

NAVIGATING THE UNCHARTED WATERS OF PATENTING BUSINESS METHODS: AN ANALYSIS OF OPENTV INC. CASE

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Abstract

This case comment delves into the Delhi High Court's recent decision in "OpenTV Inc. v. The Controller of Patents and Designs and Anr.", a case that has raised significant questions regarding the patentability of business methods in India. The court, while upholding the existing legal framework barring patents on business methods, has suggested a re-evaluation of this stance in the light of technological advancements. The comment begins by outlining the facts of the case, where OpenTV Inc., a U.S.-based company, sought a patent for a system involving the gifting of media items. However, their application was rejected, citing Section 3(k) of the Patents Act, 1970, which excludes business methods from patentability. Next, the comment discusses the court's judgment in detail, highlighting the court's observation that many innovations in emerging technologies are related to business methods or digital technologies. It also emphasises the need to revisit the exclusions under Section 3(k) to ensure that patent law remains relevant and adaptable in the face of evolving technologies. The comment then explores international perspectives on patenting business methods, citing examples from foreign jurisdictions and analysing how they handle similar issues. Additionally, it examines the TRIPS (Trade-Related Aspects of Intellectual Property Rights) Agreement to provide insights into how international agreements might influence India's approach to business method patents. The case comment concludes by saying that while the court's suggestion to re-evaluate business method patents is a progressive step towards adapting to technological advancements, it raises questions about the judiciary's role in policy-making.

Keywords: OpenTV Inc., Patentability, Emerging technologies, Business methods, Delhi High Court.

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1. Setting the Context

The case of *OpenTV Inc v. The Controller of Patents and Designs and Anr.*¹ (referred to as “OpenTV case”) presents a critical intersection between Intellectual Property law, technological innovation and international trade obligations. In this case comment, the authors delve into the implications of the judgment rendered by the Delhi High Court on May 11, which called for a re-evaluation of the grant of patents concerning ‘business methods’ in the context of evolving technology. This landmark decision has far-reaching implications not only for India’s patent landscape but also for its compliance with international agreements, including the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). We explore how the court’s approach aligns with TRIPS provisions and international norms regarding patent eligibility for business methods and software-related inventions.

2. Judgment at a Glance

The issuance of patents in India is regulated by the Indian Patents Act of 1970, which establishes the conditions for patent eligibility such as novelty, inventive step, and industrial applicability. Section 3(k) of the Act² specifically designates certain types of subject matter as ineligible for patents, explicitly stating that items like “mathematical or business methods, computer programs or algorithms executed by Artificial Intelligence” are not patentable. The primary issue in this case revolves around the classification of the gifting method. Is it a patentable invention, or does it fall within the exclusionary provision of Section 3(k) as a business method? The answer to this question holds significant implications for the patentability of similar methods and processes in the field of emerging technologies, especially those related to digital media and artificial intelligence.

OpenTV Inc., a U.S.-based company specialising in interactive and enhanced television solutions, applied for a patent concerning a system and method facilitating the gifting of media items among users. The range of media items encompassed subscriptions, DVDs, and diverse forms of digital content. Subsequently, OpenTV’s patent application was turned down by the Indian Patent Registry, invoking Section 3(k)

¹ *OpenTV Inc v. The Controller of Patents and Designs & Anr.*, 2023 SCC OnLine Del 2771.

² The Patents Act, 1970 (39 of 1970).

of the Patents Act, 1970, which expressly prohibits the issuance of patents for ‘business methods’. The Controller of Patents and Designs asserted that OpenTV’s innovation was characterised more as a business method rather than a technical invention. Subsequently, OpenTV Inc. contested this decision by appealing to the Delhi High Court. In its verdict on May 11, the court affirmed the denial of the patent application based on the prevailing legal provisions but expressed substantial reservations about the exclusion of business methods from eligibility for patents.

The Court thoroughly examined the arguments put forth by the appellant, who sought patent protection for the media gifting method. The appellant argued that their method involved more than just a business process. They emphasised its technical aspects, including the use of interactive media components and communication networks. According to the appellant, these technical elements distinguished their method from traditional business processes, making it eligible for patent protection. The Court, however, disagreed with the appellant’s arguments. It conducted a meticulous analysis of the relevant legislative provisions and judicial precedents. It found that while the method indeed involved technical components, its primary purpose remained the facilitation of media gifting — a commercial activity. The Court observed that the technical elements in the method were merely instrumental in achieving this commercial objective.

