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Copyright in Construction Sector: A Comparative Overview

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Abstract

Copyright is an exclusive monopoly right of an author/creator of copyrightable work, to copy, dispose of the work and prevent others from exploiting the work. Copyright plays an important role in protecting intellectual right in architectural works, BIM models, technical design documents, blueprints, renderings (2D, 3D images), elevations etc. Often people apply for protection under design law, unaware of the fact that they can enjoy copyright protection under copyright statute even without registration.

This research paper is an attempt to analyse application of copyright law in construction sector. Paper contains comparative analysis of copyright protection in construction industry and comparative analysis of practical challenges in protection of copyright in architectural work and limitations (for e.g. *Freedom of Panorama /public place limitation*) on copyright in construction sector. Author has also provided brief account of relevant judicial pronouncements on essentials for copyright, need for protection of copyright, and conflict between proprietary rights of owner and copyright of author/architect. Author has also proposed the test of reasonable necessity to address the conflicting interest of building owner and copyright holder.

Keywords: Copyright, Construction, Architect, Architecture

"We shape our buildings; thereafter they shape us."

-Winston Churchill

Methodology

This research work employs quantitative analytical method containing analytical study of concept of copyright, existing laws and practical challenges in protection of copyright in construction sector. The research work mainly employs doctrinal methodology by referring to various secondary resources, government reports and judicial pronouncements. It contains comparative analysis of statutory recognition of copyright mainly in India, USA, UK and the Berne Convention.

Introduction

Imagine a situation, an architect draws a design plan for a construction of a cafeteria, contractor executes the work as per plan, however owner decides to reuse the design with some small change for a second cafeteria. In such case, apart from, monetary consideration for services of design, do the

architect have any other right? Can he stop owner from making changes in design suggested by him? Answer to all such delicate questions lies in Copyright and Law on Copyright.

Copyright is a statutory right to prevent others from copying or exploiting work of authors without permission or credit. Typically, Copyright is conferred for the duration of life of the author plus 60 years. It is an intellectual proprietary right conferred upon author/creator of a work in consideration for his/her efforts in creating artistic, literary, dramatic work. The term literary is very wide and covers the architectural designs/drawings, 2D/3D designs, paintings etc.

Meaning & Definition of Copyright:

According to the Oxford Dictionary Term 'Copyright' is derived from the expression of "copies of words", first used in the context in 1586. Copyright is, "the *exclusive legal right to reproduce, publish, sell, or distribute the matter and form of something* (such as a literary, musical, or artistic work)" (Merriam-Webster, 2021)[1]. The Legal Glossary of Government of India has defined term copyright as, "the exclusive right given by law for a certain term of years to an author, composer etc. (or his assignee or heirs) to print, publish and sell copies of his original work or translation thereof."(Ministry of Law and Justice)[2]

From above definitions of copyright it is clear that only work which is 'original' is entitled for copyright protection. "*Original*, as the term is used in copyright, means only that the work was *independently created by the author* (as opposed to copied from other works), and that it *possesses at least some minimal degree of creativity*. To be sure, the requisite level of creativity is extremely low; even a slight amount will suffice. The vast majority of works make the grade quite easily, as they possess some creative spark, 'no matter how crude, humble or obvious' it might be."[3]

Copyrights do not protect the process or method of creating the work.[4] Copyright in a work does not exist until it is recorded in some tangible written form. For example, a painting is protected only when it is recorded in some tangible form like canvass or wall.

