

# **Globalization is a Catalyst for Change in Intellectual Property Systems: Case Studies in India and China**

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## **1. Abstract**

The recent forces of increasing globalization have forced India and China to reform their intellectual property stance to become competitive in the new global economy. Prior to the 1970s, both India and China had intellectual property systems that were flawed and relatively powerless to provide any real protections to individual inventors. This paper argues that the recent overhauling of the intellectual property system in both India and China are a direct result of globalization. The surge in globalization following the conclusion of World War II provided the competitive environment necessary to initiate change within the systems governing intellectual property in both countries.

## **2. Background**

Throughout history, each generation has experienced unique political, economic, and social forces. Interplay between these dynamic elements form the centerpiece of establishing any nation state. Striving to meet the basic needs and comforts of their citizens, these states for the most part remained free-standing. However, this century has been marked by unprecedented technological changes that enable a worldwide connectedness. While this idea referred to courier mail or travel in the past, nowadays the worldwide web, mobile communications, and mass media link individuals. The

economic implications of such global associations are serious. Economic progress has often been tied to technological progress. Ensuring such progress necessitates an effective patent system, which essentially is progress appearing in law. Developing nations have confronted the predicament of economic progress with little success. In the case of India and China, decades of feeble patent policy and intellectual property laws blocked such progress. Only recently due to the arm of globalization have these nations seriously pursued a strong patent system, planting the seeds for future economic success.

### **3.1 Historical Weaknesses in Indian Patent System**

Just as the origins of the American patent system are fundamentally tied to Great Britain, India's colonial counterpart played a significant role to establish and dominate the Indian patent system. Dating back to 1856, patent policy began when the Act VI enacted a protection of inventions based on the British Patent Law of 1852, granting exclusive rights to inventors for 14 years. Under imperialism, industrial development in India followed British interests with limited research, development, or innovation. Policymakers fully focused on patents only after independence, and even still, little progress was made according to two expert committees. The Patent Enquiry Committee (1948-1950) declared "the Indian patent system has failed in its main purpose...to stimulate inventions among Indians and to encourage exploiting these inventions for industrial purposes" (Ramanna). The Ayyangar Committee (1957-1959) reported that foreigners held 80-90% of the patents in India and were exploiting the system for monopolistic control of the market.

In response, the Patent Act of 1970 reformed the system, restricting patentability to process but not product patents in the food, pharmaceutical, and chemical industries. Many global parties disputed this measure since many firms could simply copy technology developed abroad. Since then, India has undergone two major waves of amendments in the Patent Acts of 1999 and 2002. Despite these changes, India remains unable to break into the ranks of the world's wealthiest nations.

Most obviously, this economic state is largely due to the poor physical infrastructure of the Indian patent system. Until very recently, only a disconnected network of offices was established across the nation with poor information access. Computerized records and a website with online search functions are finally being implemented. The division could not even establish its own identity until the newly developed logo for intellectual property offices. Consequently, it is no surprise that the system faces a backlog of approximately 40,000 unexamined applications. Even the legal ramifications of the patent system are weak with sluggish enforcement of patent. Some cases have taken 10 years for resolution and payment of damages. Legal personnel also do not carry a full proficiency with all the recent amendments.

India's current status in the global economy may also be attributed to flawed patent policy. While some nations such as Korea and Japan have transitioned from post-war phases, India's post-independent era was marked by well-intentioned but impractical goals. The Japanese model emphasized incremental innovation through certain patent provisions such as utility models (require less inventiveness, scope), single-claim requirements, and pre-grant disclosure of applications; hence, the Japanese strategy allowed for "catching up" by using patent laws to diffuse technology through all sectors

of industry. On the other hand, India's 1970 Patent Policy overlooked "utility models" to focus on preventing foreign monopolies and high priced medicines and foods. The act severely restricted the scope and term of patents. Several areas were excluded from patent protection such as the restriction to process but not product patents in food, medicine, and chemical companies. Indhira Gandhi expressed these fears in 1982, "The idea of a better-ordered world is once in which medical discoveries will be free of patents and there will be no profiteering from life and death" (Ramanna). Specifically, the pharmaceutical industry has suffered the policies induced by such fears. Short-term prices may rise, but "a strong patent system will ensure competition in the form of newer and better drugs to more people at reasonable prices" (Adelmann). Without adequate protection for innovation, there is no incentive to research and produce new products for disease.

### **3.2 Historical Weaknesses in Chinese Patent System**

The government in a developing country may be set up against the idea of intellectual property at the outset. If a government's conception of what is good for its citizens does not include private intellectual property protection, it clearly will have a resultant weak patent system. A primary example of such government is the communist Chinese government before and during Chairman Mao's leadership. The communist rhetoric exalted the idea of collectivism and the value of the publicly owned property. In this government conception, granting individual private property was not only frowned upon, it was taken by the state for public usage. Aptly put, "communism discourages individual property" (D'Antico). It can only be expected that intellectual property would not be protected, but rather be made accessible to the public for use. This naturally lent

itself to a weak intellectual property system with little to no enforcement of individual rights and claims to novel ideas.