A crucial element of this case involved the consideration of a parliamentary committee report, specifically the One Hundred and Sixty-First Report titled “*Review of the Intellectual Property Rights Regime in India*”.³ This report underscored the challenges posed by existing patent laws, particularly in the context of emerging technologies such as artificial intelligence and machine learning. The committee recommended a reassessment of Section 3(k) of the Patents Act, emphasising the necessity to facilitate Inventorship, Authorship and Ownership in the realm of artificial intelligence. The report also highlighted that the current legal framework presented obstacles to patenting AI-induced innovations in India.⁴ It proposed the establishment of a distinct category of

³ Lucy Rana and Shilpi Sharan, “Parliamentary Committee suggests Review of IPR Regime in India”, available at: <https://ssrana.in/articles/india-parliamentary-committee-suggests-review-of-ipr-regime-in-india/> (last visited on August 13, 2023).

⁴ “Action Taken Report on Review of IPRs in India tabled before the Rajya Sabha”, available at: <https://ssrana.in/articles/action-taken-report-review-of-ipr-india-rajya-sabha/#> (last visited on August 13, 2023).

rights for AI and AI-related inventions and solutions. For this, the report advocated for a framework aligning mathematical methods or algorithms with tangible technical devices or practical applications, akin to practices in the European Union and the United States. This suggested approach aimed to streamline the protection of mathematical methods and algorithms through the patent system.

In light of the arguments presented by the appellant and the analysis of Section 3(k) of the Patents Act, the Court reached a definitive decision. It concluded that the gifting method, despite its technical components, primarily served a commercial purpose — enabling the sale of media for gift purposes. As such, it qualified as a business method and was, therefore, excluded from patentability under Section 3(k). The Court also acknowledged the growing importance of emerging technologies, including artificial intelligence, and the need to adapt patent laws to accommodate these advancements. It recognised that a significant number of innovations, especially those by SMEs, Startups, and educational institutions, might fall within the realm of business methods or digital technology applications.

This case has broader implications for the field of intellectual property and emerging technologies. It highlights the need to re-evaluate the exclusions in Section 3(k) of the Act to ensure that patent law remains relevant in the face of rapidly evolving technology. The Court's decision reaffirms that, as the law currently stands, business method inventions are not patentable in India. However, it also underscores the urgency of addressing this issue, as digital innovations continue to reshape various industries. The court instructed the Registry to forward a copy of its order to the Secretary of the Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry, for appropriate review and consideration. This indicates that the judiciary recognises the legislative nature of modifying Section 3(k) and encourages the appropriate authorities to review and amend the law accordingly.

3. Critique: Analysing the Court's Approach

The case raises significant questions regarding the role of the judiciary in shaping policy and law, especially in the context of emerging technologies and patents. The deliberative process involved in drafting laws and policies is a complex and multi-stage procedure that requires extensive input from experts, stakeholders, and various government departments. It necessitates thorough analysis, stakeholder consultation, and justifications for changes to the existing legal framework. Laws and policies, whether economic or with trans boundary impacts, must be formulated with care to ensure good governance.

In this case, while the court upheld the Registry's order that business methods are not eligible for patent protection under the current legal framework, it also expressed concerns about this exclusion.⁵ The court noted that many inventions in emerging technologies, including those by small and medium enterprises, Startups, and educational institutes, fall within the realm of business methods or applications of computing and digital technologies.⁶ Ultimately, the court emphasised the need to reconsider the exclusions in Section 3(k) of the Patents Act.

However, the court's approach raises several pertinent issues:⁷

Lack of In-Depth Analysis

The court's judgment lacks a comprehensive analysis of the subject matter, particularly concerning the protection of patents. While it recognises the evolving nature of inventions in the digital space, it does not delve deeply into the comparative analysis of India's framework with that of other jurisdictions or provide statistical evidence to justify the suggested policy and legal changes.

