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Significance of Intellectual Property Rights in Elementary Education

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Abstract- Intellectual property (IP) is a mind creation involving invention, works of literature and art, and the words, titles, and pictures used by commerce. For an instance, IPs, which allow people to gain financial advantage or appreciation of what they discover or produce, are covered in law by the patent, copyright, and trade-marks also known as intellectual property rights (IPRs). Distance learning is also one of the concerns for protecting intellectual property rights. Distance learning refers to interactive, online, immersive platforms for educating students at geographically isolated places from where they are taught. The utilization of intellectual property to defend the interests of the public will lead to an improvement in the general value of the information provided by prohibiting corporations or entities from patenting innovations produced by universities. The protection of IPRs is one of the most concerning issues as the mode of communication is online in most of the areas. This paper summarises the problems faced by education institutions in intellectual properties and where they are lagging behind in the protection of student's and professor's innovations. The paper also emphasizes the protection of proficient ideas emerging from the institutions.

Keywords: Intellectual Property Rights (IPRs), Elementary education, Distance learning, innovations, concerns, IPR protection.

I. INTRODUCTION

Today's young people are the input forcreation, promotion, construction and reinforcement of inventiveness and novelty. Student-oriented policies guarantee that the students start change and support it, especially as a little and healthy activate ecosystem takes into consideration. Infrastructures, research and development facilities, and others supported by the academic organisations provide students and lecturers with a forum for creating and maintaining an innovative and creative atmosphere. These ideas of both students and lecturers should be protected as an intellectual property rights. IPRs are the rights given to an owner of the content producer to protect the individual or group information which is innovative. IPRs are of different kinds. The below figure 1 depicts the types of IPRs in India.The green colour hexagons represent the education IPRs and blue colour hexagons represent business IPRs.

The first one is patent. Itsafe guards' industrial inventions, for an instance, an innovative production or process. It operates both in industry as well as academic institutions. The second one is trade mark, which protects symbols, signs, specific terms, logos or sounds that differentiate the innovative services and products used in competing world. The third one is copyright which works on protecting published or written works such as research papers, books, films, song lyrics, internet content and literary works. Fourth one, plant breeders right which is also referred as plant variety rights are the such rights that are approved for the breeder of a plant by giving specific control over the plant incorporating plant cuttings, seeds, foliage and fruit. Fifth type is utility or model design that includes production methodology in details for a particular service or product. The sixth one, geographical indication implies certain products are located to certain areas. The other locations should not misuse these products. For example, Coffee has a geographical indication in chikmagalur in India. The last one is trade secrets, which emphasizes on protection of principles, formulas, procedures, apparatus, models, prototypes, designs or information compilations that are not commonly well known or accessible readily by random people and for the same reason they are not taken care by the owner.