"The term '*work*' means any of the following, namely

(i) a literary, dramatic, musical or artistic work,
(ii) a cinematograph films
(iii) a sound recording."[5]

The definition of the term '*literary work*' u/s 2 (o) of the Indian Copyright Act, 1957 (hereinafter referred to as 'the Copyright Act') is very narrow and provides that, "literary work includes computer programmes, tables and compilations including computer database." Article 2, the Berne Convention for Protection of Literary and Artistic Work, 1886 states that, "The expression '*literary and artistic works*' shall include every production in the literary, scientific and artistic domain, whatever may be the mode or form of its expression." The Convention provides detail list of examples of literary works which includes "works of drawing, painting, *architecture*, sculpture, engraving and lithography."[6]

Though the Convention offers protection for 'literary or artistic works,' it also allows the government 'to permit reproduction of a work without the creators consent' subject to condition that, "reproduction does not conflict with normal exploitation of the work and does not unreasonably prejudice the

legitimate interests of the author." (**the Berne Convention, 1886**)[7] Hence, an architectural plans are now protected in pictorial, graphical, or sculptural works. Such protection serves two purposes, first, it rewards the architect for his/her aesthetic and artistic work and labou/efforts that they put into the works. Second, the public benefits because extending copyright protection to design works will incentivize professionals to produce them. (**Fowles John B., 2005**)[8]

Need for protection of Copyright

In ***University of London Press* v. *University Tutorial Press***[9], court held that, "copyright over a work arises and subsists in that work due to the skill and labour spent on that work, rather than due to inventive thought. This is more popularly known as the '*sweat of the brow*' theory. Originality derives merely from the fact that sufficient labour, skill, capital and effort (whether physical or otherwise) has been applied in the work." This '*sweat of the brow*' theory was adopted in India in the case of ***Burlington Home Shopping* v. *Rajnish Chibber***[10], where it was held that, "…a compilation may be considered a copyrightable work by virtue of the fact that there was devotion of time, labour and skill in creating the said compilation from many available works."

Government of India, in its handbook on Copyright Law, has reasoned the need for recognition of copyright in following word;

"Copyright ensures certain minimum safeguards of the rights of authors over their creations, thereby protecting and rewarding creativity. Creativity being the keystone of progress, no civilized society can afford to ignore the basic requirement of encouraging the same. Economic and social development of a society is dependent on creativity. The protection provided by copyright to the efforts of writers, artists, designers, dramatists, musicians, architects and producers of sound recordings, cinematograph films and computer software, creates an atmosphere conducive to creativity, which induces them to create more and motivates others to create." (**Ministry of Commerce and Industry**)[11]

From aforementioned authorities, one can conclude that, Copyright is an incentive for promotion of creative invention. It is conferred on the author for the physical and mental labour he/she has invested in creating a work. Socio-economic development of any society is based on creativity and invention in all spheres of life. Copyright, along with other intellectual property rights, ensures and promotes such creativity by creating a conducive environment.

Limitations of Copyright Protection:

A Copyright shall cease to exist in architectural work as soon as the work is registered under the Designs Act, 2002 (which protects 2D or 3D shape, configuration, pattern, ornament or composition). Similarly, "if copyrighted architectural work is reproduced by the industrial process more than 50 times it will lose its copyright." (***Microfibers Inc.* v. *Girdhar & Co. & Anr.* 2006**)[12]

Copyright protection is confined to certain acts specified in Section 14 of the Indian Copyright Act, 1957. Oral communication of work is not an infringement of Copyright. But when trade secrets are communicated orally by an employee or others in possession of the secrets to competitors, an action for the breach of trust or confidence will lie. This is specifically provided in Section 16 of the Copyright Act, 1957.

Similarly, no protection is available under the Copyright Act where a person publish a work which resembles the authors work in title and get up or appearance, and causes confusion due to resemblance with the authors work or cause damage to its reputation. However, the author may have a remedy under the law of passing off (prevents misinterpretation of one's goods and services of with other's) or libel (false written statement) as the case may be.

Another limitation of Copyright is that it never protects the idea. What is protected is only expression of idea. "In no case does copyright protection... extend to any idea."(**17 U.S.C.A. § 102(b)**)[13] You cannot make copies of original architectural drawings and plans without a license from the architect that authored the drawings and plans. You may be found to have infringed the architect's exclusive right to prepare derivative works if you make new drawings that are modifications of the original architectural drawings and plans. (***Curtis* v. *Benson*, 1997**)[14] This answers the question raised in aforementioned hypothetical example of 'copy of design with few changes.' Copyright prevents the copying or reproduction the work without approval of author i.e. architect.

