ANALYSIS OF EMPLOYEE PATENT RIGHTS: A POSSIBLE FRAMEWORK FOR INDIA

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Abstract

Recent trends in patenting have shown that an overwhelming proportion of patent filings are originating from corporations, which is a shift away from the individual inventor (hero-inventor) trend in earlier times. Corporations routinely use a contractual obligation called pre-invention assignment agreement to secure their rights to the inventions created by their employees while they are under employment. These agreements make it binding on the employee to assign their invention to the employer which they will create in the future. The Indian Patent Act does not have any provisions to deal with employee inventions. Around the world, the Courts have upheld these agreements, holding that the salary and perks awarded to the employee are suitable compensation for giving away their rights on their invention to the employer. Germany and the UK though, contain provisions in their statutes to award compensation to the employee on the basis of several factors such as the gains made to the employer and the contribution of the employee to the invention-creation. Inspired by this comparative study, the author proposes a solution to address the lacuna in Indian law in which the employee-inventors should have two choices – one to proceed as per the assignment agreement and pass on the post filing formalities and cost to the employer, or to assign only a non-exclusive license to the employee and retain the rights to the invention. The solution strives to strike a reasonable balance between both the employer's and employee's rights to the invention. But in the second scenario they will not obtain ownership rights to the invention, which shall remain with the inventor. Such a solution can be implemented through an exception clause in the statute.

Keywords: *employee inventions, compensation, pre-invention assignment agreements, shop-right*

Introduction

A patent is a grant from a national government to the inventor(s) of an invention. It has a transactional nature – on the one hand, the government offers security to the inventor that no other person would be allowed to make, use or sell her invention without her permission, and on the other hand, the inventor must disclose the invention to the world at large through her

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patent[1]. The result of this process is mostly two-fold: the inventor receives a financial reward for her innovation in that only she can derive monetary benefit out of the invention, and the society at large is benefited because it gets to be updated about cutting-edge research which advances the scientific discipline of the field[2] which relates to the patent.

A particular dimension of patent law relates to the relationship between employers and employees with respect to inventions created by employees during the course of their employment. The Patent Act 1970, which regulates patents in India, does not have any provision regarding who is the rightful owner of the patent in such a case. Patent laws around the world were made in a previous era and in general are not keeping up with the changes introduced with the introduction of multinational, corporate workplaces[3]. Interestingly, despite being an older statute, The Copyright Act includes a separate, precise provision[4] for dealing with works created in the course of employment.

Due to the presence of a statutory vacuum with respect to regulating ownership of patents created during employment, it is left to the terms of the employment agreement signed by the employee with her employer to be the final say in such matters. In order to secure their rights to any intellectual property generated by their employees, corporations involved in research and development turn to pre-invention assignment contracts. The contract presented to employees for assent during joining have a clause which mandate assignment of all intellectual property generated by the employee to the company. This clause is called a pre-invention assignment provision, as the it is creating an assignment for the company for an invention which will be developed in the future (thus called a pre-invention).

Preinvention assignment agreements work at the interface of patent and contract law which Chisum has pointed out as an “ancient but eternal” problem[5]. This is because assignment agreements for pre-inventions are different from assignment for existing inventions. The pre-inventions are intangible while the latter are real and existing. The parties who enter into a bargain for pre-inventions have no knowledge of what they are receiving and what they have to give up in return. The problem is exacerbated when we consider the dominant position of

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[1] Walton Hamilton and Irene Till, *What is a Patent*, 13 Law and Contemporary Problems 245 (1948).
[2] Robin C. Feldman, *The Inventor's Contribution*, 9 UCLA Journal of Law and Technology 2 (2005). The author notes “We enter into the bargain to create the consequence of promoting science”.
[3] Steven Cherensky, *A Penny for Their Thoughts: Employee-Inventors, Preinvention Assignment Agreements, Property, and Personhood,* 81 California Law Review 595 (1993).
[4] The Copyright Act, 1957 (Act 14 of 1957), s. 17.
[5] Donald S. Chisum, vol. 22 part 3 Patents: A Treatise on The Law of Patentability, Validity, And Infringement, 22-8.1 (M. Bender, 1997).

the employers in such negotiations, as these agreements are often offered on a take-it-or-leave-it basis.