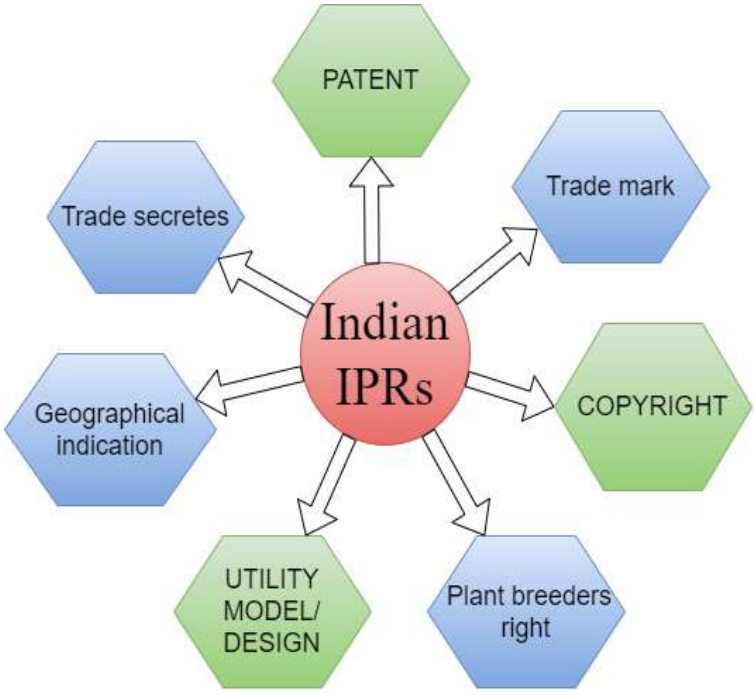

Figure 1: Types of IPRs in India

Education field mainly comprises of patent and copyright types, and also includes utility or model design and trade secrets in some cases. The ideal innovations of academic sector can be protected by various patent and copyright laws thus preventing the misutilization of one's hard work. These patent and copyright rights also help indirectly in discovery of new ideas as they will not allow copying the work of others.

The Intellectual Property rights plays a very vital role in the growing economy for any individual, institution and a governmental agency. All technological property rights dictate the industry to have a better marketing advantages and involves a huge economic interestwhich maximizes the market capture. In other ways the competition arises due to the non-availability of new technology which has an IPR, to create a counter IPRs to get the market captivity, new different lateral technologies get developed to acquire new IPRs. This spikes the industry to get a new trend setting to ignite new technological advancement altogether within the set of group industries which always keep them up in a race to get them placed at first place with new IPRs every time. So, this in turn boosts the economy by advancing a new era of technology developers.

II. LITERATURE SURVEY

Zhanna Mingaleva et. al., [1] examined the active laws in order to reveal the chief issues in legal rules for protection of intellectual property in academic and innovation to propose probable solutions. The educational material, the lecturers' materials of lectures and conferences, training ideas and courses cannot be covered by and universities. The web supports wrongful use of the work of writers. In Russia, lecturers and trainers had their intellectual property rights violated. There are also issues with the current situation.Over the course of the education cycle, intellectual property may be generated by a lecturer often without the use of university's assistance. When the lecturer's contents are published, given or available to sale or employment, copyrights of the samewill be violated. The ideas created during the educational cycle by lecturers and trainers should be protected.

Srinivasa Rao[2] highlighted the overview of intellectual property rights in India especially concentrating on patent rights. This work also deals with the patent laws in Asian countries.India has been renowned over centuries for its wealthy history, civilization and cultural and scientific heritage. Indiahas been an important contributor in recent days to the development of science and innovation capability in numeroussectors and funding for IPR action. India undoubtedly earns tremendous profits from IPR, but often complies with strict rules to protect invention.

States in which the patent organizations are located have shown a significant role in the development of patents for business, academia and research institutes. In the last ten years, the development of patents was given elevated precedence in streams such as mechanical and chemical engineering more than the areas of food and biotechnology. Innovation is a specialty of industry in the Indian education sector to promote economic growth and progress. India's research potential has been dramatically improved, both at domestic and global level, it also shows a substantial rise.

Sulekha et. al., [3] initiated the study of intellectual property knowledge among Kurukshetra University research scholars. This study concludes that a significant amount of respondents are not aware of IPRs. Some academic scholars, however, have slight knowledge of copyrights and patents. It was also seen that, in their study, the researcher had very little knowledge of copyright and patent. The authors gave suggestions that training on intellectual property should be promoted among Research Scholars. Workshops and seminars should be organized in order to create awareness. Research program should include a report on intellectual property rights. Research scholar should be provided with the practical knowledge of rights to intellectual property.

Louise Starkey et. al., [4] conducted a survey on lecturers and a small number of students to determine their understanding of intellectual property and any myths that may exist. The conclusions reflect a valid definition understanding yet ambiguity among key words such as copyright,patent, and registered design.A lecturer who is unaware of knowledge of material would possibly find it difficult to teach students how to value the intellectual property rights of others, how to safeguard their individual ideas and how to make fair use of the intellectual property of others which are features of elementary literacy.Through incorporating intellectual property material into present internet case studies and making accessible teacher tools for access, it is likely that if teachers understand the need to acquire this knowledge of content, it will be accessible in a way that makes it simple to incorporate into their teaching curriculums.