Registration of Copyright

"*Registration under the Copyright Act is optional and not compulsory*. Registration is not necessary to claim a copyright. Registration under the Copyright Act merely raises a prima facie presumption in respect of the particulars entered in the Register of Copyright. The presumption is however not conclusive. Copyright subsists as soon as the work is created and given a material form even if it is not registered." ***(Asian Paints (I) Ltd.* v. *Jaikishan Paints & Allied Products*, 2002**)[15]

Legal recognition of Copyright in Construction Industry

The first instance of copyright in construction industry, may have had its roots in ancient Egypt. Architectural legend describes the ancients' deification of the Master Builder. He was glorified by the Egyptians as the god "Imhotep (Egyptian chancellor to the Pharaoh Djoser)," the master architect of the step pyramid in Egypt. "The master architect held high station in Egyptian civilization. He was the only one who knew the way to the burial chamber of the Pharaoh. As a result, he was killed as part of the burial ceremony and buried with his king. Today, such dire steps to protect the integrity of architectural design are no longer necessary." (**Cooper R. Brent and Dortch Micah**)[16]

Modern legislations confer a copyright on the author (one who has created/published work in a permanent tangible form) of the work, who in the construction sector, generally is the designer/an architect or an engineer. Work such as architectural works, BIM models, technical design documents, blueprints, renderings (2D, 3D images), elevations etc. can be subject matter of copyright protection in construction industry. If design is created by person other than client/owner, then in that case the copyright shall vest as per the contract between them. If contract is silent, and the design is result of '*work for hire*,' the copyright shall vest in the client/employer[17] unless otherwise agreed between the parties. However, use or reproduction of copyrighted work may vest in others if there are licensing or assignment contracts by the author (See, for example AIA Contracts (Series B)). Conveyance or licensing must be through a written deed in order to avoid legal complications. "If the copyright holder agrees to transfer ownership to another party, that party must get the copyright holder to sign a piece of paper saying so. It doesn't have to be the Magna Carta; a one-line pro forma statement will do." (***Effects Associates, Inc.* v. *Cohen*, 1990**)[18]

Article 2(1) of the Berne Convention, 1886 requires the extension of copyright protection to, *"works of . . .* drawing, painting, architecture, sculpture, engraving *. . . and three-dimensional works relative to . . .* geography, topography, architecture*..."*

In India, Section 13 of the Copyright Act, 1957 clearly extends copyright protection to "*artistic works*" (which, as defined under Section 2(c)(ii) of the Copyright Act, 1957, specifically includes "*work of architecture.*"

Further, the term '*work of architecture*' is defined under the Act as, "…any building or structure having an artistic character or design, or any model for such building or structure." (**Section 2(b), the Copyright Act, 1957**)

So long as the architectural work is distinct (not substantially similar) and original it is eligible for protection under the Copyright law. However, Section 59 of the Copyright Act impose restriction on remedies in case of "*works of architecture.*" As per Section 59, "… where construction of a building or other structure which infringes or which, if completed would infringe the copyright in some other work has been commenced, the owner of the copyright shall not be entitled to obtain an injunction to restrain the construction of such building or structure or order its demolition." (Section 59 (1), the Copyright Act, 1957) Hence, in the event of copyright violation, the only option that remains with the copyright owner is to claim damages (monetary compensation) and criminal prosecution.

