

Information Asymmetry of the Intellectual Property Assets

Mukul Rani Parajuli

Master of Chinese Law, Zhejiang University, China
LL.M (IPR) O. P. Jindal Global University, Sonapat, India

ABSTRACT:

This paper proposes for a first-hand document of Intellectual Property (IP) Due diligence prepared by each department dealing with management of IP assets. This document aims to ensure efficient management of the IP asset that creates a safe haven for the seller, buyer and growing market of IP assets. This paper identifies the role of IP audit and the problems of asymmetry information faced by the external expert auditor. This paper applies the theory of Information asymmetry in the economics literature to address the problems during the process of IP Audit. This paper further increases the scope of the IP audit and due diligence study under the theory of economics.

Key word: Information Asymmetry, Intellectual Property assets, IP due diligence, IP Audit, First-hand IP due diligence

I. INTRODUCTION

The Information asymmetry is a situation in a transaction where one party has more or better information than the other.¹ The Economist George Akerlof, Michael Spence and Joseph E. Stiglitz on the theory of Information asymmetry explain the problem of information asymmetry in a market of used car market, job market and insurance market.² They emphasize on the problem of quality of information in the market regarding the product and service, which affects the seller, buyer and the condition of the market.³

The growing market for the knowledge economy has opened up a market of intangible assets, popularly known as Intellectual Property (IP) asset.⁴ IP assets are the outcome of the exclusive protection under the Intellectual Property Law and are integral part of a business asset forming the value chain of business.⁵ Commercialization of IP assets through licensing and technology transfer, merger acquisition, and direct sales has stretched the Intellectual Property as legal rights to economic rights for the owners and right holders.⁶ The value of the company has become dependent on the additional value of earnings through IP assets.⁷ The IP management functions are to create value from IP assets by practicing exclusivity of IP, licensing, deterring, and litigation

¹Jonathan Levin, Information and the markets of lemons, RAND Journal of Economics, Vol.32, No.4, Winter 2001, 657-666, p 657

²Infra note 13(George A. Akerlof), infra note 16 (A. Michael Spence) and Infra note 19 (Joseph E. Stiglitz)

³Interview with the 2001 Laureates in Economics Science, George A. Akerlof, A. Michael Spence and Joseph E. Stiglitz, on 12 December 2001. <https://www.nobelprize.org/prizes/economic-sciences/2001/stiglitz/interview/> revisited on 17.09.2019

⁴Intellectual Property as a Business Asset, WIPO, https://www.wipo.int/sme/en/ip_business/ip_asset/business_assets.htm revisited on 18.09.2019

⁵ ibid

⁶Madavi Singh, Intellectual Property: The Dominant force in Future Commercial Transactions comprising Mergers and Acquisitions, Indian Journal of Intellectual Property Law, p 180-193

⁷ ibid

and use of IP as collateral.⁸ Intellectual property law creates avenues to create revenues through commercialization. IP Audit is the first step for commercialization of IP assets.⁹ The process of IP Audit is one of the tedious processes for gathering information of the assets. The Black berry, Volkswagen, PINE-SOL cases are instance where the company has faced huge losses due to the failure in examination of the fundamental changes and its effects on IP assets.¹⁰

The objective of the paper is to propose a first-hand document of IP due diligence. The proposed document will provide an answer to the problem of information asymmetry of the IP assets. First-hand document is an outcome of continuous due diligence records documented by the internal auditor or managers. The paper aims to answer the questions: Does the IP Audit solve the problem of the Information Asymmetry of the IP assets? What would be the first-hand document for due diligence for forming quality information on IP assets tested, under the economic theories?

