

Intellectual Property Rights and India

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Modern world's economic order which runs on capitalistic line has power to commodify almost anything. Clean air has been commodified by Kyoto protocol. Water is chargeable at most locations. One can also get Himalayan glacial water by paying much more. Electromagnetic waves are auctioned by government. In similar fashion, it is possible to buy and sell intellect, thanks to IPR regime.

While it may be true that knowledge blossoms when shared, yet in certain circumstances such benevolent sharing is not desirable. When one invests lot of time, energy, money and other resources on cultivation of his knowledge towards a specific goal, he has legitimate right to fruits of his labor. Any creation of someone's mind should be used under his authorization. This, apart from moral, also makes socio-economic sense.

Upto couple of years back, any Hepatitis C patient had to undergo a harrowing ordeal of intoxicating drugs for years. This however has changed now, thanks to invention Sofosbuvir by Gilead. This drug is taken orally and much easy for body to tolerate. It's unlikely that without IPR protection this drug would have been invented.

IPR provides a secure environment for investors, scientists, artists, designers, traders etc. to foster innovation and scientific temper. This innovation often has potential to yield astronomical returns and rewards to creators and users. Obviously, original inventors shall

have rights to such profits. However it is imperative that society at large should also be benefited by such outcomes. Thus, IPR regime aims to strike balance between public and private rights.

Patents are granted for 20 years on any new product or process to original creator. After expiry of 20 years such patents expire and generic industry can exploit what was once patented. When we say Indian pharmaceutical industry is world leader in generic drugs, it means that they manufacture mostly those drugs whose patents have been expired. In other words, for 20 years law guards private rights and then they make sure that innovation is thrown open to public, hence striking a balance.

Intervention of state in guarding tangible property of citizens like immovable property, cash, jewelry etc seems more obvious. These things can be enclosed in a limited space and protected. In these things title of ownership can be made clear by invoices and payments. State's law and order machineries have been protecting citizens' right to these properties from the times immemorial. However, ideas, intellect, art, programming codes and designs etc. have only recently come under definition of property. As article 300A provides right to own property to citizens, it becomes duty of state to protect intellectual property too.

If these things are to be stolen, physical custody is not required. It means that state can't prevent proliferation of an innovative idea. Hence, it shall strive to provide exclusive right to creator to exploit its creation. Even when everyone knows the idea, secret or key, all except inventor are forbidden by law to exploit it. These things can only be used after due authorization from creator or on expiry of protection.

Not everyone is in favor of this IPR protection provided by state. Some people claim that no innovation is done in isolation. They are result of incremental innovations which are on from times immemorial. So any innovation, rather than individual asset is a social asset. Further, it is argued that most new patents are result of serendipity. There is no co-relation between effort, outcomes and rewards.

Notwithstanding strength of these criticisms, it should be realised that over the years IPR protections have encouraged tremendous investments and efforts in areas of applied science. We have overcome numerous challenges in various fields of medicine, communication, agriculture, communication, transport etc.

As already said, knowledge knows no boundaries. It is hence not enough to provide protection to a creation in domestic laws. In globalized world economy it is imperative that a universal protection is accorded. For this we have robust international system of treaty instruments and enforcement organizations.

Various International Treaties

There are different subject matters of intellectual property like Patents, Copyright, Trademarks, Industrial design, Plant Varieties etc. Need for protection in these different subjects arose in different periods. These are reflected in different treaties. Agreement on TRIPS, under aegis of WTO, remains most influential, comprehensive and inclusive of all. Other treaties are covered here for background information.

There are two main bodies – World Intellectual Property Organization (WIPO) under UN which administers 1-7 treaties mentioned below. 8th treaty is independent of any organization. Another relevant body is World Trading Organization. 9th (or TRIPS) is administered by WTO. 10th treaty comes under UNESCO.

