

Role of youth in future of IPR: The Value of novel intellectual creation

(Theme: IP and Youth: Innovating for a better future)

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Youth & innovation

According to 2011 census, every fifth person in India was an adolescent (10-19 years) and every third was a young person (10-24 years). Population of Adolescents (253.2 million) and Youth (231.9 million) constitutes youth i.e. the people whose age is between 10-24 years. It means that a big population of our country is youth and this is our bigger strength. During his 'Mann Ki Baat' programme broadcasted on All India Radio Vividhbharti channel on February 23, Prime Minister Modi said that Youngsters showing such interest in science, innovation is an encouraging sign. Innovation is implementation of ideas practically that bring in new goods or services or improvement in present goods or services. Innovation frequently takes place through the progress of more-worthwhile products, processes, services, technologies, art works or business models that innovators bring it make markets, governments and society to make it accessible. In today's scenario, we are regularly hearing about new technologies such as artificial intelligence, robots, self-driving cars and other autonomous technologies, these technologies brought a drastic change in human life which made life comfortable and fast. This is all because of innovations.

Property and its types

Properties can be categorized into tangible and non-tangible property. Tangible property have physical existence e.g. car, land, furniture, books, jewellery etc. whereas non-tangible property doesn't have physical existence e.g. ideas. Ideas are much more valuable and costlier than physical things. To secure the tangible property, lot of rights are provided by the

constitution of India but how to protect the intangible property? Non-tangible property can be secured by Intellectual property rights (IPR). Here the question rises, what is IPR?

IP & IPR

IPR is the exclusive right granted to inventor/creator to use his/her invention/creation for a set time period, no other can use it without the inventor's consent. Intellectual property (IP) includes novel intellect created works such as inventions e.g. new drug molecule, literary works e.g. music, artistic works symbols, names, images, locations and designs. The different types of IPR granted to the inventor for their work are Patents, Copyright, Trademark, Industrial designs, Geographical indications and Semiconductor integrated circuits layout design.

Table 1: Latest IP applications trends in last five years

Applications	2015-16	2016-17	2017-18	2018-19	2019-20
Patent	46904	45444	47854	50659	56267
Design	11108	10213	11837	12585	14290
Trademark	283060	278170	272974	323798	334805
Geographical design	14	32	38	32	42
Copyrights	--	16617	17841	18250	21905
Semiconductor integrated layout designs	--	00	02	00	00

Patents: A patent is a grant of right by the respective country where it is applied to the inventor for an invention in exchange for full disclosure of the invention. A patent is a legal right that allows applicants and assignees to use and utilise their inventions during a specified period of time (20 years from filing of application). For this period, the patent holder has the legal right to prevent others from commercially utilising his invention.



Figure 1: Patent logo

(Courtesy: <https://www.pngwing.com/en/free-png-xwdrz>)

Benefits of patenting:

- a. Nobody can copy, manufacture, sell or import the invention without inventor's permission.
- B. Only inventor can exploit his invention for a pre-determined period.
- c. Except inventor, nobody else can use it.
- d. It's a source of revenue (royalty) by selling or by licensing the patent for others to use.
- e. By patenting the invention, nation's GDP increases which is a contribution to nation's development.

National and global data of IPR & patents

Globally in 2019-20, overall filling of Application for various IPRs were 427,309 and has been higher as compared 405,324 in the previous year 2018-19.

In India, a total of 56,267 patent applications were filed in 2019-20 i.e. 11.1% increase as compared to 2018-19.

Table 2 - Top 10 countries based on number of patent applications filed in 2020.

S. No.	Country	No. of applications
1	China	15,00,000
2	Unites states	5,97,172
3	Japan	2,88,472
4	Korea	2,26,759
5	Europe	1,80,346
6	Germany	62,105
7	India	56,771

8	Russia	34,984
9	Canada	34,565
10	Australia	29,294

Role of patents in enhancing the GDP of the country

An industrial patent attracts International investors to invest in India and increase in investment accelerates the economy of the nation. Now due to increase in IPR applications and grant, foreign investors recognized the Indian market good for innovative products and services. Hence inventors not only play a big role in enhancing the economic growth of the country but they create employment opportunities as well. In 2008, India had 11546 patent and GDP was 4533.01 billion US\$. After 10 years, there is elevation of GDP to 8606.47 billion US\$. This growth was reported due to large number of filing of patent applications in different fields.

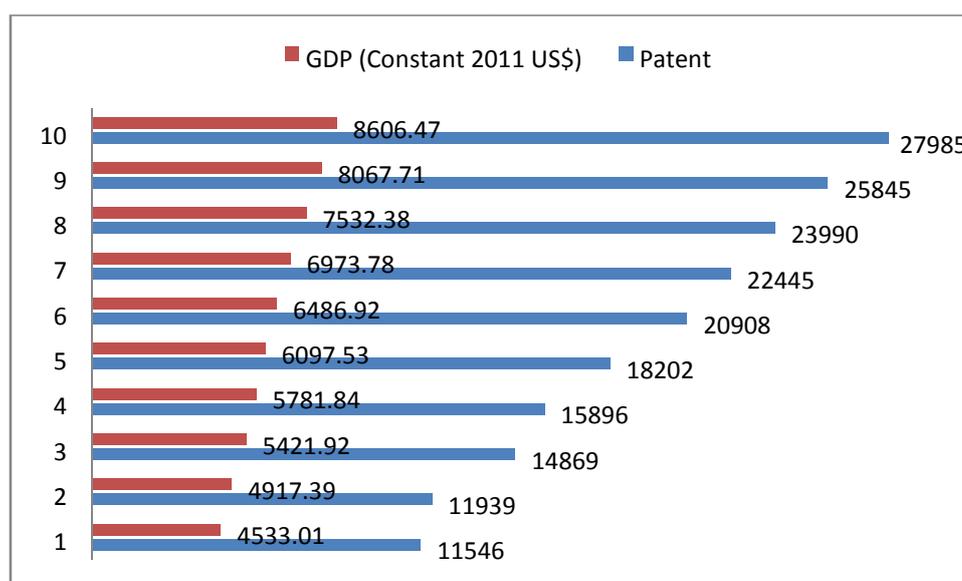


Figure 2: Graph showing the relation between patents and GDP. Source: WIPO Database, August 2019.