This paper is a doctrinal research on theory of economics and IP audit literature. The paper seeks to solve the problem of asymmetry information of the IP assets by identifying the role of IP Audit, the problem under the IP Audit and test IP Audit process with the theory of information asymmetry. The paper further claims that information asymmetry theory has a central role in IP Audits; however, there have been no systematic reviews of the IP Audit process literature using this concept. As a result, there is no unified basis for directing future researches leveraging this concept. This paper is the first attempt to provide an overview of the asymmetric information theory and its significance of IP Audit to the stakeholder of IP assets. The paper proceeds in five chapters. The Introductory section identifies the importance of study on the information asymmetry of IP assets. The second part of the paper describes the problem of Information Asymmetry described by the economist. The third part of the paper provides and overview of IP assets and IP Audit. The fourth part of the paper analyses, how IP Audit solves the problem of Information asymmetry and highlights the concern of the IP Audit with a plausible solution by the First-hand document of IP due diligence and fifth part concludes the paper.

II. THE THEORY OF ASYMMETRY INFORMATION

What is Asymmetry Information? The Asymmetry information is a situation in a transaction where one party has more or better information than the other.¹¹ The Economist George Akerlof, Michale Spence and Joseph E. Stiglitz explains the problem of information asymmetry in a market of used cars, the job market and insurance

⁸Marcus Holgerson and Sarah Van Santen, The Business of Intellectual Property A literature review of IP Management Research, Stockholm Intellectual Property Law Review Volume 1, Issue 1, June 2018, p 44- 63

⁹ Infra note 23

¹⁰ Infra note 27, 36; Carey C. Jordan, 'The Top Five Intellectual Property Traps in M&A Transaction, , MC Dermott-Newsletter, Inside M&A-July/August 2010

¹¹ Supra note 1

market in their theory of Asymmetry information. They emphasize on the quality of information in the market regarding the product and service, which affects the seller, buyer and the condition of the market. In 1970, the theory of Information asymmetry came as a plausible explanation for common phenomena that mainstream general equilibrium economic could not explain.¹² It is a theory that proposes that an imbalance of information between buyers and sellers can lead to inefficient outcomes in the markets.

George A. Akerlof¹³ first introduced the concept of asymmetric information with an example of Car Market of used (Lemons) and new (Cherries) car and how buyer use market indicators to access the value of a class of goods, since the buyer has less knowledge of the goods than the sellers.¹⁴ Akerlof states that asymmetry information, gives seller chance to sell goods of average and low quality. Due to which the average quality car will slowly lose the stand in the market. This process of the selection is an adverse selection. Information plays an eminent role is eradication the adverse selection in the car market. Information such as guarantees, brand names will allow the parties to get the value of the car based on the information about the product. The information cures the disparity in the perceived value of an investment in the car between buyer and sellers in the market.¹⁵

In 1973, Michale Spence continues the idea of information asymmetry as a Job Market signaling.¹⁶ Spence states that hiring employees is an investment decisions made under uncertainty. Before hiring, the employer is not sure of the productive capabilities of an individual and after hiring, the productive capabilities are not immediately clear as some job specific training and learning has to take place. Spence reasons that since the capabilities are unknown with certainty, it is an investment decision under uncertainty. Spence parallels such an investment decision with a lottery.¹⁷ Spence proposition is that the employer wins the lottery, if they are able to determine by prior experience in the job market the capabilities of the employee and the job applicant or the employee signals capabilities in form of a signal. Signals are the characteristics of individual capabilities for the job. Spence uses education as a signal in the job market, based on which the potential employees confront the offered wage schedules based on their signals. Education as signals are cost taken by the prospective employee, including money and time spent for education and getting a qualification or a degree should be easier for productive people. All these signals generate a signaling equilibrium and confirm the beliefs of the employers. Signaling equilibrium is a stable state where the sellers in the market differentiate themselves from

¹² Supra note 3

¹³ Akerlof, G., The market for lemons: Quality uncertainty and the market Mechanism. The Quarterly Journal of Economics, 1970, 89: 488-500

¹⁴ ibid

¹⁵ ibid

¹⁶ Spence, A.M , Job Marketing Signal, The Quarterly Journal of Economics, 1973, 87:355-74

¹⁷ Supra note 16

each other by signaling and thus reduce the information asymmetry between themselves and the buyer.¹⁸