Cultural dynamics set against securing ownership of private property in developing countries also will lead to a weaker patent system. China is another example of such a dynamic playing itself out in a developing country. The Chinese cultural opinion on being entitled to your own ideas at the exclusion of others has been relatively low. Imitation and copying is viewed as a form of compliment rather than disrespect in this culture. In this the cultural standard is correctly assessed by experts in that the “Chinese view copying as flattery” (D’Antico). Therefore, it would be very difficult to implement a hard-nosed patent system that was rigorously against infringement if the culture of the developing country itself was set toward the idea of copying rather than against it. Many of these cultural ideas had been formed by Confucius, whose influential philosophies informed a great deal of the paradigm to which the Chinese ascribed. In this philosophy, a key component to well being was a valuing of personal moral development over personal economic gain. Because of this way of thinking, the Chinese were laissez-faire in their efforts to provide a strong structure by which individuals could economically benefit from their own brain-children.

#### **4.1 The Invisible Hand of Globalization: India**

As the millennium turns, the world is undergoing a tremendous globalization enabled by technology. Now, more than ever, disparate locations are connected by websites, mobile communications networks, and other mediums. Economically, no country can survive in isolation from the globalizing world, especially developing

nations. Competition between countries affects all, and intellectual property protection and patents play a critical role in motivating innovation and competition.

Although the Indian patent system can be optimized further, it has taken serious steps to cooperate with the global economy. As a signatory to establishing the World Trade Organization (WTO), India has committed to international intellectual property rights legislation, specifically the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPs). This treaty requires nations to compose their laws to comply with international obligations. Many of the controversial policies of the 1970 Patents Act are being amended; the first act in 1999 created an IP Appellate Board as the mediator for appeals of the decisions of the Controller of Patents. In the second act in 2002, the definition of an “invention” was broadened to include a product or process with an “inventive step” and “capable of industrial application.” The term of a patent was extended from 14 to 20 years, and patent claims are to be published 18 months after filing. Even the pharmaceutical industry is set to enter the intellectual property regime in 2005. Thus, India continues to promote an international alliance for standardized patent practices.

Even more importantly, globalization has engendered an internal domestic policy change within India as seen in the Patent Amendment Acts of 1999 and 2002. In the past decade alone, liberalization of economic policies has created a more westernized notion of intellectual property rights in political and industrial parties. Surprisingly, the dominant BJP party, once a vehement opponent of patent reform, even promoted the idea. In the corporate arena, India has witnessed a rise of the modern, professional business emphasizing technology and economic advancement. A new movement for the

protection of knowledge has emerged. The Indian Institutes of Technology have spearheaded the effort. The Council of Scientific and Industrial Research (CSIR), a chain of laboratories, has created an aura bolstering the value of a strong patent system. It stunningly defeated a United States patent on indigenous knowledge of turmeric. Such acts have inspired others to harness intellectual property for economic advancement. The group has also played a large role in lobbying for the recent Patent Amendment Acts. The Confederation of Indian Industry (CII) cited weak patent structure for the technological backwardness, calling for compliance with the TRIPs guidelines. In line with MIT Professor Robert Rines, the International Institute of Intellectual Property was established in India, announcing the slogan, "Patent or Perish". Martin Adelman claims that "This is vastly different from what it used to be in pre-reform days...there is a greater level of confidence among Indians" (Adelmann).

#### **4.2 The Invisible Hand of Globalization: China**

An increasingly global economy would invoke the leadership of developing countries to rethink previously outmoded ways of thinking to be competitive in the global market. The Chinese socialist government is a primary example of such a shift in paradigms in an effort to be a leading global power. Prior to 1976, the leadership in China was the primary culprit in stifling any thinking in the realm of increased exposure to foreign markets and economic influences. In more recent years, a strong push for reform after the era of Mao Zedong post 1978 by the Chinese government marked a victory for the proponents of a more outward facing China. Global forces such as foreign capitalistic investment, and an increasingly global economy led Chinese policy makers and political leaders to aggressively seek solutions for their economic needs outside of

traditional decision making patterns. Motivations for such a push from the Chinese political leadership derived from a large desire to become not only a contender in the global economy, but a leader as well.