⁵ Pragya Singh and Lakshita Handa, "Beckoning the State: An Analysis of Open TV Inc v. Controller of Patents and Design", available at: <https://spicyip.com/2023/06/beckoning-the-state-an-analysis-of-open-tv-inc-vs-controller-of-patents-and-design.html> (last visited on August 14, 2023).

⁶ "Delhi High Court's Landmark Decision in Opentv Inc. v. The Controller of Patents and Designs and Anr.", available at: <https://www.linkedin.com/pulse/delhi-high-courts-landmark-decision-opentv-inc-v-controller> (last visited on August 18, 2023).

⁷ Apoorva Mandhani, "Intellectual property in the age of AI - why Delhi HC wants govt to relook Patents Act", available at: <https://theprint.in/judiciary/intellectual-property-in-the-age-of-ai-why-delhi-hc-wants-govt-to-relook-patents-act/1576397/> (last visited on August 18, 2023).

Constitutional Boundaries

The court's intervention in policy matters must be mindful of constitutional boundaries. Courts should avoid encroaching upon the jurisdiction of the legislature, which is responsible for enacting and amending laws. While the judiciary can influence law and policy through precedents and common law principles, it should not overstep its role in shaping policy, which forms the essence of the doctrine of Political Thicket.

Narrow Focus

The court's role in policy formulation is inherently limited, as it typically arises from disputes between parties seeking remedies based on their specific case facts. Courts have limited capacity to gather information compared to government bodies responsible for policy-making and the courts also lack the infrastructure to monitor and implement policy changes effectively.

Need for Rigorous Analysis

Substantial changes to law and policy should be based on independent research and rigorous analysis. Perfunctory attempts at policy changes can be counterproductive and should be avoided. A sound policy deliberation process, whether led by the judiciary or legislators, is essential for meaningful changes in the legal system.

While the court's concerns about adapting patent laws to technological innovations are valid, a more robust and collaborative approach involving all stakeholders, including government departments, experts, and industry representatives, is necessary to ensure that policy changes are well-founded and effectively implemented.

4. Alignment with Indian Precedents

Indian courts have faced challenges in interpreting Section 3(k) of the Patents Act, particularly its exclusion of certain categories, such as 'business methods', from patentability. Two noteworthy landmarks, *Yahoo Inc. v. Controller of Patents*⁸ and *Ferid Allani v. Union of India*,⁹ have played a pivotal role in shaping the legal landscape and jurisprudence related to this matter.

⁸ *Yahoo Inc. v. Controller of Patents*, 2009 SCC OnLine IPAB 313.

⁹ *Ferid Allani v. Union of India*, 2014 SCC OnLine Del 1825: (2014) 60 PTC 116.

In *Yahoo Inc.* case, Yahoo Inc. sought a patent for its invention related to a method of placing graphical advertisements in the header bar of a webpage. The Indian Patent Office declined the patent application, invoking Section 3(k) of the Patents Act, which excludes ‘business methods’.¹⁰ The court, however, ruled that the mere involvement of a business method did not automatically render the invention unpatentable. It underscored that a business method could be eligible for a patent if it exhibited technical advancement or a discernible technical effect. The court's decision highlighted the importance of considering the technical aspects and innovations associated with a business method in determining its eligibility for patent protection.

Adding to this, in the case of *Ferid Allani v. Union of India*, Ferid Allani’s patent application for a “method and system for accessing information sources and services of the web” faced rejection from the Indian Patent Office, mainly citing the exclusion under Section 3(k).¹¹ The Delhi High Court, in its judgment on this matter, articulated that a computer-related invention could qualify for a patent if it transcended being a mere computer program and offered a technical solution to a technical problem.

The present *Delhi HC judgment* aligns with these earlier cases by acknowledging that business methods or computer-related inventions should not be categorically excluded from patent protection under Section 3(k). Instead, the courts have consistently emphasised that the key criterion for patent eligibility should be whether the invention demonstrates a technical effect or advancement. This approach encourages innovation in digital technology while safeguarding against the grant of patents for purely business or abstract methods.