Similarly, In USA, Architectural plans and drawings are protected by copyright law as "pictorial, graphic, and sculptural works."(**17 U.S.C. § 102(a) (5)**) The exclusive rights in such copyrighted works includes the right to:

(a) make copies of the architectural drawings, and

(b) prepare derivative works based upon the copyrighted drawings. (**17 U.S.C. § 106(1) & (2)**)

Since copyright is mainly available in '*Architectural designs/works*,' it is important to understand the term. The Architectural Works Copyright Protection Act of 1990 (AWCPA) of US defines term '*architectural work*' as,

"The design of a building as embodied in any tangible medium of expression, including a building, architectural plans, or drawings. The work includes the overall form as well as the arrangement and composition of space and elements in the design, but does not include individual standard features." (**17 U.S.C. § 101**)

A work of architecture (a building or a model for a building) is an "artistic work" under section 4(1) of the Copyright, Design, and Patent Act 1988 of UK. Section 4 provides:

(a) a graphic work (including painting, drawing, diagram, map, chart, or plan, engraving, etching, lithograph, woodcut, or similar work), photograph, sculpture, or collage, irrespective of artistic quality,

(b) a work of architecture being a building or a model for a building, or

(c) a work of artistic craftsmanship.

The position on copyright in Britain is, "unless an alternative agreement has been made, the architect owns the copyright in the drawings and documentation produced in the course of the project. The client will usually have a license to copy and use them only for purposes related to the project. If stage payments have been made to the architect, and the stage involving the planning submission has been completed and paid for, then the client has the right to us e the relevant drawings for the purpose for which they were prepared (i.e. the planning application), regardless of any subsequent dispute which results in the withholding of fees owed for any following project stages" (**RIBA: Explaining an Architect's Services, June 2008**)[19]

As per the Royal Institution of British Architects (RIBA) standard form of contract, if fees due to author/architect is not paid, the licence (to carry out construction as per design) would not be valid. Copying, distributing or renting out design of author to other designers or to make alterations base on the original drawings without the author's permission/licence is considered as infringement of copyright.

The EU Directive requires Member States to provide for exceptions or limitations to the reproduction right in case of "use of works, such as works of architecture or sculpture, made to be located permanently in public places;"(**EU Directive, 2001/29/EC**)[20]

Hence, copyright protection in architectural work has been recognized by almost all nation states and even under international statutes. However, it is also important to understand how judiciary has responded to the statutory protection.

Judicial Interpretation

In, ***Holland L.P. & Anr.* v. *A.D. Electro Stell Co. Pvt. Ltd.***[21], plaintiff argued that, u/s 2(c) read with section 13 of the Act, he had the "right to convert a two dimensional artistic work into a three dimensional constructions" and that the "drawings" are capable of being copyright protection under Section 15(2) of the Act.

One also need to understand that, in case of architectural work, the scope of protection will be limited as compared to the other forms of artistic works. "Concession to practicality, photographs or other renderings of buildings are not prohibited if the building is ordinarily visible from public space."(**17 U.S.C. §§ 106, 120(a)**)[22] This is commonly known as '*public place limitations*' which in case of construction industry recognizes architecture as a public art form. (**Cooper R. Brent and Dortch Micah, Pg. 6**). Indian law too, has recognized the principle of '*Freedom of Panorama or public place limitation*' u/s 52 (1) of the Copyright Act, 1957 which provides for 'exceptions to the infringement of copyright.' It provides that, "the making or publishing of a painting, drawing, engraving or photograph of a work of architecture or the display of a work of architecture" shall not constitute copyright infringement (Section 52 (1) (s), the Copyright Act, 1957).

In, ***ATTIA* v. *Society of the New York Hospital HOK TCA*** United States Court of Appeals, Second Circuit. In 1999 (Docket No. 98-7797) decided upon the issue of violation of copyright in architectural drawings. In the instant case, complaint alleged that "Defendants had unlawfully copied his architectural drawings to effectuate the Hospital's Major Modernization Program, and had publicly misrepresented Plaintiff's 'design, ideas and concepts' for the project as their own."

However, as observed by the Court, Plaintiff failed to show "substantial similarity." Court held that, "Whatever similarity exists between his drawings and Defendants' realizations relates only to ideas and concepts, elements that are not protected by the copyright law."