Developing countries such as China are strongly motivated by a desire to become the next “modern” nation. Consequently, such modernization forces have influenced policy makers to idealize the picture of the Western standard of living. Especially rampant in the China is the idolization of Western lifestyle, in the image of financial freedom supposedly allowing for near limitless purchasing power. The picture that developing countries such as China hold up as the Western ideal have lead to a trend of economic reform is strikingly progressive. In discussing China’s reform in policy, one expert claims “The open-door policy is an essential element of the economic reform process” (Chow). This new open door policy that China has taken in its dealings with other nations, especially in economic matters have given its people the opportunity to see the availability of the individualized mode of thinking prevalent in Western countries. Perspectives on modernized countries lead China to shift toward the capitalistic form of economics that marks most Western nations today. Capitalism was a new animal in the development of the growing Chinese economy through the 1980s until now. The change in economic systems however contested and criticized, provided the groundwork upon which new reforms in policy could be made.

### **5.1 Indian Intellectual Property Reforms**

Within the past decade, the Indian economy has initiated the long road to becoming one of the world’s elite players in the global market. In large part, the



globalization movement has engendered the motive and desire for the country to begin patent reforms in order to achieve this goal. The Indian government has made substantial progress in upgrading the physical plant and integrity of the patent system. New offices in each of the four major cities are planned to be operational by 2004 under a unified business complex. New examiners have been recruited and trained, and transactions are now computerized. Corporate plans and work manuals are being created to ensure standardized procedure that is simple and responsive to needs of users.

Bolstered by industrial and political support, the 1999 and 2002 Patent Amendment Acts are only the beginning of a massive program to revamp the patent system. These changes in outlook and policy have contributed to a general rise in patent applications (Figure 1).

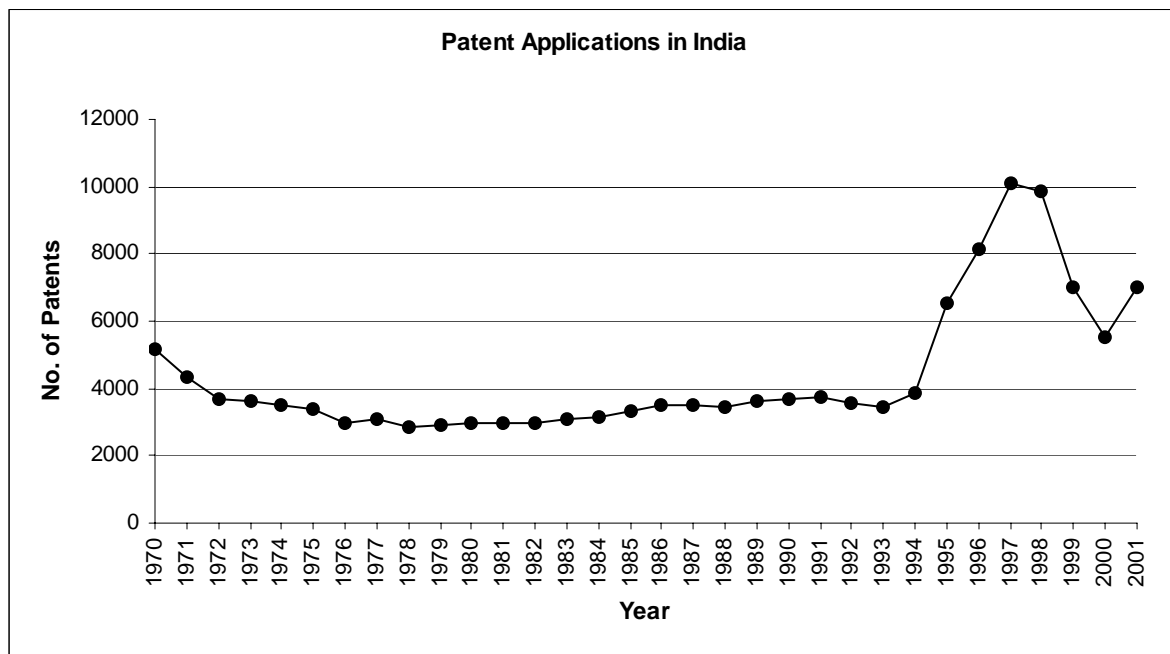


Figure 1: Patent Applications in India, 1970-2001.

Source: Prabuddha Ganguli, Gearing Up for Patents the Indian Scenario(1998),p.21;and for the years 98-2001 from TIFAC (1998 updated 2002), Database on Patent Applications filed in India.

Until the mid-1990s, patent applications remained generally static; however, then follows a sudden surge in applications, reflecting the rising tide of globalization and the patent reforms that it produced. In addition to the rise in patents, Indians are increasingly looking to patent their inventions abroad (Figure 2). Again, the curve begins to rapidly increase in the mid-1990s.