5. How Foreign Courts Approach Patenting Business Methods

5.1. United States of America

In the United States, the patent eligibility of software and business methods has been significantly influenced by key case law, legal provisions, and established doctrines. One of the seminal cases that shaped this area of patent law is *Alice Corp. v. CLS Bank*

¹⁰ Prateek Suriseti, “Yahoo’s Patent Application Denied Due to Section 3(k)”, *available at*: <https://spicyip.com/2016/09/yahoo-instant-messaging-patent.html> (last visited on August 23, 2023).

¹¹ Prithviraj Senthil Nathan, “Software Patents: The Debate Continues!”, *available at*: <https://www.mondaq.com/india/patent/898146/software-patents-the-debate-continues> (last visited on August 23, 2023).

International,¹² where the U.S. Supreme Court established a two-step framework to determine patent eligibility.¹³

Step 1 - Abstract Idea Analysis

This step of the patent examination process entails evaluating whether the patent claims pertain to an abstract idea, a natural phenomenon, or a law of nature. This evaluation is influenced by the principles established in the *Mayo v. Prometheus*¹⁴ decision, which underscored that laws of nature, natural phenomena and abstract ideas fall outside the scope of patentability.

Step 2 - Inventive Concept

Upon determining that the claims are directed to an abstract idea, the examination advances to the second step. During this stage, the courts scrutinise whether the claims incorporate supplementary elements that elevate the abstract idea into something beyond the idea itself. The insistence on an ‘inventive concept’ as a requisite for patent eligibility was underscored in the *Alice*¹⁵ decision. This step aims to ascertain whether there is a tangible and inventive application of the abstract idea that qualifies for patent protection.

This principle was upheld in the *Bilski v. Kappos* case,¹⁶ which played a major role in the scrutiny of business method patents. The U.S. Court of Appeals for the Federal Circuit, in the *Bilski* case, clarified that although abstract ideas are ineligible for patents, the patent statute does not outrightly exclude business methods. Expanding on this, the *Diamond v. Diehr*¹⁷ decision holds significance as it confirmed the patent eligibility of software-related inventions, provided they demonstrate a practical application of a mathematical formula or algorithm. These legal precedents find support in provisions outlined in 35 U.S.C. § 101 of U.S. patent law,¹⁸ defining patent-eligible subject matter.

¹² *Alice Corp. v. CLS Bank International*, 573 U.S. 208 (2014).

¹³ Julia Powles, “Alice v. CLS Bank: United States Supreme Court Establishes General Patentability Test”, available at: https://www.wipo.int/wipo_magazine/en/2014/04/article_0004.html (last visited on August 29, 2023).

¹⁴ *Mayo v. Prometheus*, 566 U.S. 66 (2012).

¹⁵ Stuti Sinha, “Case Analysis: *Alice Corp. v. Cls Bank* (134 S. Ct. 2347 (2014))”. *Patent - India*, available at: <https://www.mondaq.com/india/patent/731008/case-analysis-alice-corp-v-cls-bank-134-s-ct-2347-2014> (last visited, August 29, 2023).

¹⁶ *Bilski v. Kappos*, 561 U.S. 593.

¹⁷ *Diamond v. Diehr*, 450 U.S. 175 (1981).

¹⁸ United States Patent and Trademark Office, “2104-Requirements of 35 U.S.C. 101”, available at: <https://www.uspto.gov/web/offices/pac/mpep/s2104.html> (last visited on August 29, 2023).

Although the statute is broadly framed, subsequent case law, including *Alice* and *Mayo*, has fine-tuned its interpretation, particularly in the context of software and business method patents.

The *doctrine of Patentable Subject-matter*¹⁹ in the U.S. underscores that patent eligibility should be grounded in technological innovation and not encompass abstract concepts. This doctrine is reinforced by the *Supreme Utility doctrine*, emphasising that patents must serve a useful and tangible purpose. Indian courts grappling with the patent eligibility of software and business methods can look to the U.S. case laws, legal provisions and doctrines as a guiding framework. Applying this doctrine to the Indian case, where the patentability of a method for providing a “media item as a gift” was questioned, would have led to a structured analysis:

Step One

The court could have evaluated whether the patent claim was directed to a fundamental economic or business concept, such as facilitating a commercial transaction (an abstract idea). If so, it would necessitate proceeding to the second step.