This extraction of patent rights from inventors would be difficult to justify from a policy perspective if the personality theory of property is considered. The Hegelian personality theory states that ownership of property is a key component in the development of personhood. The inventors have an inborn right to control the application and utilization of the fruits of their labour. That their creations are taken away from them before they are even conceptualised throws a question at the validity of pre-invention assignment agreements. This paper will make an attempt to address the issue from the perspective the personality theory and devise a possible framework for inventors.

In all, the paper will first look into the evolution and scope of employee inventions and the situations in which pre-invention assignment provisions arose. It will then look at how these agreements have been enforced by the Courts and regulated by legislations, with a comparative approach towards the judicial pronouncements and statutes from India as well as other countries around the world. Next, it will analyse the theoretical perspective of property through the personality theory, and analyse the scope of its applicability for employee inventions. Finally, the paper will look at arriving at a solution for the Indian scenario to compensate employee-inventors.

Evolution of status of employee inventions

The following section will explore the historical development of employee inventions and how the rights of employers and employees have been construed by the Court over time. We will also analyse what preinvention assignment agreements are and their scope within employee inventions.

Historical perspective

In the early 18th century, US President Abraham Lincoln emphasised the importance held by invention for the development of America. [6] His speeches were geared towards motivating creators and he was an advocate of protecting the rights of inventors through a patent system[7]. But it was the industrial revolution and the growth of hierarchical employment relationships in

[6] Abraham Lincoln, Second Lecture on Discoveries and inventions (Feb. 11, 1895), *available at* www.abrahamlincolnonline.org/lincoln/speeches/discoveries.htm, (last visited on 15th November 2022).

[7] *Ibid*.

an organised and structured working environment which brought to the forefront the question of whether the inventor owned her inventions.[8]

The confrontation between inventor and employer is born when the employee creates an invention for another entity or person as work or duty, or uses the resources provided by such an entity or person to give shape to her own idea. Employers have an interest in owning these inventions exclusively as they are beneficial to the development of business, and also for the reason of the support provided by the employers themselves for the invention process through the resources provided to the employee. The evolution of this debate can best be observed by going back to Industrial Revolution era.

In the middle of the 1880s[9], courts first started acknowledging employers' participation and support in the invention process. Employers' resources, for instance, provided staff innovators with the opportunity to create inventions, receive compensation for their work, and carry out marketing strategies to promote their creations. Courts began granting businesses a "shop right" to their employees' concepts without their consent[10]. A shop right is a legal fiction created by the judiciary to protect employer's rights in employee inventions and is defined as "A nonexclusive licence to use, manufacture, and sell an invention without financial obligation to the inventor". The shop right doctrine acknowledges the assistance provided by an employer in the creation of an employee invention.

A landmark judgment on employee inventions was delivered by the US Supreme Court in *United States* v. *Dubilier Condenser Corp*. Two inventors, Francis W. Dunmore and Percival D. Lowell, had created certain inventions while they were employed in the radio laboratories of the Bureau of Standards, which is under the aegis of the US government. The inventors obtained patents for the inventions and assigned them to Dubilier Corporation, their subsequent employer. The Supreme Court held that the right to patent belongs to the employee in cases where the employment contract does not mention invention but where the employee invents something while working for the employer and uses tools and materials provided by the employer. The employer's interest in the invention is then restricted to a nonexclusive "shop right." Although the case was related to relationship between the US government and its employees, the Court held that the doctrine of employee inventions relevant to private employment will also apply to this case. A "shop right" was described as an equitable remedy

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[8] Yucheng Wang, *A Statutory Patent Reversion Period May End the Debate on Employee Inventions,* 51 John Marshall Law Review 675 (2018).

[9] *Supra* note 2 at 2.

[10] Evelyn D. Pisegna-Cook, *Ownership Rights of Employee Inventions: The Role of Preinvention Assignment Agreements and State Statutes*, 2 (University of Baltimore Intellectual Property Law Journal 169 1994).

to compensate the employer for providing the employee with the materials and support for invention, while also balancing the rights of the employee for her invention.