Copyright: The exclusive rights granted to the author or creator of an original work, including the right to copy, distribute and adapt the work, is known as copyright. Copyright does not protect the idea itself but it protects the expression of an idea. The sectors like literary, dramatic, musical, artistic, cinematograph films, sound recording comes under this protection. The provisions under this act is called copyright act, 1957.



Figure 3: Copyright logo

Courtesy: <https://1000logos.net/copyright-symbol/>

Trademark: A trade mark or brand name is a visual symbol that may be considered as a word signature, name, device, label, numerals or combination of colours used by one undertaking to distinguish it from similar goods or services or other commercial article from another undertaking. The chosen mark should be able to be represented graphically either paper or computer graphics. The trademark act, 1999 and trademark rules, 2002 came into existence on 2003. Trademark rules was amended in 2017 and implemented. Head office is at Mumbai and branch offices are located at Delhi, Kolkata, Chennai and Ahmedabab. There are 45 classes; the applicant can go for registration in any one of the 45 classes depends on the field. In 2019-20, Maharashtra raked number 1 with 68750 applications, Delhi number 2 with 62720 applications and Gujarat number 3 with 30032 applications.



Figure 4: Trademark logo

Courtesy: <https://www.pinterest.com/pin/555702041527172116/>

Designs: Design includes the features like shape, configuration, pattern, ornamentation or composition of lines or colours applied to any article, whether in 2D or 3D (or both) forms, are known as design. An industrial design registration provides protection to an article's ornamental or aesthetic aspect. In 2019-20, Maharashtra rank 1 with 2298 applications, Delhi rank 2 with 1484 applications and Gujarat rank 3 with 1305 applications. Design is administered by Design Act, 2000 & rules, 2001. Rules, 2001 were amended and implemented in 2014.

Geographical indications: Geographical Indications of goods refers to a country or a place located therein as being the place of origin of that product. The geographical indication

registry is situated at Chennai and set up for geographical indications of goods (Registration and protection) Act, 1999. Some sectors comes under the act are tea, coffee, spices, natural goods etc.



Figure 5: Geographical indication logo

Courtesy: <http://siddhast.com/gudelines-for-permitting-the-use-of-geographical-indication-gi-logo-tagline/>

Semiconductor integrated circuits layout design: Semiconductor integrated circuits layout design registry works for protection of semiconductor IC layout designs. The provisions come under semiconductor integrated circuits layout design act, 2000.



Figure 6: Semiconductor integrated circuits layout design logo

Courtesy: <https://techgrapher.com/electrical-electronics/how-to-protect-topography-of-semiconductor-integrated-circuits/>

Problems faced in getting grant: Due to lack of awareness or knowledge, people think the below mentioned points. On comparing IPR applications in India with worldwide applications, following reasons comes out.

- a. Complex online application process
- b. Difficult to obtain IPR
- c. Financial problems of applicant

- d. Infringement if happens
- e. Lack of knowledge/awareness
- f. Totally online process from application to grant
- g. Difficult to check novelty and patentability
- h. To do everything in a time frame

Conclusion: Many problems a researcher/inventor faces in getting IP rights but if the work is authentic, fair and novel, he/she must go for taking IP rights because of following reasons

- a. Researcher/inventor after patenting can get the exclusive rights i.e. only he can use it commercially either by producing herself/himself or by giving it to somebody on contract basis for specified period.
- b. Commercialization of copyright art, benefits only the artist because of his/her novel idea.
- c. Commercialization not only gives financial benefits to the researcher/inventor/artist but it increases the Gross domestic production (GDP) of the country. He can contribute in the development of the country.
- d. Increase in IPR makes the country scientifically and financially strong.
- e. The researcher gets recognition at national and international levels.
- f. The country gets recognition at international level in field of science/arts/commerce/geography because here only the creation is originated.
- g. IPR motivates others to do research and novel creation, not only for name and popularity but for financial support too.

IP Assistance by Government of India

DPIIT (Department of promotion of industry and internal trade) Government of India under the scheme SSIP (Scheme for facilitating start-ups intellectual property protection) encourages IPR protection amongst start-ups. Under this scheme, the start-ups can get facilitators for filing an processing of application for patents, trademarks, designs and reimbursement of professional charges. CGPDTM (Controller general of patents, designs and trademarks) is responsible for effective implementation of this scheme and also solve the queries of start-ups through email and helpdesks.

Gujarat Technological University's IP assistance to researchers –

IPR Cell is providing free online PATSEER software to its affiliated colleges for limited time period on application to needy for Patent Search Database, for Novelty search, Patentability Search or Technology. Under the scheme of SSIP policy, GTU provides financial assistance of Rs. 25,000/- for patent filing to GTU students, faculty, academic researchers or student start-ups (current students or students passed out in last five academic years). Apart from financial support GTU Supports the applicant through their facilitators in all phases from filing application to grant.