Step Two

Here, the court would have examined whether the patent claim included inventive elements that went beyond the mere business method. Did the method involve specific technological processes or novel digital technologies that transformed the abstract idea of gift-giving into a practical and innovative application?

By implementing this doctrine, Indian courts could have struck a balance between promoting innovation in the digital space and preventing the issuance of patents for abstract business methods.

5.2. European Union

In the European Union (EU), the patent eligibility of software and business methods is primarily governed by the European Patent Convention (EPC)²⁰ and decisions rendered by the European Patent Office (EPO). The EPC outlines that computer-

¹⁹ See, Hazel V. J. Moir, “Patentable Subject Matter: Response to IP Australia’s Consultation on an objects clause and an exclusion from patentability, July 2013”, available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2547364.

²⁰ European Patent Convention, *European Patent Office*, available at: <https://www.epo.org/en/legal/epc> (last visited on October 20,2023).

implemented inventions may be granted patents if they exhibit a ‘technical character’. This requirement mandates that the invention demonstrates a specific and discernible technical solution to a technical issue. Consequently, the EU patent regime focuses on the presence of a ‘technical effect’ or contribution as the decisive factor in determining eligibility.²¹

Legal provisions within the EPC, notably Article 52, Article 56 and Article 57, set the foundation for assessing patent applications related to software and business methods. Article 52 delineates the scope of patentable subject-matter, emphasising the exclusion of abstract ideas and mathematical methods from patent eligibility. Article 56 puts forth the requirement of inventiveness or non-obviousness, while Article 57 stresses on that the patents shall be granted for inventions that provide a technical solution to a technical problem. Crucially, this legal framework has led to several noteworthy case laws shaping the EU’s approach to patent eligibility for software and business methods.

The ‘technical effect’ doctrine essentially asserts that for a software or business method invention to be eligible for patent protection, it must demonstrate a specific and concrete technical effect or contribution.²² In other words, the invention must go beyond being purely abstract or conceptual and should have a discernible impact on the field of technology. This doctrine was first articulated in the famous case of *Vicom (Computer Programs) (1987)*²³ which laid down the principle that an inventive step could be present in software inventions if they led to a ‘further technical effect’. Subsequently, the *Aerotel/Macrossan (2006) case*²⁴ introduced a structured approach, highlighting the need for ‘technical contribution’ as a crucial criterion. Subsequent rulings, such as the *Pension Benefits Systems Partnership*²⁵ case in 2010, further solidified the ‘technical effect’ doctrine. Hence, it was highlighted that the technical effect must extend beyond the mere automation of known business methods and must address a specific technical problem.

²¹ Jerome H. Reichman and Rochelle Cooper Dreyfuss, “Harmonization Without Consensus: Reflections on Drafting a Substantive Patent Law Treaty” 57(1) *Duke Law Journal* 109 (2007).

²² João Pereira Cabral, “The Evolution of Software Patents in Europe”, *Inventa*, available at: <https://inventa.com/en/news/article/241/the-evolution-of-software-patents-in-europe> (last visited on October 20, 2023).

²³ *Vicom Systems Inc. v. J.A. Kemp & Co.*, T 0208/84 dated 15-07-1986.

²⁴ *Aerotel Ltd v. Telco Holdings Ltd and Macrossan’s Patent Application*, [2006] EWCA Civ 1371.

²⁵ *Controlling pension benefits system/PBS PARTNERSHIP*, T0931/95, 2000, available at: <https://www.epo.org/en/boards-of-appeal/decisions/t950931ex1> (last visited on October 20, 2023).

In the present case, the application of the ‘technical effect’ doctrine, similar to the one employed in the European Union, could have offered a structured approach to assess patent eligibility. The case involved OpenTV Inc.’s patent application for a method to provide a “media item as a gift”. Under Section 3(k) of the Patents Act, 1970, business methods and computer programs per se are not considered inventions eligible for patents unless they exhibit a technical effect. Had the Delhi High Court applied the ‘technical effect’ doctrine, it would have scrutinised whether OpenTV’s invention demonstrated a clear and tangible technical effect beyond being a mere business method. The doctrine, supported by relevant legal provisions and EU case law, requires that an invention must contribute significantly to the technical field or provide an advancement in technology. This would entail assessing whether OpenTV’s system and method involved a novel and non-obvious technical solution that improved the functioning of computing or digital technologies.