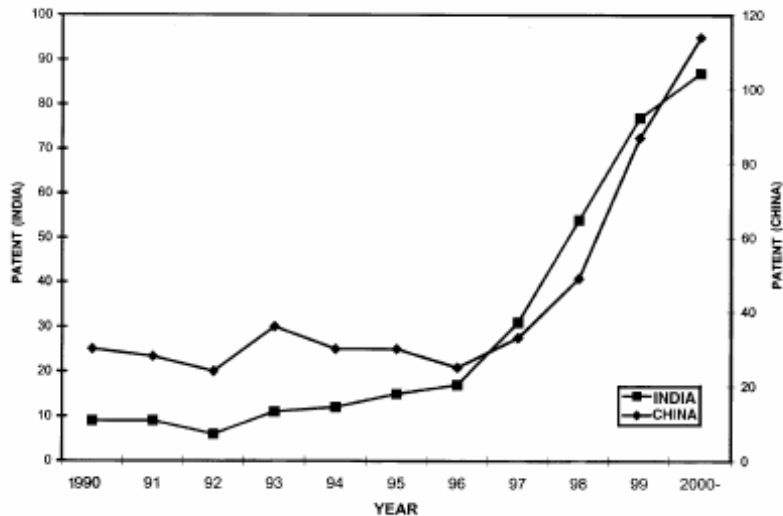


Figure 2: India and China Patents in the US

Bhattacharya, Sujit, and Pradosh Nath. Using patent statistics as a measure of “technological assertiveness”: A China India Comparison. *Current Science*. Vol. 83, NO. 1, 10 July 2002.

Another aspect of the impact of patent reforms is the expanding collaboration between firms. Organizations such as CSIR and the IITs are crucial in this regard, but the practice is still relatively young and growing.

## 5.2 Chinese Intellectual Property Reforms

Although the idea had been proposed by previous forms of Chinese government, not until the 1970s did China seriously begin to recognize the need for legal and government protection of private intellectual property. In response to the tide of change

concurrent with the increasingly global economy, the government engaged in numerous law and statute creating exercises that provided legal terms for prosecuting against infringements on intellectual properties. After observing that technical advancements were an integral part of the positive forces behind the development of a healthy and prosperous nation. Most clearly, the primary motivation for such a move by the government was to increase foreign investment in the Chinese economy.

Not until the past two decades did a radical change in the paradigm of thinking take place to promote the enforcement of intellectual property laws and statutes. The end goal of the Chinese political leadership was now to promote economic development and positive social change. It was realized that this goal would be significantly helped by the promotion of technology and science, in that in these fields lay the “premier productive forces” and that they were “critical to economic and social development” (Oake). In this, China warmed to new foreign trade and technology in its dealings, whereas before it had not considered the possibility. Correspondingly, large amounts of reform steps have been taken to improve the current system of intellectual property protection. China has joined the Paris Convention, the Madrid Agreement, the Universal Copyright Convention, and the Berne Convention intellectual property treaty agreements as a move to be supportive to individual inventors and innovators. It has been claimed that “In the past ten years, the Chinese government has enacted an impressive number of intellectual property laws covering trademarks, patents, copyrights, computer software, unfair competition, and technology contracts” (Oake). Also noteworthy is China’s entrance into the WIPO, or World Intellectual Property Organization. During the decades of the 1980s and 1990s, legal reform in the passage of the Chinese Patent Law of 1984, and subsequent

amendments made in 1992 have served to protect the rights of intellectual property owners. These reforms mark the significant positive shift in the Chinese government's posture toward intellectual property rights.

Foreign pressure both economically and politically have motivated the new changes in the Chinese attitude toward intellectual property and resultant economic reform. The United States in particular in its dealing with China has been outspoken and active in pursuing political action against the Chinese government. The US threatened economic sanctions, opposition to China's entrance into the WTO, and revoking other trade related benefits in an effort to protect the infringement of intellectual property taking place overseas within China. Appropriately, China responded with many of the aforementioned treaty agreements and reforms to appease the US, and other claims to intellectual property infringement. The Chinese intellectual property system has benefited from such external pressures and the system in place now significantly stronger than its historical precursors. American and Chinese intellectual property systems can eventually result in a "harmonious relationship between the two countries, to foster better mutual understanding between each other, and to promote a self-sustainable intellectual property regime in China" (Yu). Future forces in the global market economy can only lead to further improvements in the Chinese intellectual property system.

## **6. Conclusion**

We have shown that the forces of globalization have caused India and China to reform their intellectual property positions in letter and in action. Both countries are now leading contenders in the fight to be the fastest developing country. The weak intellectual property systems in both India and China were revamped to provide real protections to individual inventors. Globalization after the conclusion of World War II wrought the necessary occasion to bring about change within the patenting systems of both countries. India and China have risen to the occasion, and are poised to prevail in the future global economy.

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