1. **Paris Convention for Industrial Property, 1883** – Since it deals only with Industrial property, it covered only Patents and Trademarks. It was among first treaties to recognize various principles of international trade like National Treatment, Right of Priority, Common rules etc.
2. **Bern convention for literary and artistic works, 1886** – It provided for copyright system. It doesn't provide for any formality to claim protection. Protection is automatically accorded to any creation, provided work is original and other conditions under the treaty are fulfilled. It means that your work, if original, is already protected. You can claim that you have copyright.
3. **Madrid Agreement, 1881** – Governs the international recognition of trademarks. Made international filings easy and cheap.
4. **Patent co-operation treaty, 1970** – It was earlier not possible for an entity to claim protection in different countries by single application. This was made possible as it aimed for co-operation and it was open for all parties to Paris convention.
5. **Budapest Treaty of 1980** – It made possible patenting for micro-organisms. Claimant is required to deposit his invention on micro-organisms with an Authority – 'International depository of Micro-Organisms' under WIPO. He shall make all the adequate disclosures.
6. **Trademark Law Treaty, 1994** – Harmonized administrative procedures and introduced 'service marks' in ambit of trade marks. Earlier trademarks were accorded only to goods.
7. **The Hague agreement concerning the International Deposit of 'Industrial Design' 1925** – It created International Design Bureau of WIPO.
8. **International Union for protection of new varieties of plants, 1961** – This provides breeders and farmers right to new plant varieties.
9. **Agreement on Trade Related Aspects of Intellectual Property** – It is a landmark and most comprehensive treaty on Intellectual property. While earlier treaties' subject matters were specific, TRIPS deal with 8 kinds of property rights – Patents, Trademarks, trade dress, Copyrights, Industrial Designs, Plant Varieties, Integrated Circuits and layouts, and Geographical Indication. Further, almost all countries are party to TRIP. In earlier treaties only limited countries participated. It also provides enforcement mechanism which was not available in WIPO treaties. It mandated all member countries to make their domestic laws complaint to TRIPS. India passed certain laws and amended others. India's IPR regime now stands fully complaint to TRIPS. For E.g. India amended patent law in 2005 to provide 'product' patent protection. Earlier protection was available only to 'processes'.

TRIPS was results of discussions held in Uruguay round which led to formation of WTO. This treaty is an offshoot of General Agreement on Trade in Goods (GATT). This treaty provided a robust Dispute Resolution Mechanism and stringent penal provisions under auspices of WTO.

Further, every treaty under WTO is based some principle which are –

1. National Treatment – No foreign products, once they enter domestic territories, shall be discriminated in any manner. This also applies to intellectual property. Members must accord similar treatment to foreign creations, as they do to domestic ones.
2. Most Favored Nation – If a member provides some privilege, favorable treatment or exemption to another country or group, then other members must get similar favorable treatment.
3. Right to priority treatment – If a similar patent application has been filed in two different countries, then prior applicant has right to the patent.
4. Concept of Minimum Standards – This treaty provides for minimum level of protection that every member should provide to intellectual property. Members have discretion to provide more protection than minimum standards.
5. **Universal Copyright Convention, 1952** – This convention is administered by UNESCO. This exists simultaneously with Bern Convention. This treaty provides for procedural formalities for filing and recognition of copyright. As Bern convention provides for automatic route to copyright, this treaty has lost its relevance.

Various subject matters of Intellectual Property in India

1. Copyrights

Law – Copyrights Act 1957, amended in 2012

Ministry – Copyright Office, Ministry of Human Recourse Development

Copyright is a bundle of rights given by the law to the creators of literary, dramatic, musical and artistic works and the producers of cinematograph films and sound recordings. The rights provided under Copyright law include the rights of reproduction of the work, communication of the work to the public, adaptation of the work and translation of the work.

Copyrights of works of the countries mentioned in the International Copyright Order are protected in India, as if such works are Indian works. The term of copyright in a work shall not exceed that which is enjoyed by it in its country of origin.

Acquisition of copyright is automatic and it does not require any formality. Copyright comes into existence as soon as a work is created and no formality is required to be completed for acquiring copyright. However, certificate of registration of copyright and the entries made therein serve as prima facie evidence in a court of law with reference to dispute relating to ownership of copyright. Application for copyright can be filed in Copyright office.

Computer Software or programme can also be registered as a 'literary work'. As per Copyright Act, 1957 "literary work" includes computer programmes, tables and compilations, including computer databases. 'Source Code' has also to be supplied along with the application for registration of copyright for software products.

The 2012 amendments make Indian Copyright Law compliant with the Internet Treaties – the WIPO Copyright Treaty (WCT) and WIPO Performances and Phonograms Treaty (WPPT).