Court in this case passed following observation;

"The problem of distinguishing an *idea* from its expression is particularly acute when the work of "authorship" is of a functional nature, as is a plan for the accomplishment of an architectural or engineering project. As a generalization, to the extent that such plans include generalized notions of where to place functional elements, how to route the flow of traffic, and what methods of construction and principles of engineering to rely on, these are "ideas" that may be taken and utilized by a successor without violating the copyright of the original "author" or designer. On the other hand, to the extent that the copier appropriates not only those ideas but the author's personal expression of them, infringement may be found." (***Attia* v. *Society of New York Hosp.* 1999**)[23]

In *Sparaco* v. *Lawler, Matusky, Skelly Engineers,* a contractual provision between the owner and the plaintiff (architect) was found to have been breached when the owner hired another surveyor and then permitted him to modify the plaintiff's pre-existing site plan drawings for use on a revised project. Court, in this case held that,

"When NMF breached the contract by permitting LMS to copy Sparaco's plan, without his consent and without compensating him for the re-use of his drawings, Plaintiff was damaged in an amount coextensive with the actual damages he could recover for the infringement of his copyright." (***Sparaco* v. *Lawler, Matusky, Skelly Engineers,* 2004**)[24]

Hence, re-use of drawing without license/authority of author amounts to infringement which can also be treated as breach of contract between author and owner. Author in such cases shall be entitled to claim compensation for breach of contract.

Defending Copyright in Architectural Work

To substantiate the copyright infringement claim, every copyright owner has to prove:

(1) ownership of a valid copyright and

(2) copying or infringement of protected portions of its copyrighted work. (**Feist Publ'ns, Inc…, 1991**).[25]

"Additionally, to receive copyright protection of architectural plans and specifications, the plaintiff must also comply with the requirements of '*originality*,' despite the fact that the fundamental elements of architectural designs exist in the public domain." (**Melville B.Nimmer & David Nimmer, 2005**)[26]

Fiest case also laid down two tests for determining whether there is any infringement of copyright. First, whether there was *evidence of direct or indirect copying*. Second, whether the *copying was so substantially similar to qualify as infringement*. (**Feist Pub'lns, Inc., 1991**)[27] However, the concrete meaning of term 'substantially similar' has not been defined by the court.

In India, in case of ***S.K. Dutt* v. *Law Book Co. And Ors.***,[28] court determined the amount of *substantiality* should be more than half of the total work. It has also held that where the half of the work is copied and the remaining being original work, it does not constitute infringement.

a. "If there are no similarities, no amount of evidence of access will suffice to prove copying".

b. "If evidence of access is absent, the similarities must be so striking as to preclude the possibility that plaintiff and the defendant arrived at the same result."

However, what qualifies for substantial similarity, has to be decided on case to case basis. Having a uniform criteria of 'half of total work' may not serve the justice in each case. Thus, making new drawings with *substantial modifications* in original architectural drawing will not constitute an infringement.

While determining the copyright infringement case, "the court must evaluate the validity of the copyright at issue. A certificate of copyright registration is prima facie evidence of the validity of a copyright. But, even if a valid copyright certificate exists, architectural works must also exhibit some creativity before they are eligible for protection." (***CSM Investors, Inc.* v. *Everest Development, Ltd.*, 1994**)[29]

"Evidence of direct copying is often not available, therefore, in most cases infringement must be established using circumstantial evidence by showing that: 1) the accused infringer had access to the plaintiff's plans and specifications; and 2) the two works are substantially similar in idea and expression." (***CSM Investors, Inc.* v. *Everest Development, Ltd.*, 1994**)[30]

Remedies for Infringement

Interim injunction

By filing application for interim relief, author can prevent continuous infringement of copyright work as well as the possible breach of infringement. In the English case of *American Cyanamid* v *Ethicon Ltd.*[31] Court laid down three requirements for grant of interim relief. They are;

a. Prima facie case
b. Balance of Convenience tilting in favour of applicant; and
c. Irreparable injury (in absence of interim relief). (***American Cyanamid* v *Ethicon Ltd., 1975***)

Pecuniary relief

Under Sections 55 and 58 of the Indian Copyright Act, 1957, the plaintiff can seek the following three remedies, namely

a. account of profits
b. compensatory damages and
c. conversion damages which are assessed on the basis of value of the article converted.

