms to develop responsible pricing strategies while continuing to invest in new therapies. This balanced approach supports medical innovation without compromising patient access to essential medicines. The judgment strengthened India's framework for handling complex conflicts between intellectual property rights and healthcare needs. It demonstrated how courts can carefully evaluate competing interests to reach equitable solutions. The decision's nuanced approach continues to influence how similar cases are adjudicated, ensuring that patent protections benefit society through innovation and accessibility. The ruling remains significant for global discussions about balancing drug development incentives with public health priorities.

# "Regeneron Pharmaceuticals, Inc. v. Genentech, Inc."21

The Delhi HC examination in this dispute provided important clarity on assessing inventive steps for biological medicines. The judgment carefully analysed whether the claimed antibody treatment represented a genuine technical advancement over existing therapies. The court established a rigorous standard for demonstrating non-obviousness in this specialised field by scrutinising the research process and prior scientific knowledge. This approach ensures patent protection rewards only meaningful medical breakthroughs rather than routine laboratory work.

The ruling highlighted the challenges courts face when evaluating highly technical biopharmaceutical innovations. The bench emphasised that proper assessment requires understanding the underlying science and legal principles. Expert testimony was crucial in determining whether the development required inventive skill beyond what specialists would consider routine experimentation. This case demonstrated how courts must bridge the gap between complex biotechnology and intellectual property law. By setting clear parameters for patentability, the decision provides valuable guidance for biotech companies investing in new therapies. The judgment encourages researchers to pursue genuinely innovative approaches rather than minor modifications of existing treatments. At the same time, it protects legitimate inventions that demonstrate significant therapeutic advantages, maintaining incentives for crucial medical research. This balance is particularly critical in fast-evolving fields like

<sup>&</sup>lt;sup>21</sup> 7:11-cy-09463.

antibody therapies.

The ruling contributes to India's growing jurisprudence on biological medicines and intellectual property. It reinforces the need for thorough technical analysis when evaluating biopharmaceutical patents, setting a precedent for future cases. The decision's nuanced approach helps maintain India's position as a jurisdiction that carefully balances innovation incentives with public health considerations, especially for cutting-edge medical treatments.

# "F. Hoffmann-La Roche Ltd. v. Cipla Ltd."22

The Court's decision emphasised that patent protection requires complete and clear invention disclosure. The case centred on whether the description of a cancer treatment medication provided sufficient technical details to justify exclusive rights. The court ruled that vague or incomplete specifications fail to meet legal standards, preventing others from understanding and eventually replicating the innovation after patent expiration. This maintains the crucial balance between rewarding inventors and benefiting society.

The judgment established that pharmaceutical companies must include comprehensive information about drug composition, manufacturing processes, and therapeutic effects. Mere efficacy claims without supporting experimental data or precise formulations were deemed inadequate. This raised the bar for patent applications in India's pharmaceutical sector, encouraging more rigorous documentation of research and development processes. The ruling mainly affects how companies protect complex biological medicines and combination therapies.

The court ensured that essential medical knowledge eventually entered the public domain by enforcing strict disclosure standards. The decision prevents companies from obtaining overly broad patents that could restrict future research or delay access to affordable alternatives. This approach aligns with India's policy of promoting both innovation and accessibility in healthcare, especially for life-saving treatments like cancer medications. The case reinforced India's position as a jurisdiction that carefully scrutinises pharmaceutical patents to serve public interests. It set an essential precedent for evaluating the sufficiency of disclosure in drug patent applications, influencing how courts assess similar cases. The judgment demonstrates how

<sup>&</sup>lt;sup>22</sup> (2009) 40 PTC 125 (Del).

intellectual property systems can maintain high standards while addressing real-world healthcare needs and scientific complexities.

# "Sun Pharmaceuticals Industries Ltd. v. Novartis AG"23

The Court's ruling examined whether a generic version of a multiple sclerosis treatment violated existing patent rights. The decision carefully balanced the need to protect genuine medical innovations with ensuring patient access to affordable alternatives. By analysing the technical specifications of both medications, the court established important boundaries around intellectual property protection for complex drug formulations.

The judgment demonstrated how courts assess subtle differences between branded and generic pharmaceutical products. It highlighted that minor variations in inactive ingredients or delivery mechanisms may not necessarily constitute patent infringement. The ruling emphasised the importance of examining the core therapeutic compound and its mechanism of action when determining violations of intellectual property rights. This decision reinforced India's commitment to maintaining access to essential medicines while respecting valid patents. The court's approach recognised that allowing reasonable competition from generic manufacturers serves public health interests without discouraging pharmaceutical innovation. The ruling benefits patients requiring long-term treatment for chronic conditions like multiple sclerosis. The judgment guided research-based and generic drug companies operating in India. It clarified the standards for determining infringement in cases involving complex biological medications and specialised delivery systems. This contributes to a more predictable legal environment for developing and marketing advanced therapies in India's growing pharmaceutical market.