Thus, despite continuing to uphold the notion that employees owned the patent to their innovations, courts started protecting employers' rights in their employees' creations more after *Dubilier*. The shop right gave employers little more than a permission to use the ideas of their employees without having to provide them royalties or other forms of payment.[11] But the Courts, by recognising the rights of the employer over the invention created by employees, had opened the door for the employer asserting more and control over such inventions. A popular tool to exercise such control emerged to be pre-invention assignment contracts.

Pre-invention assignment agreements

Post *Dubilier*, Courts must take into account a number of elements in order to identify ownership and the scope of the employer's shop right because there are numerous different types of innovations and the shop right rule are both reliant on the specifics of a given case. It was therefore challenging for the corporations to anticipate a court's decision due to the extensive fact-based investigation. Employers now frequently demand pre-invention assignment agreements from workers due to the possible unpredictability of the courts and their desire to secure more ownership rights than the common law permits.[12]

Evelyn Pisegna-Cook has broadly defined pre-invention assignments as:

> "A preinvention assignment agreement is an employment contract that obligates the employee to assign to the employer all interests in any future inventions conceived during the employment term. These agreements may include the assignment of inventions made before and after the term of employment."[13]

Preinvention assignment agreements provide that all employee innovations must be assigned to the employer as a condition of employment. Such contracts typically have a wide range of provisions, some of which include the assignment of private inventions. Although the agreement typically only covers the duration of employment, it may also include times before or after the employment period. While some contracts have strict restrictions on inventions developed with the employer's resources or in connection with the employer's company, others are more inclusive and encompass all inventions made throughout the contract period.[14]

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[11] *Supra* note 8 at 4.
[12] *Supra* note 10 at 4.
[13] *Ibid* at 11.
[14] Edward L. Raymond, Jr., *Annotation, Construction and Effect of Provision of Employment Contract Giving Employer Right to Inventions Made by Employee,* 66 Administrative Law Review 1135 (1988).

Although the courts have created a thorough set of common law standards to distribute preinvention rights, preinvention agreements are so ubiquitous that these rules are sometimes meaningless. Employee inventors are thought to be the source of 80% to 90% of all patented inventions.[15] In the workplace of today, practically all technical workers are obliged to sign a private agreement giving their company rights to inventions. The fact that courts tend to enforce these contracts in general shows how much power has been given to employers and taken away from employees as a result of the pre-invention contract. As a result, preinvention assignment agreements have begun prevailing over existing legislation.

In the following section, we will analyse how employee inventions and pre-invention assignment agreements are regulated through legislations across various jurisdictions.

Regulating Employee Inventions: A Comparative Approach

For the following comparative approach, we will analyse how employee inventions have been regulated through legislations and judicial interpretation in India, USA, UK and Germany.

India

The Patent Act 1970, which regulates patents in India, does not have any provision regarding who is the rightful owner of the patent in such a case. Patent laws around the world were made in a previous era and in general are not keeping up with the changes introduced with the introduction of multinational, corporate workplaces[16].

In 2015, the first case regarding employee inventions came before the Bombay HC in *Darius Rutton Kavasmaneck* v. *Gharda Chemicals*[17]. In this case, the Managing Director of a company had filed and obtained patents in his individual name. The Court acknowledged the doctrine of "duty to invent" and held that there was no duty imposed on the inventor in his role as MD to create inventions and thus, the company could not claim to have any rights over the invention. The Court also noted that there is nothing to indicate that the inventions conceived by the inventor were done by using funds of the Company, perhaps indicating that in such disputes the judiciary will look into the circumstances in which the invention was created and there cannot be a universal assignment of patents created by employees to the employers.

USA

[15] A. Samuel Oddi, *Beyond Obviousness: Invention Protection in the Twenty-First Century*, 38 Adam Mickiewicz University Law Review 1097 (1989).

[16] *Supra* note 3.

[17] *SCC Online Bom* 1851 (2014).

sAlthough the Federal Patent Act of 1988 does not address pre-invention assignability explicitly[18], preinvention assignment agreements are often enforced in accordance with the principles of "freedom of contract". Depending on the unique circumstances of each case, courts decide whether or not specific agreements are enforceable. Preinvention assignment agreements have been declared unenforceable because they are unconscionable if they are: (1) poorly written; (2) implied (e.g., through an employee handbook); (3) an unreasonable attempt to bind workers for a period of time after the end of the employment relationship (e.g., holdover clauses); or (4) are applied to inventions that were thought of during the employment relationship but were never put into use[19].