- Literary
 - dramatic,
 - musical and
 - artistic works
- Lifetime of the author + sixty years from the beginning of the calendar year next following the year in which the author dies.

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- Anonymous and pseudonymous works
 - Posthumous work
 - Cinematograph films
 - Sound records
 - Government work
 - Public undertakings
 - International Agencies
 - photographs
- Until sixty years from the beginning of the calendar years next following the year in which the work is first published

India has a very large copyright-based creative industry. The Copyright Act is comprehensive and with the recent amendments, the rights of creators have been strengthened. India was the first country to ratify the Marrakesh Treaty 2013 for Access to copyright works for visually impaired persons. Enforcement in copyright has been significant and will be further reinforced. Judgments of Indian courts have adequately balanced the rights of copyright owners with the rights of public. Moral rights are fully recognized.

The challenge in the future is the enforcement of copyright in digital platforms for which the statute has adequate provisions. Indian copyright owners are also victims of copyright violations and piracy. Apart from Copyrights Act, Information Technology Act, 2000 too has certain relevant provisions for copyright in electronics and digital field.

There have been disagreements over the question whether Softwares are eligible for copyrights or for patents. Copyright Office recently held that softwares, if are not in conjuncture with novel hardware should be protected by copyright. This is relief for software industry as Copyrights are cheap, automatically recognised and protects for 60 years while patents are only for 20 years.

2. Patents

Law – Patents Act, 1970, amended in 2006

Ministry – DIPP, Ministry of Commerce and industry

The object of patent law is to encourage scientific research, new technology and industrial progress. The price of the grant of the monopoly is the disclosure of the invention at the Patent Office, which, after the expiry of the fixed period (20 years) of the monopoly, passes into the public domain. The fundamental principle of Patent law is that a patent is granted only for an invention which must have novelty and utility. It is essential for the validity of a patent that it must be the inventor's own discovery as opposed to mere verification of what was, already known before the date of the patent. A patentable invention, apart from being a new manufacture, must also be useful.

Evergreening of patent is not allowed: In order to be patentable, an improvement on something known before or a combination of different matters already known, should be something more than a mere workshop improvement, and must independently satisfy the test of invention or an inventive step. It must produce a new result, or a new article or a better or cheaper article than before. The new subject matter must involve “invention” over what is old.

It allows Compulsory Licensing: This strikes balance between two objectives – Rewarding patentees for innovation and to make sure that patented products, particularly Pharmaceutical ones, are available to public in developing and underdeveloped countries at affordable prices.

In March 2012, India granted its first compulsory license ever. The license was granted to Indian generic drug manufacturer Natco Pharma Ltd for Sorafenib tosylate, a cancer drug patented by Bayer. Non-governmental groups reportedly welcomed the decision.

TRIPS also allows for compulsory licensing under certain circumstances. The principal requirement for the issue of a compulsory license is that attempts to obtain a license under reasonable commercial terms must have failed over a reasonable period of time. Specific situations in which compulsory licenses may be issued are set out in the legislation of each patent system and vary between systems. Some examples are – Unaffordable prices of particular drug for masses or inability of patentee to fulfill demand in markets. Further, TRIPs also provides that the requirements for a compulsory license may be waived in certain situations, in particular cases of national emergency or extreme urgency or in cases of public non-commercial use.

It allows both Product and Process patent: Prior to 2006 amendment, only process was allowed to be patented. It means that if same product is manufactured using some process different than that was patented, there shall be no infringement.

System of pre-grant and post-grant oppositions: Introduced in 2005, ensures that only deserving patents are granted. It is now possible to raise objection both before and after the patent has been granted.

Data exclusivity: Indian Patent Act doesn't specifically provide for data exclusivity. Companies spend significant time, energy and money on research and clinical trials. During all this they gather large amount of useful data. While obtaining permission for launch of product in markets or while applying for patents, these companies have to provide data to authorities. By provision of data exclusivity, companies want authorities to not to share such data with any third party for certain period.

