

## The role of Patent Law in Public Interest – A case study on L-RAMP

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### INTRODUCTION

Public interest law advocates the interests of those clients who do not have the economic power to obtaining legal assistance. Public interest law is interested more in helping out the public as opposed to private interests. Patent law on the other hand, is the system by which a set of exclusive rights is granted to an inventor for a fixed period of time in exchange for disclosure of the invention, and after the expiry of this period passes into public domain. Acquiring and maintaining patents are resource consuming in terms of time and money and increasingly becoming a domain of larger companies. While it might seem strange that the law governing public interest and patent law which grants exclusive rights can work together for a common goal, they sometimes can do so to serve a very important public function. It is the aim of this paper to show that patent law can serve public interest, and illustrate this further by doing a case study of Project L—RAMP.

### PATENT LAW

A patent is a “grant of exclusive privilege to own, use or sell the method or the product patented for the limited period . . . . The price of the grant of monopoly is the disclosure of the invention

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at the Patent Office, which after expiry of the fixed period of monopoly passes into the public domain.”<sup>2</sup>

### **Important characteristics of Patent Law**

The Patent Law including that of India has the striking characteristics to determine the patentability of an invention.

**The purpose:** The object of the patent law is to encourage scientific research, new technology and industrial progress.<sup>3</sup>The reward of the grant of exclusive right for the invention is conferred by the Patent Office and the property falls into the public domain after the expiry of the fixed period of the rights.

**Scope:** A patent provides the right to exclude others from making, using, selling, offering for sale or importing the patented invention for the term of the patent which is usually 20 years from the filing date. A patent has been held to be a movable property by the Supreme Court in Appeal (Civil) 4552 of 1998 in the matter of M/S. Sunrise Associates v. Government of NCT of Delhi & Ors., on 28<sup>th</sup> April, 2006. Similar to other property rights, it may be sold, licensed, mortgaged, assigned, or transferred, or donated. Unlike other property rights, a patent right may be revoked, amended or abandoned.

**Originality/Inventorship:** The basic doctrine of Indian Patent Law is only a true and original inventor may obtain a patent. “. . . [T]he person seeking patent protection must personally

<sup>2</sup> *Bishawanath Prasad Radhey Shyam v. Hindustan Metal Industries*, [A.I.R. 1982 S.C. 1444, para. 17].

<sup>3</sup> Draft Manual of Patent Practice and Procedure (2008), para. 3.2.1

invent the subject matter of the invention.”<sup>4</sup> The originality requirement protects the interests of the true inventor and the general public; it would be morally offensive to allow one to harvest what another has sown. The originality requirement limits patent monopolies to those who actually expend inventive effort successfully. Joint invention occurs when more than one person contributes to the conception of the invention.<sup>5</sup>

**Novelty:** “An invention is considered new (novel) if it has not been anticipated by publication in any document anywhere in the world or used in the country or prior claimed in an application for patent in India or form part of the knowledge, oral or otherwise, available within any local or indigenous community in India or elsewhere before the date of filing of patent application or date of priority, that is, the subject matter has not fallen in the public”.

**Assessment of inventive step:** The invention/improvement must be novel. The art known to the inventor will be outside the sphere of discernment of a person with ordinary skill in the art. The invention cannot be either an anticipated or an obvious improvement. It is not an expected solution to a problem that falls within the knowledge of a person with ordinary skill in that field.<sup>6</sup>

**Industrialization and legality:** If the subject matter is devoid of industrial application it does not satisfy the definition of “invention” for the purpose of the Act. Ordinarily, "Industry" is taken in its broad sense as including any useful and practical, as distinct from intellectual or aesthetic

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<sup>4</sup> John W. Schlicher, *Patent Law: Legal and Economic Principles*, § 1.07 (1994).

<sup>5</sup> Chisum on Patents, 2.01.

<sup>6</sup> *Id.* 3, para. 3.15.5 & 3.15.6

activity. An invention must have utility and serve a useful purpose.<sup>7</sup> A patent will not be issued for an invention that is frivolous.<sup>8</sup> “An invention the primary or intended use or commercial exploitation of which could be contrary public order or morality or which causes serious prejudice to human, animal or plant life or health or to the environment.”<sup>9</sup>

Thus, the “invention” must embrace an inventive step which is filled of “industrial application”. The invention should also be non-obvious to be patented under the patent laws.

## **PUBLIC INTEREST LAW**

Public interest law is the use of litigation and public advocacy; lobbying by representation or publication, to advance the cause of minority or disadvantaged groups, and individuals, or the public interest, though the term now embraces the use of the law to promote other sectional interests such as consumer rights, environmental protection, and business interests.<sup>10</sup> Public interest law serves public interests instead of private interests. Handling issues of public interest; constitutional rights; issues related to constitutional rights; and personal property rights all fall within the realm of public interest law. Services are usually provided for the government, or for those who cannot afford an attorney from private firms.

