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PATENT STATUS ON INDIAN PERSPECTIVE

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ABSTRACT

IPRs also allow the partners to more clearly manage the output of collaboration. The patent choice is related with extensive collaborative behaviour maintained by firm. The patent selection provides an opportunity for different collaboration like sales, marketing, technologies etc. For achieving better result in collaboration the firm activate their R&D partnership with third parties. It provides wide scope for patent propensity. The boundaries are defined with help of patents, the boundaries of partnership right examined through patents with respect to background and foreground technologies. The partners bring their knowledge and technologies for the success of collaboration. The collaborative behaviour is attained by the firm through IPR policy. Now India tries to improve their patent status to compete with world economies.

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INTRODUCTION

Patent is a government authority or licence conferring a right or title for a set period, especially the sole right to exclude other form making, using or selling an invention. It is a set of exclusive right granted by a sovereign state to an inventor or assignee for a limited period of time in exchange for detailed public disclosure of an invention. An invention is a solution to specific technological problem and is a product or a process. A patent is exclusive right granted by country to the owner of invention to make, to use, manufacture and market the invention, provided the invention satisfies certain conditions stipulated in law. Patent is a government authority or licence conferring a right or title for a set period, especially the sole right to exclude other form making, using or selling an invention. It is a set of exclusive right granted by a sovereign state to an inventor or assignee for a limited period of time in exchange for detailed public disclosure of an invention. An invention is a solution to specific technological problem and is a product or a process. Patents are a form of intellectual property. The word patent originates from the Latin 'patere' which means "to lie open" (to make available for public inspection). it is a shorter version of the term letters patent, which was a royal decree granting exclusive right to a person, predating the modern patent system.

Patent status of India

India has joined WIPO in 1975 and now it is second largest populated country in the world. The GDP status of the country consist of approximately 7512.5 billion US\$ (As per the status of WIPO).

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Here, I explain the Indian patent status with help of IP filing, Patent application, Patent application in different field of technology, Patent grant, Patent in force and Utility model applications.

IP Filings (Resident + Abroad, Including Regional) and Economy

According to Economic theory the technology is radically new for the market or the company. It impact on the decision to opt or not for patent protection. The theoretical paper by Anton and Yao suggest that country should prefer secrecy in radical innovations. It will help to reduce the loss in patent innovation. It given that the disclosure requirement of patent could lead, in any case, to a partial loss of the rents generated by the invention. The table 1, at the end of this paper, provide the details about IP status of India for the last 15 years.

Table 1 IP (Intellectual Property) Status of India

Year	Patent	Trademark	Industrial Design	GDP (Constant 2011 US\$)
2001-02	3,456	81,494	2,839	2784.32
2002-03	4,164	90,751	2,618	2890.24
2003-04	5,370	79,488	3,034	3117.42
2004-05	6,728	67,504	3,465	3364.41
2005-06	8,028	77,908	3,867	3676.79
2006-07	9,434	93,736	4,078	4017.41
2007-08	10,529	1,25,078	4,759	4363.23
2008-09	11,546	1,28,122	4,949	4533.01
2009-10	11,939	1,43,626	4,610	4917.39
2010-11	14,869	1,81,621	5,030	5421.92
2011-12	15,896	1,86,783	6,472	5781.84
2012-13	18,202	1,88,154	5,900	6106.7
2013-14	20,908	1,96,262	6,101	6512.11
2014-15	22,445	2,18,723	7,404	6983.82
2015-16	23,844	2,69,705	8,244	7512.5

Source: WIPO (World Intellectual Property Organization)

From the table it is clear that in 2001, India had 3456 patent and GDP was 2784.32 billion US\$. After 15 years the country showed a marvellous growth in patency distribution and it's leaded the country to attain the GDP of 7512.50 billion US\$. Now the country tries to improve their Intellectual Property status. There is enormous leap in the trade mark and industry design too. The trade mark was 81494 and reached at 269705 and industrial design was 2839 and reached at 8244 in 2015. The number of patent of country in 2006 was 9434 with GDP 4017.41 billion US\$. Later it showing increasing trend in patent and GDP status.