Article 39(3) of the TRIPS states that that “Members when requiring, as a condition of approving the marketing of pharmaceutical or of agricultural chemical products which utilize new chemical entities, the submission of undisclosed test or data, the origination of which involves a considerable effort, shall protect such data against unfair commercial use. In addition, Members shall protect such data against disclosure, except where necessary to protect the public, or unless steps are taken to ensure that data are protected against unfair commercial use“

But it should be remembered that Article 39(3) does not talk about “Data Exclusivity” but only about “unfair commercial use” and it is this phrase that is interpreted by Multi-national companies as containing “Data Exclusivity” provision and thus demanding data exclusivity law.

Data exclusivity however, is opposed on following grounds –

1. If generic drugs manufacturers are denied access to such data then they will have to do separate clinical trials which will increase costs.
2. Further, there are ethical issues with clinical trials as it involves experimentation on animals or humans.
3. TRIPS agreement not at all mentions ‘data exclusivity’. It is just creative interpretation of MNCs.
4. It can become an alternative to patentability and can be used for evergreening. Data exclusivity concept is different from patent. If a company manages to protect data, then it may continue to maintain its monopoly by incremental improvement in products and generation of new data.

There is no need of a “further protection” to pharmaceuticals in the form of “Data Exclusivity” as the protection under the Patents Act, 1970 is not only sufficient but also in conformity with the TRIPS Agreement. The protection in the form of “Data Exclusivity” is a “TRIPS plus” provision to which Indian does not owe any obligation.

The Health Ministry has said that India already has necessary legal provisions to protect data and hence there is no need for any further protection, while Satwant Reddy committee was of the view that there is no legal provision to protect test data. It is alleged by the Health and Human right activist that government is under pressure from Multi-National Companies and western countries to enact law on data exclusivity.

India has adopted a balanced approach towards patent law. It is committed to protect innovation while promoting the larger goal of welfare of its citizens. Courts and tribunals have upheld key provisions of India’s patent law by their authoritative pronouncements. The system of pre-grant and post-grant oppositions introduced in 2005 ensures that only deserving patents are granted.

It is expected that there would be a steady evolution of patent jurisprudence in India. Patent filings too have gone up by 10.56% from 2008-2009 to 2013-2014. Over 75% of patent filings are by foreign entities and so there is a need for concerted action to be taken to increase filings by Indians.

3. Trademarks

Law – Trademark Act 1999

Ministry – DIPP, Ministry of Commerce and industry

A trademark is typically a name, word, phrase, logo, symbol, design, image, or a combination of these elements. There is also a range of non-conventional trademarks comprising marks which do not fall into these standard categories, such as those based on color, smell, or sound (like jingles). A trademark cannot be offensive

India joins Madrid Protocol, 2013

The Madrid System for the International Registration of Marks offers trademark owners a cost effective, user friendly and streamlined means of protecting and managing their trademark portfolio internationally.

4. Designs

Law – Designs Act, 2000

Ministry – DIPP, Ministry of Commerce and industry

Apple iPhones are manufactured in China. But, China is able to capture paltry 2-5% of its value while overwhelming part is cornered by USA. This is mainly attributed to value added by Designing and Research, which is based in USA. Thus, importance of design protection can't be overstressed.

As per WIPO – 'In a legal sense, an industrial design constitutes the ornamental or aesthetic aspect of an article.'

'An industrial design may consist of three dimensional features, such as the shape of an article, or two dimensional features, such as patterns, lines or color.'

Industrial designs refer to creative activity which results in the ornamental or formal appearance of a product and 'design right' refers to a novel or original design that is accorded to the proprietor of a validly registered design. Industrial designs are an element of intellectual property.

In principle, the owner of a registered industrial design or of a design patent has the right to prevent third parties from making, selling or importing articles bearing or embodying a design which is a copy, or substantially a copy, of the protected design, when such acts are undertaken for commercial purposes. Such rights are perpetual.

Under the TRIPS Agreement, minimum standards of protection of industrial designs have been provided for. As a developing country, India has already amended its national legislation to provide for these minimal standards.

The existing legislation on industrial designs in India is contained in the New Designs Act, 2000 and this Act will serve its purpose well in the rapid changes in technology and international developments. India has also achieved a mature status in the field of industrial designs and in view of globalization of the economy, the present legislation is aligned with the changed technical and commercial scenario and made to conform to international trends in design administration.