Anton Pillor Order

In a landmark decision of English Court of Appeal in ***Anton Piller AG* v. *Manufacturing Processes***,[32] issued three orders namely,

a. An injunction restraining the defendant from dealing in the infringing goods or destroying, them;
b. An order that the plaintiffs solicitors be permitted to enter the premises of the defendants, search the same and take goods in their safe custody; and
c. An order that defendant be directed to disclose the names and addresses of suppliers and customers and also to file an affidavit will a specified time giving this information.

The (Anton Piller) order intends to prevent the danger of destruction of evidence.(***Yousuf* v. *Salama, 1980***)[33] By virtue of *Anton Pillor*, now it is a settled position (and followed much widely) *that,* an *ex-parte* order may be passed if it feels that the case is balanced in favour of copyright holder. The *Anton Piller order* though *prima facie* seems to be harsh for defendants, it plays a vital role in identifying the possible violation of intellectual property rights. However, use of this potent weapon against innocent defendant results in violation of privacy of such defendant, and needs to be dealt with sternly. (**Yadav V., 2018**)[34]

Practical challenges in protection of architectural copyright

Though the Copyright law affords right to architectural or associated artistic work, there are practical challenges in implementing the same. One such challenge is a very *thin line of distinction between inspiration and plagiarism*. This is particularly very complicated in construction field as the copyrighted work is publicly displayed once the construction is completed. This is where the exceptions created under the *Freedom of Panorama or public place limitation* pose challenges before architectural copyright holder. An example of Chinese pavilion is pertinent here. In 2010, the construction of the Chinese Pavilion (the Crown of the East) sparked a heated battle given its stark similarity to the Japanese Pavilion and the Canadian Pavilion constructed in 1992 and 1967, respectively. Consequently, Ni Yang, the assistant designer of the Chinese Pavilion, denied the allegations of plagiarism stating that there were "differences between his work and mine. His work had a decorative purpose; mine is a building. Pavilion style is widely used in architectural design, so it cannot be said that it is the creation of Tadao Ando (the architect of the Japanese Pavilion)."(**WIPO, 2011**)[35]

The right to the integrity of a work (moral right given under copyright law to the architect) is another debated area. The question that this right has posed is, can the building owner make changes in a structure of a building, of which copyright vests in an architect? Section 57 (1) (b) of the Act, provides that the author has right "*…to restrain or claim damages* in respect of any distortion, mutilation, modification or other act in relation to the said work which is done before the expiration of the term of copyright *if such distortion, mutilation, modification or other act would be prejudicial to his honour or reputation.*" As these are moral rights, they will not pass on with the economic rights and will remain with author of work, which in case of architectural work would be architect. Hence, if alterations, modifications are likely to bring disrepute to the author/architect, under moral rights, he/she can bring action in court of law.

In the case ***Amarnath Sehgal* v. *Union of India*, (2005)**[36] certain murals of very high acclaim were removed and placed in the storage during the renovation of Vigyan Bhavan. It was done without the

permission of the author, Mr. Amarnath Sehgal. He claimed that, "such dismemberment and treatment of his work of art by government authorities was mutilation and hence affected his honor and reputation."