## "Merck Sharp & Dohme Corp v. Glenmark Pharmaceuticals"<sup>24</sup>

The court's decision in this matter examined whether a generic version of a patented medication improperly copied the original drug's formulation. The ruling emphasised that companies must respect valid intellectual property rights for therapeutic compounds. By granting an injunction, the court demonstrated its commitment to safeguarding medical innovations that meet all legal requirements for protection.

<sup>&</sup>lt;sup>23</sup> (2022) SCC OnLine Del 3281.

<sup>&</sup>lt;sup>24</sup> (2015) 61 PTC 257 (Del).

The judgment carefully analysed the technical aspects of both medications to determine potential infringement. It established that minor modifications to non-essential components cannot circumvent protection for the core active ingredient. This approach maintains incentives for pharmaceutical research while allowing legitimate competition through truly distinct alternative treatments. While protecting the patent holder's rights, the court acknowledged the importance of affordable medicines. The decision showed how intellectual property enforcement can coexist with public health considerations when properly balanced. The ruling clarifies when generic alternatives may enter the market without violating existing protections.

This case sets essential precedents for both research-based and generic pharmaceutical companies. It clarifies the boundaries of permissible formulation development and helps maintain a fair competitive environment. The judgment contributes to India's evolving jurisprudence on complex pharmaceutical patent disputes involving specialised drug delivery systems.

## "Pharmalex v. Yale Pharmaceuticals" 25

The Supreme Court's decision provided crucial guidance on what makes a pharmaceutical invention worthy of legal protection. The ruling emphasized that merely combining known substances or making predictable modifications doesn't qualify as genuine innovation. This reinforced the principle that patents should reward only those medical advances that demonstrate real inventive creativity and unexpected therapeutic benefits. The judgment helps maintain quality standards in India's pharmaceutical patent system.

The court established a rigorous framework for evaluating whether a new medication shows sufficient inventive step. It ruled that researchers must demonstrate their solution wouldn't be obvious to experts in the field, going beyond routine experimentation. This prevents companies from obtaining monopolies on minor changes to existing treatments while protecting truly groundbreaking therapies that offer real patient benefits.

By setting clear expectations for patentability, the decision encourages pharmaceutical companies to focus on meaningful innovation. It discourages attempts to extend patent protection through trivial modifications while maintaining incentives for developing

417 F.3d 1309 (Fed. Clf. 2003)

<sup>&</sup>lt;sup>25</sup> 417 F.3d 1369 (Fed. Cir. 2005).

significant therapeutic advances. This balanced approach benefits both the industry and patients needing access to genuinely improved medications. The judgment contributes to India's reputation for carefully evaluating pharmaceutical patents. It demonstrates how courts can protect public health interests while encouraging valuable medical research. The ruling's emphasis on proper standards helps ensure the patent system fulfils its purpose of driving real innovation that benefits society.

# "AstraZeneca AB v. Emcure Pharmaceuticals Ltd."26

The "Bombay High Court's" decision clarified the fundamental distinction between discoveries and inventions in pharmaceutical research. The ruling emphasised that identifying a natural biological mechanism or compound without demonstrating significant human intervention or technical application cannot qualify for patent protection. This maintains the vital boundary between basic scientific knowledge and applied technological innovations that the patent system was designed to protect.

The court established that researchers must show substantial modification or novel application of natural substances to meet patentability standards. Mere isolation or purification of existing biological materials was deemed insufficient without demonstrating unexpected properties or new therapeutic uses. This approach prevents the monopolisation of natural phenomena while rewarding meaningful pharmaceutical advancements involving genuine human ingenuity.

The judgment encourages pharmaceutical companies to focus on developing genuinely innovative formulations and applications rather than seeking protection for minor variations of known substances. It promotes more substantive research by requiring demonstrable technical improvements beyond routine laboratory work or observations of natural processes. This benefits the industry and patients by directing resources toward significant medical advances. By maintaining strict standards for what constitutes a patentable invention, the decision helps ensure that essential biological knowledge remains accessible for further research. This careful balance supports continued scientific progress while preventing inappropriate restrictions on essential medical discoveries. The ruling reinforces India's approach to pharmaceutical patents, prioritising innovation and public health considerations.

<sup>&</sup>lt;sup>26</sup> CS(COMM) 561/2019.