Patent Application

Every application for a patent shall be for one invention only and shall be made in the prescribed form and filled in the patent office. Where the application is made by virtue of an assignment of the right to apply for patent for the invention, there shall be furnished with the application, or within such period as may be prescribed after the filing of the application, proof of the right to make the application. Every application under this section shall state that the applicant is in possession of the invention and shall name the owner claiming to be the true and first inventor; and where the person so claiming is not the applicant or one of the applicant, the application shall contain a declaration that applicant believes the person so named to be the true and first inventor. Nowadays countries try to improve their patent application in residential, non residential and abroad status. The economics and management of innovation has analyzed ways to measure patent value and determine value drivers. The innovation is major element that force to patent. The innovation for the purpose of development of society will give positive evidence to patent. The patent value measured in-terms of research and innovation, reward for expense of development invention and invest capital in new line which may not be profitable. At the end of this paper, Table 2 shows the patent applications status of various categories likes resident, non resident and abroad. In patent application, 2379 resident applied on 2001, 8213 non residents and 1077 abroad also were there.

Table 2 Patent Application

(In Numbers)

Year	Resident	Rank	Non- Resident	Rank	Abroad	Rank
2001-02	2,379	20	8,213	14	1,077	22
2002-03	2,693	18	8,772	14	1,471	21
2003-04	3,425	17	9,188	13	1,945	20
2004-05	4,014	15	13,452	8	2,714	20
2005-06	4,721	14	19,661	8	3,307	20
2006-07	5,686	13	23,242	7	3,748	20
2007-08	6,296	14	28,922	7	4,233	20
2008-09	6,425	13	30,387	7	5,121	20
2009-10	7,262	14	27,025	7	4,677	19
2010-11	8,853	11	30,909	6	6,016	19
2011-12	8,841	11	33,450	6	7,055	19
2012-13	9,553	11	34,402	6	8,649	17
2013-14	10,669	11	32,362	6	10,239	14
2014-15	12,040	11	30,814	7	10,405	15
2015-16	12,579	9	33,079	6	11,265	14

Source: WIPO (World Intellectual Property Organization)

In 2005, the resident patent application was 4721 and India secured 14th rank. Similarly 19661 non resident applications secured with 8th rank and 3307 abroad application with 20th rank. But in 2010, the resident application was improved and reached at 8853 application with 11th rank. The non resident

application was increased and reached at 30909 with 6th rank and abroad status application was reached at 6016 with 19th rank. Finally in 2015, the all status of resident, non resident and abroad applications is improved. India has improved their ranking in resident application with 9th rank; non resident application reached 6th rank and abroad application at 14th rank in the world.

Patent Grant

The patent shall, on request made by the applicant in the prescribed form, be granted to the applicant or in the case of a joint application, to the applicant jointly, and the controller shall cause the patent to be sealed with the seal of the patent office and the date on which the patent is sealed hall be entered in the register. The table 3, at the end of this paper shows rank scored by India for the last 15 years in patent grant. In 2001 India distributed 529 patent granted to residents which were reached to 822 in 2015.

Table 3 Status of Patent grant

(In Numbers)

Year	Resident	Rank	Non-Resident	Rank	Abroad	Rank
2001-02	529	25	1,020	28	288	27
2002-03	619	23	921	28	425	23
2003-04	615	27	911	28	621	21
2004-05	851	21	1,466	17	766	21
2005-06	1,396	19	2,924	16	888	21
2006-07	1,907	18	5,632	11	919	22
2007-08	3,173	13	12,088	7	1,119	22
2008-09	2,541	14	13,520	7	1,394	21
2009-10	1,725	18	4,443	12	1,460	22
2010-11	1,208	23	5,930	10	1,926	19
2011-12	776	26	4,392	13	2,104	19
2012-13	722	24	3,606	15	2,861	19
2013-14	594	27	2,783	17	3,806	18
2014-15	720	26	5,433	11	4,342	18
2015-16	822	25	5,200	12	4,980	15

Source: WIPO (World Intellectual Property Organization)

The number patent granted to non residents reached to 5200 from 1020. The number of patent granted from abroad in 2015 reached to 4980 from 288. From the above status clear that India has improved their position especially in abroad category. In 2001, India has rank 27th position in abroad status. Later it was improved to 21st rank in 2008 and 18th rank in 2014. Now in 2015, the rank shows the improvement in position of abroad status and reached to 15th position. Similarly non resident status of patent grant shows tremendous improvement. The non resident rank on patent grant was 28th in 2001. Later it was improved to 7th position in 2007 and narrow down to 17th position in 2013. The current status shows again improvement in position and reached into 12th rank

Patent Application by Top Fields of Technology (2001-2015)