Delhi High Court in this case held that, "*author's moral rights were violated as right to paternity and integrity were essential rights bestowed upon an author by the Act*." Court opined that,

"The mural, whatever be it's form today, is too precious to be reduced to scrap and languish in the warehouse of the Government of India. It is only the plaintiff who has a right to recreate his work and, therefore, has a right to receive that the broken down mural. *Plaintiff also has a right to be compensated for loss of reputation, honour and mental injury* due to the offending acts of the defendants."[37]

In case of ***Raj Rewal* v. *Union of India & Ors.***,[38] the question before the Delhi Court was whether reconstruction can be considered an infringement of copyright u/s 52(1)(x) of the Copyright Act, 1957. In this case, Raj Rewal, an architect, designed the Hall of Nations, situated in *Pragati Maidan* in New Delhi. Upon its construction, this 'Hall of Nations' was declared as the 'world's first Large Span Concrete Structure'. However, in 2016 the occupiers of the building in contention i.e. the Indian Trade Promotion Organization proposed construction of a new building in place of the old one. As a result the building was demolished in 2017. Plaintiff claimed that, "*demolition of the building was against his moral rights*" and claimed interim relief.

Denying the claims of plaintiff, Court ruled that, "Section 52(1) (x) of the copyright act which provides an exception to copyright, stating that reconstruction cannot be considered an infringement of copyright. The section would be left inoperative if the contention of the appellant, that destruction of a building under Section 57(1) (b) is prohibited, is upheld." Court reasoned its decision by stating that, "Right to property was right embedded in the constitution itself under Article 300-A, compared to moral rights, which were statutory rights provided by Indian Copyright Act. …constitution rights prevail over the statutory rights."

Though the aforementioned two pronouncements of Delhi High Court are contradictory, one can conclude that, the architect has moral right of integrity, but it cannot circumvent constitutional right to property. In case the alterations or modifications to the building structure are reasonably necessary, same may be effected by the owner. However, if such necessity is not proved, and the alteration/modification brings disrepute to the architect, same may be prohibited/objected by the architect. Unfortunately, neither the legislation nor the judicial interpretation has applied the wednesbury principle of '*reasonable necessity*' to reconcile the competing rights of owner and architect.

Conclusion

Many architects/construction designers are unaware, either about their intellectual rights or about the mechanism (legal and judicial) of enforcement of these rights. The Copyright law in India has been developed in line with international developments particularly, in accordance to the implementation of Berne convention. Judicial application of doctrine of sweat of the brow also underlines the pro copyright approach of Indian judiciary. However, as observed hereinabove, there are various practical challenges in protecting and enforcing these rights. Addressing these challenges by carrying out necessary legal and administrative reforms is need of an hour. Creating awareness about copyright

law, its need and benefits will certainly help in reducing the disputes between author and licensee (owner/employer in case of contruction industry).

It is also pertinent to strike balance between protection of copyright on one hand and protection of proprietary rights (and even fundamental right to shelter) on the other hand. This can be done by adoption of reasonable necessity test (protecting owners) and developing compensatory jurisprudence (compensating copyright holder).

Future work:

In the light of technological advancements, the expanded *sui generic* system of copyright is need of future. The national and international legal and judicial systems must strive to address the questions that may arise out of use of robotics in preparation of design or other copyrightable work. Clarity is required in terms of questions like, who will be the author? Will it be robotic inventor or robot owner or robot itself (given the fact that one of the robot has been conferred with citizenship in recent times)?