Shaheen Lakhan et. al., [5] cleared a deep understanding of the laws associated with IP is essential in the education community. While some may disagree with the laws or pursue their rights through enforcement, no other can afford to ignore the issues surrounding copyright and intellectual content.Power will come from education, and the dissemination of information will contribute to the lawful and broader use of provisions such as fair use, and the duty of consumers toward their original material and the owners or producers of that content.

Meenakshi K Khurana et. al., [6] has been clarifiedhe definition of intellectual property rightsand offered a thorough overview of the status of IP education around the world. The debate splits the globe based on the economic differences among nations and learns the problem within their level of development: developing, developed, or underdeveloped.With intensive efforts in advanced and emerging global parts, there is no question that IP education at the levels of national and international is gaining greater traction and focus. However, taking the field to the point where it will still be a big battle, significant obstacles still remain, especially in large tracts of the developing world.

Gururaj [7] made an attempt to teach IPR over various active learning methods, and to analyze the results. The outcomes include obtaining curriculum results via the Course Outcomes.The analysis of the achievement before and later the implementation of active learning methods indicates that the active learning approach has supplied for the students to develop their ideas according to IPRs.Student-focused active learning approach is proven to be an active tool for educating the futuristic students. Intellectual property is essential to promoting creativity in the field of engineering, and is therefore part of the curriculum for engineering education. The Intellectual Property Rights (IPR) course has historically been taught with a methodology based on the instructor.

Shefalika Ghosh Samaddar [8] implemented an open courseware-dependent platform for promoting the teaching of IP courses.During the creation of the syllabus, lecture schedule, case study and experimental assignment for the paper “Techno-legal Dimension of IP Rights”, it was found that some conceptual differences remain among the theoretical concepts, a legislative structure and analogous global features.In this work, these problems and some of their effectively applied solutions are discussed as a case-study. It is also designing a groundbreaking evaluation procedure and predictive feedback system. As the project's chief prosecutor, “Educational Content Creation and Related Depository of Intellectual

Property Rights Web Services", numerous IPR tools and repositories are being abused in the IPR curriculum.

2.1 STARTUPS AND IPR

Start-up always have a tough competition with a more dominated and sustainable business establishment which may cause threating situations. To escape from this unstabilised situations start-ups always thrives to work in an innovative thought process environment to make them competitive beyond conventional mindset, so that their unique way of work with new IPRs can strengthen up to compete with the technological giants in the market.

2.2. ENTREPRENEURSHIP AND IPR

Innovation always needs a good backup with investments and marketing, without these booster's innovation fails to leverage its importance and loses its zest. Any individual person whose idea is registered as an IPR will always have a chance to make it commercialize with a proper financial support to make it more enhanced commercially viable solution. So to make any small innovations would make an impact to the society through an entrepreneur platform. With such innovation backed up by entrepreneurship provided with proper brand identity will lead to a successful business venture.

III. CONCERNS OF EDUCATION IPRs

Librarians are in an exclusive role as a connection between copyrighted content creators and users. These librarians were used to sit back and disregard how the content was used and distributed for a long time.In every field of academia, the effects are felt but libraries are foremost on the strikelist as straight intermediaries of contents. Neither students nor teachers have a good understanding of intellectual property laws and the limited scope of fair utilize. Both students and faculty continue to be driven by libraries.Professors prefer to use the word "plagiarism" instead of "violation of copyright" because it is the similar in legal terms. Students should be motivated to find too much material freely accessible for Web copying, school archives and teacher references lists.Nevertheless, the use of these resources must be differentiated and the content is the only guide that must be specifically stated. In order to minimize the plagiarism risk and to make sure that the classroom, library and educators are not involved to violation situations, the purpose and value of referencing should be shared.

Distance education which is a kind of E-learning, is a method of organisation of training process by using telecommunication and information technologies. It enables knowledge to be accessed from a far, without direct personal interaction with the teacher or mentor. Distance education is viewed by some scholars as a type of further education or preparation.Distance education offers fair educational opportunities to those who do not have the ability to travel to the main education centres. Some professors and educators claim that video-readings, exams, online textbooks, etc., are a replacement for teaching in distance learning. In this scenario, a teacher who is a key player can vanishin the educational process.