With the lack of federal legislation in this regard, it is left to the states to draft their own regulations on employee inventions. The primary goal of state legislations is to ostensibly discourage companies from going overboard in preinvention assignment agreements that their workers sign[20]. The first law in the US addressing employee invention contracts was approved by Minnesota in 1977. With the exception of Utah, all succeeding state statutes have comparable text and organisation to the Minnesota act, with a few minor modifications to some of the clauses. The following clauses are frequently seen in state statutes:

- An invention made by an employee alone on their own time and without using resources provided by the company is not covered under employment preinvention assignment agreements.
- If the invention: a. is related to the employer's business, projected research, or development; or b. is the product of any work the employee has done for the employer, then the rule in item 1 may be an exception.
- Any clause that requires an employee to assign an invention that is exempt from assignment under state law and is not an exception is against public policy and is void and unenforceable.
- Written notice that the agreement does not apply to innovations as defined by statute must be included in employment agreements that contain provisions to assign or offer to assign inventions.[21]

UK

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[18] *Supra* note 10 at 4.
[19]*Ibid*.
[20] *Supra* note 3 at 2.
[21] *Supra* note 10 at 4.

In the United Kingdom, patents are regulated under the Patents Act 1977, which has a separate chapter for provisions related to employee invention. Sections 39 to 43 deal with employee inventions. Section 39 has a provision similar to Section 17 of Indian Copyright Act[22], in that the employer will retain all rights to the invention if the employee made the invention under a contract of service.[23] Section 40 allows an inventor to ask for special compensation from the Court or the Comptroller of Patents if the invention created by her is of "outstanding benefit to the employer".[24]

As can be observed here, the Act provides for a special monetary reward to employees who create inventions which help their employer to monetary gains. K.R. Wotherspoon observes that since it is generally accepted that 80–85 percent of patents result from inventions produced by employees while they were employed, this provision had a significant influence on the thousands of workplaces that file patent applications annually[25]. But what should be the amount of compensation that the employee-inventor should receive? This is answered by Section 41.[26]

Although the provisions of Section 40 and 41 had been in place for many years, till 2019 there was only one instance where the Court had awarded a significant compensation to the employee (*Kelly* v. *GE Healthcare*[27] in 2009). In *Shanks* v. *Unilever*[28], Unilever UK Central Resources Limited (CRL), a fully-owned subsidiary of Unilever PLC, employed Professor Shanks (Unilever). Shanks developed a technique for monitoring diabetes in the 1980s that uses biosensors in disposable devices to assess glucose. The ownership of the innovation was then transferred to Unilever, who successfully filed numerous patent applications worldwide, resulting in a return to the business of approximately £24 million in revenue through licencing agreements. Shanks argued that his employer received an amazing advantage from the patents stemming from his invention, giving him a legal right to a fair portion of the earnings.

The matter was heard by the Supreme Court, which ruled in favour of Professor Shanks and determined that Unilever had received a "substantial and considerable" benefit from the Shanks patents, which was superior to the benefit it had received from other patents. The court granted him £2 million in damages, or 5% of Unilever's revenues. The inventor in the Shanks case

[22] The Copyright Act, 1957 (14 of 1957).
[23] The Patents Act 1977, section 39(1).
[24] The Patents Act 1977, section 40(1).
[25] K.R. Wotherspoon, *Employee inventions revisited*, 22 Industrial Law Journal 119-132 (1993).
[26] The Patents Act 1977, Section 41(1).
[27] EWHC 181 [Pat] (2009).
[28] UKSC 45 (2019).

received a salary and a payment of £100 to assign his rights to the innovation, whilst Unilever profited handsomely from the patents with little work or risk.

Germany

The Law on Employee Inventions was enacted in Germany in 1957[29], and it covers inventions and technical improvement suggestions made by workers in the private sector, the public sector, civil servants, and military personnel. Its provisions are binding, but they can be changed by an agreement between the employer and the employee after the employer has been informed of the invention of a service.