The innovation can be classified into two i.e. product innovation and process innovation. The product innovations can be observed in the market place by competitors. So the competitors analyzed this innovation through reverse engineering activities. The process is always kept in secret and could not easily identify with different activities. As per the company's point of view, if the company try to grow in market, must be focused on the secrecy in product innovations. For the same reasons, the infringement of patent innovations by competitors can be more easily identified and contrasted in case of product innovations. Nowadays firms try

to restrict their competitors in terms of innovation. The protections of product innovation in case of patent assure the sustainable development to the firm. The sustainable development tends to enhance the growth of country. In India patent application for various technologies shows increasing trend. From the table 4, at the end of this paper, it is clear that India has 16.34% of share in computer technology, 16.30% of share in pharmaceuticals, 14.67% of share in organic fine chemistry, 7.33% of share in semiconductors, 4.10% share in both biotechnology and digital communication, 3.22% of share in basic material chemistry, 2.56% of share in IT method for management, 2.34% of share in measurement, 2.26% of share medical technology and remaining 26.78% of shares in other sector.

Table 4 Patent Application by Top Fields of Technology

(In Percentage)

Field of Technology	Share
Computer technology	16.34
Pharmaceuticals	16.3
Organic fine chemistry	14.67
Semiconductors	7.33
Biotechnology	4.1
Digital communication	4.1
Basic materials chemistry	3.22
IT methods for management	2.56
Measurement	2.34
Medical technology	2.26
Others	26.78

Source: WIPO (World Intellectual Property Organization)

Intellectual Property Rights have been acknowledged and protected in the people of India since 1975. India has added to the major international conventions on protection of patent law has also been established by government legislation, administrative regulation and decree in the area patent. This has led to the creation of comprehensive legal framework to protect both local and foreign patents.

Patent in Force

From Table 5, at the end of this paper shows rank scored by Indian patent office for last ten years in patent in force. India has not up to the mark of world in patent in force.

Table 5 Patent in Force

(In Numbers)

Year	Patents in Force	Rank
2004-05	6,857	29
2005-06	16,419	23
2006-07	17,066	23
2007-08	29,688	22
2008-09	30,822	23
2009-10	37,334	22
2010-11	47,224	19
2011-12	41,361	20
2012-13	42,991	19
2013-14	45,103	22
2014-15	49,272	22
2015-16	47,113	21

Source: WIPO (World Intellectual Property Organization)

The beginning stage India had only 6857 patent in force and reached at 29th position. But after that India has tried to improve their position and reached into 19th rank on 2012 with 42991 patents in force. Now India has 47113 patents in force with 21st rank in the world. The trend of patent in force reached at 41361 in 2011 and has improved their position with 49272 patents in force on 2014.

Patent Utility model

India has not maintained their position in resident and non resident status of utility model application. Table 6, at the end of this paper shows the patent utility model status of in India for the last 15 years.

Table 6 Patent Utility model

(In Numbers)

	Year	Resident	Rank	Non-Resident	Rank	Abroad	Rank
2	2001-02	-	-	-	-	4	35
2	2002-03	-	-	-	-	4	45
2	2003-04	-	-	-	-	9	40
2	2004-05	-	-	-	-	1	55
2	2005-06	-	-	-	-	2	48
2	2006-07	-	-	-	-	3	42
2	2007-08	-	-	-	-	8	40
2	2008-09	-	-	-	-	19	34
2	2009-10	-	-	-	-	25	32
2	2010-11	-	-	-	-	36	27
2	2011-12	-	-	-	-	32	31
2	2012-13	-	-	-	-	15	39
2	2013-14	-	-	-	-	50	29
2	2014-15	-	-	-	-	43	31
2	2015-16	-	-	-	-	34	32

Source: WIPO (World Intellectual Property Organization)

The patent office in India not at all gives the support to resident utility model application and non resident utility model application. It means the benefit only available in abroad status. In 2001, only four utility model application available to India and secured 35thrank in the world. Later abroad utility model application reached at 36 and secured 27th position in 2010. Now the current position of India in utility model applications is 29th rank with 50 model application.

CONCLUSION

Indian patent office is not competing with world greatest patent office like China, USA and Japan. The china is number one developed country and their patent status has magnificently supports the economic growth. Similarly India must try to strengthen its patent status and it will help to improve their IP index in the global market. The Organization for Economic Co-operation and Development (OECD) found that 1% change in the strength in a country's IP rights environment is associated with a 2.8% increase in FDI inflows. The patent citation received is always positively correlated with economic value. The citation has received from various area have been influence the economic value of patent.

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