By applying this doctrine, the court could have conducted a comprehensive analysis to determine whether the invention, although related to a business method, exhibited a genuine technical character. If it did, it could have been considered eligible for patent protection, aligning with the evolving nature of technology. Furthermore, applying the ‘technical effect’ doctrine would ensure that patent grants do not stifle innovation or create monopolies over conventional business methods, thereby striking a balance between incentivising technological advancements and preserving fair competition in the digital space.

6. TRIPS and Patent Eligibility

6.1. Article 27(1) of TRIPS²⁶

This provision requires member countries, including India, to make patents available for inventions in all the fields of technology, provided that they meet certain criteria. In the case of OpenTV, the business method related to giving media as a gift and software components involved could be considered inventions related to technology.

²⁶ Uruguay Round Agreement: TRIPS, s. 5, art. 27 “Patentable Subject Matter”, available at: https://www.wto.org/english/docs_e/legal_e/27-trips_04c_e.html (last visited on October 20, 2023).

6.2. Order Public and Morality Exception [Article 27(2)]²⁷

Under this, the member countries have the flexibility to exclude certain inventions from patentability to safeguard order public (public order) or morality. In the OpenTV case, if the Indian Government deemed that granting business method patents for particular transaction types could jeopardise public order or morality, they could introduce specific exclusions in accordance with the provisions outlined in TRIPS and also Section 3(b) of Indian Patent Act, 1970.²⁸

While TRIPS does not provide a direct solution to the OpenTV case, it establishes international norms for patent protection, encouraging member countries to grant patents for inventions in all fields of technology. India, as a member of TRIPS, has some flexibility in determining what is eligible for patents, but TRIPS encourages alignment with international standards.²⁹ Therefore, TRIPS could influence India to consider revising its patent law to better accommodate business method patents and software-related inventions, promoting innovation and ensuring compliance with international norms.³⁰

Business Method Patents

TRIPS, through Article 27(1), encourages member countries to grant patents for inventions in all fields of technology. If India decides to follow this TRIPS provision, it might revise its patent law to allow for business method patents under certain conditions. This would align Indian law more closely with international standards, which could be beneficial for innovation in the digital space.³¹

Software-Related Inventions

TRIPS does not explicitly address software patents but requires patents to be available for inventions in all fields of technology. To comply with TRIPS, India might consider adopting a more technology-neutral stance on software-related inventions,

²⁷ *Ibid.*

²⁸ *Supra* note at s. 3(b).

²⁹ Eugenio Hoss, *Delays in Patent Examination and their Implications under the TRIPS Agreement* (2010/11) (Master Thesis, Munich Intellectual Property Law Center).

³⁰ *Ibid.*

³¹ Ritushka Negi, "Business Method and Software Patent Trends in India", *Intellectual Asset Management* 102-104 (2009).

focusing on whether they meet the patentability criteria such as novelty, inventive step and industrial applicability.³²

TRIPS sets international norms for Intellectual Property protection. The fact that TRIPS encourages patents in all fields of technology can influence Indian courts' interpretations of patent law. In the OpenTV case, if TRIPS compliance were explicitly considered, the court might have been more inclined to evaluate the business method and software components under the framework provided by TRIPS.

7. Conclusion

The OpenTV case brings to the table the intricate relationship between domestic Intellectual Property law, international trade agreements like TRIPS and technological advancement. The Delhi High Court's decision to re-evaluate the grant of patents for business methods in light of evolving technology reflects a forward-looking approach that aligns with TRIPS' encouragement of patents in all technological fields. However, this re-evaluation must be conducted with utmost care, considering both the potential benefits of innovation and the risks of monopolisation. The case serves as a reminder of the evolving nature of Intellectual Property law and the imperative of balancing international compliance with domestic interests. India, as a member of TRIPS, must navigate this path carefully to ensure that patent law remains relevant and conducive to innovation in the years to come.

³² *Ibid.*