German law makes a distinction between free and service inventions. Service inventions are those created during the course of employment or are substantially related to the business of the employer[30]. Inventions other than service inventions are free inventions[31]. Employees are required to report their employers in writing right away if an innovation qualifies as a service invention. The employer must submit an unrestricted or limited claim to the service innovation within four months after receiving a comprehensive notification. If the employer makes a limited claim, it will only have a nonexclusive right to utilise the invention. If the employer makes an unrestricted claim, all rights in the service innovation will pass to the employer.[32] In any case, the service invention will become "free" if the employer does not submit a claim within the four-month window[33].

The employee is entitled to reasonable compensation under the Law on Employee Inventions when the employer declares an unrestricted claim to a service invention[34]. The amount of pay should be determined in light of the financial viability of the service invention, the employee's responsibilities and position within the company, and the enterprise's involvement in the invention process. Employers are only compelled to pay compensation for actual use if they submit a limited claim[35]. Within a reasonable amount of time following the filing of the claim, the employer and employee must come to an agreement on the compensation amount.

[29] Gesetz iber Arbeitnehmererfindungen [Law on Employee Inventions], July 25, 1957, as last amended by the Law of June 24, 1994, translated in World Intellectual Property Organization, Industrial Property Laws and Treaties, at 1 (1996) [hereinafter German Employee Invention Law]
[30] German Employee Invention Law, *supra* note 41, section 4(2).
[31] *Ibid*, section 4(3).
[32] Vai Io Lo, *Employee Inventions and Works for Hire in Japan: A Comparative Study against the U.S., Chinese, and German Systems*, 16 Temple International & Comparative Law Journal 279 (2002).
[33] German Employee Invention Law, *supra* note 41, section 8(1).
[34] *Ibid*, section 9(1).
[35] *Ibid*, section 10(1).

The Guidelines for the Compensation of Employee Inventions in Private Employment were published by the Minister of Labor in 1959[36]. Three techniques are advised[37] for determining the commercial viability, or "invention value" of a service invention that the employer uses. The so-called licence analogy is the first strategy. In other words, a service invention's "invention value" should be evaluated in light of "the licencing rate [that] is applied in practise for free inventions in comparable instances." As a result, the "invention value" of a service invention is determined by multiplying the licence rate by a predetermined unit of reference, such as the employer's turnover or production. In the second option, a portion of the employer's actual profit attributable to the use of the innovation is given to the employee. The third option is a free evaluation of the invention's value in the event that none of these methods is practical[38]. As a result, when an employee assigns a service invention to the employer, the Germany model demands payment from the latter. Germany mandates that the employer pay the employee for actual use in the circumstances of limited claim and nonexclusive licence. Here, there is some similarity to the UK model for compensation based on actual use of the employee’s invention by the employer.

From the above analysis, it appears that the American IP regime is based on economic reasoning whereas the EU regime is more inspired from the labour and personality theories. The personality theory in particular will be analysed next in detail as a possible source for a framework for employee inventions in India.

A Theoretical Perspective – the Personality Theory

Having analysed the origins and development of pre-invention assignment agreements and how employee inventions are handled across several jurisdictions, this paper shall look at how the personality theory perspective can hold a possible solution for India. Georg Wilhelm Friedrich Hegel is perhaps the greatest advocate of personality rights of property. According to him, “ideas are an “extension of oneself and of one’s personality”. This concept finds resonance particularly in European IP laws, where we have analysed how legislations have developed mechanisms to compensate employee-inventors regardless of their contractual obligations under pre-invention assignment agreements. From this perspective, this paper argues that IP

[36] As mandated under section 13 of the German Employee Invention Law.

[37] Richtlinien fuir die Vergtitung von Arbeitnehmererfindungen im Privaten Dienst [Guidelines for the Compensation of Employee Inventions in Private Employment] (issued by the Federal Minister of Labor on July 20, 1959)

[38] *Supra* note 33 at 9.

which originates from the creativity of employee-inventors, should be vested in some manner at least with the creators so as to develop their personhood.

Professor Radin has further developed this idea with the view that assets in which one's personhood is embedded, such as the intellectual property they create, should be protected more vigorously than merely exchangeable assets with which a person has a weaker connection.[39] It is precisely this personal connection with their creation which warrants an obstruction of complete transferability of ownership rights.[40] Radin terms these personal attributes or personal property as "market-inalienables" – that is, assets for which sale and purchase should be forbidden.