Overall, the law of industrial designs and enforcement thereof has been quite positive. At present, approximately 8000 applications are filed annually. This is much below India's potential and there is scope for considerable improvement. Concerted steps shall be taken particularly to increase sensitization to this law especially in the MSMEs and the informal sector.

5. Geographical Indications

Law – Geographical Indications of Goods Act, 1999

Ministry – DIPP, Ministry of Commerce and industry

A geographical indication (GI) is a sign used on products that have a specific geographical origin and possess qualities or a reputation that are due to that origin. In order to function as a GI, a sign must identify a product as originating in a given place. In addition, the qualities, characteristics or reputation of the product should be essentially due to the place of origin. Since the qualities depend on the geographical place of production, there is a clear link between the product and its original place of production.

A geographical indication right enables those who have the right to use the indication to prevent its use by a third party whose product does not conform to the applicable standards. For example, in the jurisdictions in which the Darjeeling geographical indication is protected, producers of Darjeeling tea can exclude use of the term “Darjeeling” for tea not grown in their tea gardens or not produced according to the standards set out in the code of practice for the geographical indication.

However, a protected geographical indication does not enable the holder to prevent someone from making a product using the same techniques as those set out in the standards for that indication. Protection for a geographical indication is usually obtained by acquiring a right over the sign that constitutes the indication.

Geographical indications are typically used for agricultural products, foodstuffs, wine and spirit drinks, handicrafts, and industrial products.

How are geographical indications protected?

Broadly speaking geographical indications are protected in different countries and regional systems through a wide variety of approaches and often using a combination of two or more of the approaches outlined above. These approaches have been developed in accordance with different legal traditions and within a framework of individual historical and economic conditions.

There are three main ways to protect a geographical indication:

- so-called *sui generis* systems (i.e. special regimes of protection);
- using collective or certification marks; and
- methods focusing on business practices, including administrative product approval schemes.

These approaches involve differences with respect to important questions, such as the conditions for protection or the scope of protection. On the other hand, two of the modes of protection — namely *sui generis* systems and collective or certification mark systems — share some common features, such as the fact that they set up rights for collective use by those who comply with defined standards.

List of GIs in India

6. Plant Varieties

Law – Protection of Plant varieties and farmers’ right Act, 2001

Ministry – Department of Agriculture and Cooperation, Ministry of Agriculture

With the advent hybrid and genetically modified plants, it is possible to create different quality of plants of same genus or species. There have been unending quest of developing plant varieties that are more productive, more fortified with nutrients, more resistant to vagaries of nature and are reasonably priced. Such development demands lot of expenditure and time just like any other patentable invention. TRIPS agreement says that either a member should cover plant variety in domestic patent law or it should be provided a sui- generis protection. Accordingly, India’s patent law doesn’t cover plant varieties and POPVFR act provides a sui-generis protection.

“In order to provide for the establishment of an effective system for the protection of plant varieties, the rights of farmers and plant breeders and to encourage the development of new varieties of plants it has been considered necessary to recognize and to protect the rights of the farmers in respect of their contributions made at any time in conserving, improving and making available plant genetic resources for the development of new plant varieties. The Govt. of India enacted “The Protection of Plant Varieties and Farmers’ Rights (PPV&FR) Act, 2001” adopting sui generis system. Indian legislation is not only in conformity with International Union for the Protection of New Varieties of Plants (UPOV), 1978, but also have sufficient provisions to protect the interests of public/private sector breeding institutions and the farmers. The legislation recognizes the contributions of both commercial plant breeders and farmers in plant breeding activity and also provides to implement TRIPs in a way that supports the specific socio-economic interests of all the stakeholders including private, public sectors and research institutions, as well as resource-constrained farmers.”

‘Protection of Plant Varieties and Farmers Right Authority’ has been created under the act. Application can be made (by farmer, breeders) to authority to claim protection on a particular plant variety.

Indian law, not only provides for right of breeders’ and researchers’, but it also provide right to seed to farmers and village community. Registering the variety under the authority offers certain protection to its growers under the law. Notable among them is that if any breeder, including seed companies, use this variety for producing hybrid varieties, its growers are entitled for a royalty from the breeder.

As such, plant varieties present in wilderness cannot be registered, under PPV&FR Authority. However, any traditionally cultivated plant variety which has undergone the process of domestication /improvement through human interventions can be registered and protected subjected to fulfilment of the eligible criteria.