IV. PROTECTION OF IPRs IN EDUCATION

Academics and students get caught in the quick change that affects the plan and delivery of academic courses. This impacts the lawyer's education in intellectual property, as well as non-law programs that want to give their students education in intellectual property.Intellectual property has historically been imparted by law faculties as a law matter to law students. Suggesting intellectual property to be incorporated as an interdisciplinary feature of a technology or science program contradicts two presumptions: that impossible cognitive obstacles may exist, and that lawyers have to teach intellectual property. Including education on intellectual property in the curriculum of non-law can be appreciated as an 'opportunity' for engaging with a critical subject connecting economic, technical andlegal disciplines., Teaching non-lawyers an intellectual property delivers a unique viewpoint for the lawyer, which may improve law course's plan and delivery.Although IPRs are legally grounded, education in intellectual property has divisions that touch upon many fields of academic exploration and business activity, comprising: finance, economics, revenue system, human rights, education,ethics, authority and management.In non-law educators, the use of available resources and a deliberate mix of learning

outcomes and evaluation approaches can be used to provide learners with an intellectual property knowledge level and competence.

When researchers make use copyrighted content for coaching or for purposes like research, it must be assured that the use is inside the authorisation acquired from the copyrightholder(s) that are concerned or within the scope of the exceptions granted by Indian copyright legislation. Different courts interpreted the scope of the numerous learning use-related exceptions under Indian copyright law of India.An institutional repository may be created by the academic institution and a connection to the same may be given on its official website. Theses, dissertations, articles, publications and other internal publications shall be included in this collection. The researchers can apply these works in other open repositories in the similar topiczone, in lack of an official repository. Researchers may be stimulated to authorise their works under afree license so that other scholars could also utilize the research results by providing the researchers with correct attribution.

V. CONCLUSION

Intellectual property rights play a very crucial rule in the field of education as most of the information being exchanged through internet. The spectrum of intellectual property has amplified severely because of the rapid and ongoing advances in technology. The advancement of communications and information technology, biotechnology, e-commerce, and a variety of other emerging fields has resulted in intellectual property being increasingly central in nation and business agenda.

This paper emphasizes on the problems of IPRs in education and protection of such rights. The issues include violation of rules related to copying some information which is patented or copyrighted and also work done which is published somewhere online is not properly protected leading to misuse. Protecting the work is to ensure proper patent and copyrights. The authorisation logics should be standard as a precautionary measure.

REFERENCES

[1] Zhanna Mingaleva and Irina Mirskikh, "The protection of intellectual property in educational process," *Procedia - Social and Behavioral Sciences*, pp. 1059-1062, 2013.

[2] Y. Srinivasa Rao, "Intellectual Property Rights in India: Significance of Patents," *National Conference*, pp. 121-134, 2014.

[3] Sulekha and Sukhbir Singh, "Awareness of IPR (Intellectual Property Rights) among the ResearchScholars of Kurukshetra University Kurukshetra," *International Journal of Library and Information Studies*, pp. 193-199, Vol. 8(2), 2018.

[4] Louise Starkey, Susan Corbett, Ann Bondy and Susan Davidson, "Intellectual property: what do teachers and studentsknow," *International Journal of Technology and Design Education*, pp. 333-344, 2017.

[5] Shaheen E Lakhanand Meenakshi K Khurana, "Intellectual property, copyright, and fair use in education," *Journal of Academic Leadership*, pp. 1-11, Vol. 6, 2008.

[6]Meenakshi K Khurana and Shaheen E Lakhan, "The State of Intellectual Property Education Worldwide," Journal of Academic Leadership, pp. 1-11, Vol. 5, 2007.

[7] Gururaj, "Active learning approaches to teach intellectual property rights," *International Conference on MOOCs, Innovation and Technology in education*,pp. 306-309, 2015.

[8] Shefalika Ghosh Samaddar, "Teaching Quality Intellectual Property Management using Information Technology in Indian Pedagogy," *International Conference on Social Science and Humanity*, pp. 188-193, Vol. 5, 2011.