This conception of property stands against the principles of law and economics, according to which it should be the economic criteria which should mandate legal norms. The personhood theory is, however, more concerned with human flourishing and draws on values which are implicit or shared in our society. According to Hegel, ownership is accomplished by placing one's will into an object. Alienation from the object will consequently weaken the personality of the creator. This theory assumes greater importance in the context of pre-invention assignment agreements, where it becomes difficult for an employee to bond with a creation which they know is ultimately not theirs. This is a moral deprivation of their right to personality, as they are deprived of the right to enjoy their creation even before they know what it would be. Additionally, Marx's argument on alienated labour highlights the alienation that develops when the creator of a product or invention is robbed of it right away after it is "born." Marx discussed the consequences negatively to the point that he conceptualised the worker's bodily and mental potential as being castrated. He argued that this was especially true for creative and innovative workers.

However, critics of the personality theory argue that making property "market-inalienable" itself takes away the right of the property owner to alienate their asset.[41] This is an important critique, as application of the personality theory in totality tends to make law more rigid and less nimble. It is also important in the context of employee inventions, as the employers have a legitimate claim to the inventions created by their employees. In such a scenario, what is needed

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[39] Margaret Jane Radin, *Property and Personhood*, 34 Stanford Law Review 957 (1982).

[40] Shlomit Yanisky Ravid, Intellectual Property in the Workplace: Theoretical and Comparative Perspectives, (Nevo Publishers, 2012).

[41] Stephen J. Schnably, *Property and Pragmatism: A Critique of Radin's Theory of Property and Personhood*, 45 Stanford Law Review 353 (1993).

is a balanced approach between application of the personality theory and the interests of the employers to inventions.

The Indian Scenario – A Possible Solution

So far, we have observed that in India, the Indian Patent Act does not contain any express provision to deal with employee inventions and to fill the vacuum, research companies use pre-invention assignment agreements to secure their rights in these inventions. We have seen that the issue involves a delicate balance between compensating the employer for providing the employee with salary, suitable environment, research guidance and facilities with rights in the resulting patent, as well as compensating the inventor for her efforts. We have also observed that the Indian Copyright Act allows the employer to obtain all rights to the work if it was made in an employment-for-service.

Status of Employee Patent Rights in India

First, a brief look at the Indian patent landscape. In 2019-20, 56,267 patent applications were filed in India[42]. Crucially, 37% or 20,843 of these were domestic filings, meaning applications filed by inventors domiciled in India. This was an increase from 33.6% in 2018-19 and this upward trend has been seen for the last five years now. This data shows that more and more Indian innovators are applying for patents, although the industry is still in a nascent stage.

We have noted earlier that the trend in patenting is veering towards inventions created by corporations rather than individual inventors, contributing to around 80-90% of all inventions[43]. The government of India has started a Scheme for Facilitating Start-Ups Intellectual Property Protection (SIPP) in order to promote and simplify the patent application procedure for start-ups[44]. We have also noted that in the absence of any statutory provisions, pre-invention assignment agreements as negotiated between the employer and employee will prevail. In such a scenario where a growing number of Indians will be turning inventors while working in research centres and start-ups where their innovations will be regulated by contractual obligations, it becomes imperative for the law to accommodate a provision for such inventors to obtain reasonable compensation for their creations.

Way-forward

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[42] The Office of the Controller General of Patents, Designs, Trademarks, and Geographical Indications India, "Annual Report 2019-2020" 6, 2020. (*available at* https://ipindia.gov.in/annual-reports-ipo.htm).

[43] *Supra* note 16.

[44] More information related to the Scheme *available at* https://ipindia.gov.in/SIPP.htm (last visited December 2, 2022).

Having considered the UK model of compensating the employee inventor for the benefit derived from her invention, the paper proposes that this model is not well suited for the Indian scenario. It has been a very recent phenomenon in which companies headquartered outside India have been opening research and development centres in India. For such companies, the inventions are assigned to the parent company post-grant which makes it complicated to assess the benefit derived from the invention. Also, many patents are being obtained by start-ups which are based on future sales and thus the employee would not be suitably compensated in these cases. The paper also considers the German model to not be suited for India. While it is very precise and specific, Indian courts suffer from chronic overburdening[45] and lengthy arbitration procedures would deny the inventor timely compensation.