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<sup>7</sup> *Id.* 3, para. 3.25.2

<sup>8</sup> *Id.* 3, para. 4.13(a)

<sup>9</sup> *Id.* 3, para. 4.2 3(b)

<sup>10</sup> Dhavan, “*Public Interest Law*” (Basil Blackwell 1986), p.17

## PATENT LAW AS SERVING PUBLIC INTEREST

Knowledge can either be a commodity that is bought, sold, and protected by copyright/patent, or it can serve a social purpose in dissemination, where a free exchange of ideas and information serve an educative purpose. The question still prevails whether knowledge should be a public asset first and a private right second or vice versa.

The main objective of bestowing an Intellectual Property Right upon the inventor for the invention is to recognize the same in the society, where such recognition profits him economically. The public interest is protected by way of Technology Transfer, Licenses, etc. for the innovations. The public interest and private interest are tallied by restricted period of the Intellectual Property Rights whereas their exploitations are dealt strictly. The Patents Act, 1970 with necessary amendments till date, framed in line with the provisions of the TRIPS Agreement to providing the protection of patents in India shows that the public interest is addressed widely by the Patents Act of India.

International instruments like the Universal Declaration of Human Rights promise to protect the rights of creators. However, these same instruments also want to use the results of these protected rights for the betterment of human beings all over the world. This creates a conflict between the right to control information and the right to use it for purposes of improving health, education, communication, and intellectual study.<sup>11</sup>

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<sup>11</sup> Dreyfuss, Rochelle, “*Patents and Human Rights: Where is the Paradox?*”, Molengrafica Series, Forthcoming; New York University, Law and Economics Research Paper No. 06-38; New York University Law School, Public Law Research Paper No. 06-29.

## Value to society at large

The value that patent law provides society lies in stimulating original and ingenious activity, motivating the development and commercialization of inventions, encouraging disclosure of information, and allowing for more efficient exploration of prospective inventions.<sup>12</sup>

## Dissemination of knowledge

The long-term goal of patent law “is to encourage scientific research, new technology and industrial progress. Grant of exclusive privilege to own, use or sell the method or the product patented for the limited period, stimulates new inventions of commercial utility. 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 the monopoly passes into public domain.”<sup>13</sup>

## Protection of individual fundamental and constitutional rights--Fundamental right against exploitation

The short-term goal of patent law is to safeguard creative individuals and organizations from “involuntary servitude” by giving them control over their innovations, and providing them with financial incentives for the creation, development, and commercialization of valuable inventions.<sup>14</sup>

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<sup>12</sup> Roberto Mazzoleni & Richard R. Nelson, “*The Benefits and Costs of Strong Patent Protection: A Contribution to the Current Debate*”, 27 RES. POL’Y , pp. 273, 274–300 (1998).

<sup>13</sup> *Id.* 2

<sup>14</sup> *Id.* 11

## A “Carefully Crafted” Bargain that benefits the Public

The patent system should be thought of as “a carefully crafted bargain that encourages both the creation and the public disclosure of new and useful advances in technology, in return for an exclusive monopoly for a limited period of time”.<sup>15</sup> The alternative would be secrecy, protectionism, and loss of knowledge to the public.

## L—RAMP: A CASE STUDY WHERE PATENT LAW SERVES PUBLIC INTEREST

This case study illustrates how patent law is made available to people who could not otherwise afford its protections and benefits such as students, grassroots, and rural innovators. Here the benefits to society are twofold: (1) these innovators without the mentorship afforded by this programme would be deprived of the incentives and wherewithal to bring their innovations to fruition; and (2) by mentoring these innovators the programme brings knowledge that might otherwise have been left undeveloped or hidden into the public domain for the benefit of society.

## The Lemelson Foundation

The Lemelson Foundation of United States is a private organization founded by Jerome Lemelson, a prolific inventor of renown and a philanthropist. Mr. Lemelson made it his personal mission to champion of the rights of the independent inventor. The Lemelson Foundation uses its resources to serve its three-pronged strategic mission to recognize inventive minds and good ideas, mentor students and grassroots inventors and entrepreneurs and disseminate technologies

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<sup>15</sup> *Eldred v. Ashcroft*, 537 U.S. 186, 226–27 (2003) (Stevens, J., dissenting); *see also, e.g., Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55, 63 (1998) (emphases added).

and information that enhance people's lives, illustrate the value of invention to society, create entrepreneurial/economic opportunities and foster research.

The Lemelson Foundation seeks to accomplish its international goals through its Invention for Sustainable Development Programme (ISD). The mission statement of this programme says that it “fosters and unleashes human creativity and invention to meet basic human needs and build sustainable livelihoods for the world's poor people.”

The first component of the ISD is RAMP—Recognition And Mentoring Programme. The Foundation collaborates with leading institutions to form RAMPs that support students, grassroots and other innovators, to further its broad objectives of sustainable development in third-world countries. It strives to create a “technology-based social enterprise” that provides assistance to innovators who make inventions to improve the lives of poor people by incubating the ideas with the most potential.

The second component of the ISD, the Technology Dissemination portfolio consists of projects to promote the “creation, manufacturing, distribution and adoption of technologies” with the most potential to alleviate poverty. These projects manage various stages of product development.