The Central Government has notified 57 crops with their genera and species eligible for registration as new varieties.

7. Semi-conductors and integrated Layouts

Law – Semi-conductors and integrated Layout design Act, 2000

Ministry – Department of Electronics and I.T, Ministry of Communication and I.T.

A semiconductor layout design means a layout of transistors and other circuitry elements and includes lead wires connecting such elements and expressed in any manner in semiconductor integrated circuits.

The first registration under the Semiconductor Integrated Circuits Layout-Design Act, 2000 was granted in October 2014. It is expected that the industry will make increased use of this right to protect integrated circuit layout designs.

Under this, a SICLD registry has been created where layout designs of integrated circuit chips can be registered. The Registrar will determine the originality of the design based on the information available with him as also through the mechanism of advertisement of the application for registration of the layout-design and or any input he may receive. On registration, protection is granted for 10 years.

8. Traditional Knowledge

Traditional Knowledge Digital Library

A collaboration – between the Council of Scientific and Industrial Research (CSIR) and the Department of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy (Dept. of AYUSH), Ministry of Health & Family Welfare, Government of India.

There is considerable unexplored potential for developing, promoting and utilizing traditional knowledge, which is a unique endowment of India. Create a sui generis system for protection of traditional knowledge which will safeguard misappropriation of traditional knowledge as well as promote further research and development in products and services based on traditional knowledge.

The creation of the Traditional Knowledge Digital Library (TKDL) has been a major achievement for India which has a vast pool of traditional knowledge. India has been able to thwart attempts to misappropriate its traditional knowledge. The next challenge is to use India's strength in traditional knowledge for its effective promotion, development and utilization.

It manages a database of knowledge that exists in various local languages such as Sanskrit, Urdu, Arabic, Persian and Tamil. TKDL has also converted the database into five international languages in patent application formats.

So far, over 2 lakh medicinal formulations have been transcribed and the database is present in 30 million A4-size pages.

It has been observed that in the past years patents have been wrongly granted to traditional knowledge related inventions which do not fulfill the requirement of novelty and inventive step, particularly due to existence of relevant prior art. For instance, this has happened in the case of Turmeric, Neem, Basmati etc.

The practical obstacle underlying the issue was that patent examiners could not search relevant traditional knowledge as prior art, because they did not have access to traditional knowledge information in their classified non-patent literature. The reasons for this non-accessibility were that the Indian traditional knowledge exists in local languages such as Sanskrit, Urdu, Arabic, Persian, Tamil, etc. which either was not available or not understood by patent examiners. TKDL breaks the language and format barrier and makes available this information in English, French, Spanish, German and Japanese in patent application format, which is easily understandable by patent examiners. TKDL is thus a tool providing defensive protection to the rich traditional knowledge of India.

A research council of AYUSH ministry has been implementing a Tribal Health Care Research Programme (THCRP) which aims at collecting information on folk medicines / traditional practices prevalent in different parts of the country besides extending health care services to tribal population.

Some success stories of TKDL –

1. India Foils Colgate-Palmolive Bid to Patent Nutmeg Mouthwash

In 2010, a Patent application was filed by Colgate-Palmolive Company titled “Oral compositions containing extracts of myristica fragrans and related methods”. The company claimed an oral composition comprising a combination of extracts including an extract from *Myristica fragrans* and a natural extract other than the extract from *Myristica fragrans*.

The prime issue with this application by Colgate-Palmolive is that *Myristica fragrans* (nutmeg) has been traditionally used in the Indian system of medicines and is used almost every single day by an average Indian, especially those residing in the country side. The Patent application by Colgate-Palmolive itself describes that *Myristica fragrans* (nutmeg) is known as a headache cure and a gastrointestinal drug in the Indian ancient Ayurveda, and has been used in the treatment of dyspepsia, bellyache, diarrhea and vomiting in the traditional Chinese medicine. *Myristica fragrans* has reportedly been used as a fruit paste and applied to teeth. An important claim of this application is “A composition according to any preceding claim, wherein the composition is a dentifrice in a form selected from the group consisting of: powder; toothpaste or dental gel; a periodontal gel; a liquid suitable for painting a dental surface; a chewing gum; a dissolvable, partially dissolvable or non-dissolvable film or strip; a bead, a wafer; a wipe or towelette; an implant; a mouthrinse, a foam, and dental floss.”