Instead, this author puts forward a unique solution derived from the principles of employee-inventor compensation we have analysed so far. Whenever an employee creates an invention for which she files a patent, she would be given two choices to choose from. If the employee had signed a pre-invention assignment agreement, she can choose to go as per its terms. This would mean automatic assignment of the invention to the employer, but also confer benefits to the employee as she would not have to incur costs related to prosecution of the patent and post-grant expenses such as renewal.

The second choice offered to the employee would be to offer a non-exclusive license to the employer (similar to the "shop-right" used in US jurisdiction) and allow the employee to retain rights to the patent. This would mean the employee would have to incur the post-filing costs for the patent but she would enjoy all benefits from the patent. The employer would also be benefited here as they would be spared from the post-filing costs for the patent. This is important because, as some researchers have pointed out, only a minority of patents filed by employees lead to products with commercial value to the company. Besides, they would in any case receive a non-exclusive license from the employee.

This solution is in consonance with the personality theoretical perspective, regardless of the choice the employee-inventor makes. If the inventor were to choose the option where she retains ownership of the patent and only confers a shop-right to the employer, she would retain the rights to her creation which are essential in developing her personhood and an important conception of her personality. However, if she were to choose the other option, she would assign the patent to her employers as a conscious decision, exercising her choice to alienate her

[45] Sumeda, "Explained | The clogged state of the Indian judiciary", *The Hindu,* May 10, 2022, *available at* https://www.thehindu.com/news/national/indian-judiciary-pendency-data-courts-statistics-explain-judges-ramana-chief-justiceundertrials/article65378182.ece (last visited on December 2, 2022).

creation which is an important right associated with property. This would also eliminate the criticism to the personality theory wherein market-inalienability itself takes away the right of property owner to alienate their assets.

This method, thus, is a unique invention compensation strategy where the employee by choosing the second option receives ownership rights of the patent. Equity is, however, still balanced as there is a cost attached to this choice being the legal procedure attached with obtaining and maintaining a patent. This author proposes that such a choice-based system would suit the Indian workplace. The employees would get an incentive to innovate more as they can choose to retain rights in their invention. And if the employee does not wish to be bogged down by the post-filing formalities and costs, they can honor their pre-invention assignment agreements with a condition of compensation in case of specific benefit accrued from the invention.

Conclusion

This paper has attempted to analyse the legal position of employee inventions in patent law. Given the dominant position of employer when they make employees give their assent to preinvention assignment agreements, it is a worthwhile question to analyse their fairness. Our analysis shows to us that courts have interpreted these agreements to be binding on the employees in most cases, with the salary and perks conferred to the employee being construed as adequate compensation for the invention assignment.

While there are no specific provisions in the Indian legal system related to this, this paper has taken a comparative approach to analyse the position in the US, UK and Germany. Our analysis demonstrated how the approach to employee inventions differs in these countries. While the employers have been given the rights to the inventions, they are also required to compensate the employees in a fair manner. The quanta of compensation and its calculation differs, but it shows a path towards a possible solution for India.

To provide a fair opportunity to the employees to enjoy the fruits of their labour, we have presented a solution regarding invention compensation which essentially offers a choice to the employee to either provide all rights to the invention to the employer if she does not want to handle the filing and post-grant formalities; or to take up these formalities by herself and assign a non-exclusive license of the invention to the employer. Such an arrangement should be fair to both employers and employees. The option as proposed can be implemented as an exception clause in the statute. Such a solution is based on the principles of the Hegelian personality theory which argues for the retention of rights to the property one creates to develop their personhood.

This paper is limited in its scope as it has restricted its comparative search to just three jurisdictions. Future works may look at more countries to possibly develop an even better solution to this pressing issue. The solution can also be improved keeping in mind principles of distribute justice as laid down by Rawls. Although this paper has focussed on the personality theory, retention of rights to their inventions by employee-inventors can be justified based on distributive justice theory as well, which has been finding support in the IP discourse lately.

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