## **L-RAMP (Lemelson Recognition And Mentoring Programme)**

The Lemelson Foundation has teamed with IIT Madras (IITM), and Rural Innovations Network (RIN), Chennai, to create an L-RAMP (Lemelson Recognition And Mentoring Programme) in Chennai, India. This powerful alliance provides a comprehensive range of services for the innovator by way of financial support from the Lemelson Foundation; technological mentoring from IITM; and guidance regarding all business/entrepreneurial aspects from RIN. L-RAMP assists students, grassroots and other innovators who come up with inventions and innovations that can benefit the poor people.

L-RAMP further supports the innovator by testing the feasibility of innovative models for distribution, assisting in scaling and replication, developing sustainable business models and facilitating non-detrimental technology transfers to suitable entrepreneurs if certain innovators lack the inclination or capability to take their innovative ideas to market. Once an innovation becomes commercially viable the profits go to the innovator.

L-RAMP rewards innovators with ideas or products related to water, food, sanitation, healthcare, employment, education, shelter, and energy through its Innovations Awards Programme. Innovators are evaluated based on the uniqueness, societal value, and strategy for the development of their innovations.

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## THE INNOVATOR AS A PUBLIC CLIENT

L-RAMP provides structure, networking capabilities, and financial assistance to innovators for the development of ideas that might otherwise be lost forever due to lack of resources. Resources provided to the innovator are:

**Funding:** An innovator can obtain up to Rs. 25, 00,000 as an interest-free loan, repayable when the product becomes commercially viable. The loan is delivered in regulated sums upon the completion of set milestones. A sustenance allowance is also provided while the innovator is focused on the innovation

**Mentoring:** Experienced project officers guide the innovators through any difficulties they might experience in the areas of technology or business. External consultants are also made available if necessary.

**Networking:** L-RAMP provides the innovator access to its wide network of business and technical experts, government officials, and investors when necessary.

Services provided for incubation support include Technology incubation and Business incubation. Technology incubation entails design, prototype development, field trial, and laboratory testing. Business incubation comprises pilot marketing, market research, technology transfer, business planning, investment support, and capacity building.

## Pre-incubation Screening

L-Ramp directly supports innovators even at the very early stages of conception. This pre-incubation process, takes up to three months, of initial screening and selection of innovators based on the utilitarian value of their innovations, benefit to society, and commercial viability.

## Incubation Process

This process usually takes two to three years. The important step in this process is screening, which has three stages:

**Rapid Screening Session:** Innovators get to present their innovations, show how it serves as a particular solution to a problem, marketability, and user groups. L-RAMP Project officers make an assessment of the innovation based on this preliminary screening.

**Evaluation:** The assessment report is evaluated by a Steering Committee which determines whether the innovation should advance in the incubation process. Innovative ideas that fall short might still be placed in a pre-incubation phase for capacity building.

**Detailed Screening:** Stakeholders like end users, manufacturers, dealers, market promoters, and experts in the field perform their evaluations.

L-RAMP conducts workshops to help innovators prepare incubation plans along with project officers. Innovators meet with experts and the steering committee to see what kind of help might

be needed. Steering Committee approval is necessary for obtaining funding; Advisory Committee approval is required for higher level funding. Innovators must sign an MOU with project coordinators IITM and RIN.

The MOU sets out the terms of the multi-lateral agreement. It clearly states how the required funding will be distributed either after examination of a written report regarding how allotted funds have been exhausted, or on the attainment of specified milestones. Innovators agree to repay the interest-free loan in installments after the successful completion of their project—usually when the innovation becomes commercially viable. Particular care is taken to see that the repayment schedule is not structured to cause hardship to the innovator.

## **Incubation**

Incubation usually spans a period of two to three years. During this period regular assessments are made by L-RAMP project officers, and requisite funding and expertise are provided for the innovator. Upon successful completion of all the steps in the incubation plan and review by the Chief project officer and the Steering Committee the project is considered complete.

## **IMPLICATIONS FOR PUBLIC BY L-RAMP**

The funding, mentoring and incubation that L-RAMP provides the innovators has benefitted the rural poor. By the Innovation project, 3 lakh rural families and 13 lakh rural individuals have directly been impacted. Rs. 1950 lakhs of consumer surplus and Rs. 620 lakhs sales have been generated by mentored innovations. L-RAMP has so far discovered 2000 innovators.

## CONCLUSION

In conclusion, this case study makes it amply apparent that the protections and benefits of patent law are made available to clients who but for the mentoring services would have innovations that never saw the light of day. It provides legal services that such clients would never be able to obtain in the regular legal market. In exchange for the benefits to the innovator, society at large benefits from the knowledge brought into public domain. "Rural innovations help rural households save on costs, enhance incomes and offer entrepreneurial opportunities that were not available to rural Indians almost a decade ago," says Mr. Paul Basil of Rural Innovations Network. Patent law here gives the public client sufficient incentive to create and innovate, at the while ensuring that the public have access to the fruits of their endeavours. This clearly demonstrates how patent law can serve public interest. The public interest about the affordability of patent filing have been protected to a great extent which otherwise would have made the innovations lost.

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