References

1. Merriam-Webster.com dictionary. Retrieved from, https://www.merriam-webster.com/dictionary/copyright (accessed 20th June 2021).
2. Ministry of Law and Justice-Government of India. Legal Glossary. Part I. pg. 79. Retrieved from, https://legislative.gov.in/sites/default/files/legal-glossary/A%20to%20C.pdf (accessed 22nd June 2021)
3. *Feist Publications Inc.* v. *Rural Telephone Service Co. Inc.* 499 U.S. 340 (1991)*; see also, CSM Investors, Inc.* v. *Everest Development, Ltd.*, 840 F. Supp. 1304 (D. Minn. 1994), at 1310.
4. 17 U.S.C § 102 (2006).
5. Section 2(y) of the Copyright Act, 1957.
6. World Intellectual Property Organization. Understanding Copyright and Related Rights. (2016) pg.7. Retrieved from, http://www.wipo.int/edocs/pubdocs/en/wipo_pub_909_2016.pdf (accessed 30th May 2021)
7. Article 9 (2), the Berne Convention for the Protection of Literary and Artistic Works, 1886
8. Fowles John B., *The Utility of a Bright-Line Rule in Copyright Law: Freeing Judges From Aesthetic Controversy and Conceptual Separability in Leicester* v. *Warner Bros.*, 12 UCLA Ent. L. Rev. 301, 305 (2005)
9. [1916] 2 Ch. 601
10. *Burlington Home Shopping* v. *Rajnish Chibber* 61 (1995) DLT 6
11. Ministry of Commerce and Industry, Government of India. A Hand Book of Copyright Law. Retrieved from, http://copyright.gov.in/documents/handbook.html (accessed 29th May 2021)
12. See, *Microfibers Inc.* v. *Girdhar& Co. & Anr.* RFA (OS) NO.25/2006.
13. 17 U.S.C.A. § 102(b).
14. Curtis v. Benson, 959 F. Supp. 348, 351-52 (E.D. La. 1997).
15. *Asian Paints (I) Ltd.* v. *Jaikishan Paints & Allied Products*, 2002 (6) Born CR 1: (2002) 4 Born LR 941: 2002(4) MAH LJ 536.
16. Cooper R. Brent and Dortch Micah. *Copyright and IP Issues Involving Construction.* Cooper & Scully. D/750472.1 Retrieved from, https://www.cooperscully.com/uploads/resources/Article%20on%20IP%20Issues%20in%20Construction%20.pdf (Accessed 25th June 2021)
17. See, 17 U.S.C. § 201(b)
18. *Effects Associates, Inc.* v. *Cohen*, 908 F.2d 555, 557 (9th Cir. 1990).
19. Clause 15 of the Royal Institute of British Architects (RIBA), Explaining an Architect's Services, June 2008.
20. Article 5 (2) (h), The EU Directive on the Harmonisation of Certain Aspects of Copyright and Related Rights in the Information Society, 2001/29/EC
21. *Holland L.P. & Anr.* v. *A.D. Electro Stell Co. Pvt. Ltd*. CS(COMM) 83/2017
22. See 17 U.S.C. §§ 106, 120(a).

23. *Attia* v. *Society of New York Hosp.,* 201 F.3d 50, 54 (2d Cir. 1999)
24. *Sparaco* v. *Lawler, Matusky, Skelly Engineers LLP*, 313 F. Supp.2d 247 (S.D.N.Y. 2004)
25. Feist Publ'ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 348, 361 (1991).
26. Melville B. Nimmer & David Nimmer. Nimmer on Copyright. *Matthew Bender*. (1997) at § 2.01
27. *Feist Publ'ns, Inc*. v. *Rural Tel. Serv. Co.*, 499 U.S. 340 at 361; see also *Johnson* v. *Gordon*, 409 F.3d 12, 18 (1st Cir. 2005).
28. *S.K. Dutt* v. *Law Book Co. and Ors.,* AIR 1954 All 570
29. *CSM Investors, Inc.* v. *Everest Development, Ltd.*, 840 F. Supp. 1304 (D. Minn. 1994), at 1309
30. *Id*. At 1311.
31. *American Cyanamid* v. *Ethicon Ltd.* [1975] AC 396
32. *Anton Piller AG* v. *Manufacturing Processes,* [1976] Ch 55
33. *Yousuf* v. *Salama* (1980) 3 All ER 405, at pg. 406
34. Yadav V. Judicial response to Anton Piller order: a critical appraisal. *International Journal of Basic and Applied Research.* (October 2018**).** Volume 8 Issue 10. At pg.221
35. World Intellectual Property Organization (WIPO). Architecture and Copyright Controversies. *WIPO Magazine*. (September, 2011). https://www.wipo.int/wipo_magazine/en/2011/05/article_0004.html (accessed 10th July 2021)
36. 117 (2005) DLT 717, 2005 (30) PTC 253 Del.
37. *Ibid* para 62.
38. *Raj Rewal* v. *Union of India & Ors*. CS(COMM) 3/2018.