CSIR-TKDL submitted proof in the form of references from an ancient book, which said that the herb and its extracts were used for oral diseases in Indian systems of medicine. In addition, other third party observations also made submissions against the claims and the Patent application was shot down. The status of the application [EP2689806](#) now stands cancelled.

2. India wins Patent war on hair loss formula

Pangaea Laboratories Limited, a UK based company had filed a Patent application in February, 2011 titled “Hair building solid agent” ([EP2361602](#)). On a close reading of the application, they come across two important pieces of information viz, the description section of the application which reads:

“The hair building solid spray agent may include one or more pharmacologically active ingredient for treating one or more of hair loss, thinning hair and skin conditions.

The pharmacologically active ingredient may be one or more of finasteride, dutasteride, spironolactone, minoxidil, nitric oxide donators, Beta-glucan, saw palmetto, resveratrol, curcumin, marine extracts, polycyanidins, superoxide dismutase, superoxide dismutase mimetics, taurine, plant sterols, pine bark extract, melatonin, green tea, caffeine, copper peptides, copper PCA, EUK-134, copper(II) 3,5-dispropylsalicylate, dimethoxy chromanol, catalase, catalase mimetics and hydrolysed lupine protein.”

As can be observed from a reading of the paragraph, there is clearly a mention of use of curcumin, pine bark and green tea among others as a pharmacologically active ingredient in the preparation of the hair loss formula.

Thus CSIR filed an objection to the application by providing the EPO with evidence from the TKDL citing the traditional use of curcumin, pine bark and green tea in the treatment of hair loss. The third party observations submitted by CSIR can be accessed [here](#).

Based on India’s evidence, the Patent application was finally “deemed to be withdrawn” by the applicant on 29 June 2015.

3. “Over 1500 yoga asanas shortlisted to thwart patenting by foreign parties”

Another news piece making rounds these days is that TKDL is in the process of documenting over 1500 yoga postures in order to stop patenting of these postures by foreign parties. TKDL is said to believe that as many as 2,000 applications were being made internationally every year for patents on Indian systems of medicine including yoga postures, which was nothing but misappropriation of traditional Indian knowledge. But with India providing evidence to the contrary, Patent applications have had to be withdrawn in countries as varied as USA, Japan, UK, Italy, Germany, Australia, China, Cyprus, Kenya, Spain, South Korea, Bulgaria, the Netherlands and New Zealand.

It is estimated that up to 300 million people practice yoga across the globe, with the US being the world’s largest yoga industry worth over \$27 billion. Yet more than half of global yoga enthusiasts are Indians, in a country that until now lacked any organizational approach to the \$80bn global industry. Lacking brand names, yoga training in India is mainly run through small independent businesses.

News sources indicate that a mind-boggling 249 patents were taken on yoga in 2004 and 2,300 in 2005 at various international Patent offices, thus implying the urgent need to incorporate these yoga asanas into TKDL.

The above three instances are only some of the success stories of TKDL. As published by the Press Information Bureau of India, CSIR-TKDL unit till date has achieved success in about 200 cases and more, like the ones listed here, without any cost.

Besides major companies like Colgate-Palmolive and Pangaia, the other big players who have been hit by the TKDL include Nestle, L’Oreal, Avasthagen, Ranbaxy, BASF and Unilever.

9. Biological Diversity

Law –Biological Diversity Act, 2002 in pursuance of Convention on Biological Diversity, 1993

The Convention on Biological Diversity (CBD) is a legally binding multilateral environmental agreement that has 194 contracting Parties (Countries) as its members with three objectives –

1. Conservation of biological diversity,
2. Sustainable use of the diversity and
3. **Ensuring fair and equitable sharing of benefits of such use.**

It has entered into force on 29th December 1993.

3rd point is particularly relevant here. To check misappropriation of Indian biological resources or bio-piracy, the Act provides that access to Indian biological resources and associated knowledge are subject to terms and conditions, **which secure equitable sharing of benefits**. Further, it would be required to obtain the approval of the National Biodiversity Authority before seeking any IPR based on biological material and associated knowledge obtained from India.

It is a bit similar to PPVFR Act we just read. What PPVFR Act protects in plant varieties, Biological Diversity Act, 2002 aims to accord similar protection to general biodiversity. There is no overlap between Biological Diversity Act and Protection of Plant Varieties and Farmer's Rights Act (PPV&FRA). The scope and objectives of these two legislations are different. In order to harmonise both the legislations, an exemption has been provided under Section 6 (3) of the Biodiversity Act for applicants seeking protection under the PPV&FRA.

The purport of Section 6(3) is to ensure that before grant of IPRs, it becomes possible to realize equitable sharing of benefits arising out of the use of biological resources and knowledge. As the PPV&FRA also has a provision for benefit sharing, an exemption has been provided in the Biological Diversity Act for applicants seeking protection under the PPV&FRA.

The patent applicant should disclose the source and geographical origin of the biological material when used in an invention. Further, non-disclosure or wrongful disclosure of source of biological material and any associated knowledge will result in opposition to the grant of patent or revocation of the patent.

Section 6(1) provides that prior approval of NBA is necessary before applying for any kind of IPRs in India and outside based on any research or information on a biological resource obtained from India. However, in case of patents, permission of the NBA may be obtained after application is made but before sealing of the patent.

Indo-US IPR problem

The U.S. Chamber of Commerce in its **International Intellectual Property Index** has placed India at 37th position out of 38 countries. This report comes at a time when the government is close to finalizing a National Intellectual Property policy to improve the IP regime, increase IP awareness and strengthen enforcement of rules.

The list is topped by the US, which is followed by the UK, Germany, France and Sweden. India's peers in the BRICS grouping were all ranked ahead with Russia ranked 20th, China (22nd), South Africa (26th) and Brazil (29th). Venezuela occupies the last position in the index.

Main complaint is that, Brazil, China, India, Indonesia, and Russia introduced or maintained **policies that tie market access to sharing of IP and technology**. Such forced-localization policies tend to undermine the overall innovation ecosystem and deter investment from foreign IP-intensive entities. U.S and allies want laws which protect intellectual property even when lack of market access in such innovations is against public interest.

India remains at the bottom of the Index for the fourth year in a row. The report notes that India's score would have increased if the government had not suspended implementation of Final Guidelines for Computer Related Inventions (CRI). The report notes the following reasons for India's low rank:

- Patent protection in India remains outside of international best practices.
- Indian law does not provide adequate enforcement mechanisms to effectively combat online piracy.
- Among India's key areas of weakness was the use of compulsory licensing (CL) for commercial and non-emergency situations, and the expanded use of CL being considered by the Indian government.
- Another area of weakness was poor application and enforcement of civil remedies and criminal penalties.
- The fact that India was not party to major international treaties, like the Trans-Pacific Partnership agreement, was also a consideration.

In backdrop of these concerns India has been placed under 'Priority watch list' in USA. If India is put under 'priority nations list' then US will impose trade sanctions on INDIA. But this is unlikely because **India, so far, has not violated any of the clauses of TRIPS**. That's why US has negotiated 'Trans – Pacific/Atlantic' trade partnerships, which are expected to be 'WTO+'. It will include stringent provisions guarding intellectual property by diluting flexibilities allowed by current TRIPS agreement, among other things.

Conclusion

As said earlier, India's IPR regime stands fully complaint to Agreement on TRIPS. However, implementation of various laws has been lax. Patent or copyright infringement and piracy in India is not uncommon. It is also the fact that India has poor performance in R&D, where it accounts for meagre 2.7% of global expenditure. Poor IPR protection regime plays some part in this. Government is about to launch a New IPR policy. It is expected that it will reassert its commitment to TRIPS and promise that measures like compulsory licence will be resorted to in rarest of rare case. It will also consider need and measures to ramp up

implementation by building infrastructural and human resource capacities. It is like to give a significant impetus to expansion of copyright and patent offices all over India.

As we have seen that various subject matters in IPR are dealt by different departments and ministries, there needs to be some integration among these arms. This integration is prerequisite for formulating an integral IPR policy and taking stand at various international forums. Having said this, legal setup in India nicely tries to balance Public rights with Private rights. This system provides adequate incentives for entrepreneurs to innovate. We just need strict implementation. This way we will able to make innovation a change agent of Indian economy