Stiglitz¹⁹ stated plausible assumption that people buying insurance knows more about their relevant characteristics than the insurance company selling insurance to the customer. The insurance company would classify the customer by risk category and offer range of insurance products and given options for the customer to choose insurance. A Health insurance with low premium would be attractive to healthier customers, and unattractive to unhealthy customers. The unhealthy customer would purchase a high premium. In this way, the market would lead to what the authors called a separating equilibrium. Separating equilibrium is a market in which people's risk category is determined by the kind of insurance they buy.²⁰

The Asymmetry Information theory further explains how the quality of information and how insurance companies and bank screen their customers with the use of collateral requirements and investigate the quality of information given by the customer.²¹ The seller signal the quality of their products by offering product warranties to customers or workers signals their ability by getting an academic degree.²² The effects of asymmetry information are adverse selection, information are a signal which if accepted leads to a signaling equilibrium and information for separating equilibrium. However, if the information is an outcome of continuous due diligent process accompanied by the first-hand information of the IP assets then the transaction will be under symmetry information. In the next chapter, we will identify the role of IP Audit that solves the problem with Asymmetry information and the necessity for the first-hand information.

III. IP ASSETS AND IP AUDIT

When an enterprise seeks an IP protection in any form Patent, copyright and trademark, they also seek to commercialize the protected IP assets. Commercialization acts as returns for the investment made on the business and the products. The aim is to extract the value of IP and prevent others from deriving value, until agreed otherwise. The main responsibility of IP management is to plan strategies to create value from IP and strive to maintain exclusivity by practicing IP, licensing, deterring, litigation and using IP as collateral.²³ During this process, an IP audit is the first step for a company to commercialize and appropriate Intellectual property assets.²⁴ IP Assets are collection of intellectual properties that are patent, trademark, copyrighted

¹⁸ *ibid*

¹⁹ Rothchild, M and J.E. Stiglitz, Equilibriums in competitive insurance markets: An essay in the economics of imperfect information, *The Quarterly Journal of Economic*, 80:629-49

²⁰ *ibid*

²¹ Rothschild and Stiglitz, 1976 *supra* note 19

²² Spence, 1973 *Supra* note 16

²³ IP Asset Development and Management: A Key strategy for Economic growth, WIPO, https://www.wipo.int/edocs/pubdocs/en/intproperty/896/wipo_pub_896.pdf, (revisited on 18.09.2019)

²⁴ *ibid*

works, industrial designs, and geographical indications, trade secrets and their economic value.²⁵ IP assets have economic value because of their ability to enhance the value and financial return from technologies, product and services protected by Intellectual Property rights.²⁶ The use of the word asset implies that Intellectual Property is not only a legal right but also an economic benefit and very valuable asset of a company.²⁷ What is an IP Audit? IP Audit is the first step in implementing an effective IP asset management strategy.²⁸ The information gained under an IP audit can be a powerful tool to gain access to capital, to develop a business strategy, change an existing business strategy, or obtain a realistic idea of the value of your company when assessing merger and acquisition.²⁹ The main object of the IP audit is the identification and cataloguing of a company IP asset, typically for determining their legal status, value and the means to best protect and capitalize on them. A company uses an IP Audit to identify potential claims by or against third parties for infringement, misappropriation or other violation of IP rights.³⁰ There is no clear-cut definition of IP audit, but this paper concurs with this explanation. IP audit is a systematic assessment of various process and procedure adopted in creating or generating IP, including IP assets owned, used and/ or acquired by a business and understanding the IP rights/ liabilities associated thereto.³¹

In a generic sense, an audit is the process of making an official investigation and examination. Thus, through logical deduction, an IP audit is a comprehensive tool officially undertaken by a company, enterprises or organization to ensure appropriate management and protection of IP to derive optimum business value and articulate any possible litigation that is likely to arise in the future.³² There are three types of Audit. The General Audit conducted before establishing a new company or, while implementing a new market approach or direction or, while major reorganization of the company, or when a new person becomes responsible for IP Management.³³ Second, IP due diligence, it is an event driven IP Audit which determines the event in question and assess the value and risk of all or a part of a target company's IP assets. IP due diligence is a part of a comprehensive due diligence audit that is done to assess the financial, commercial, legal benefit and risk linked to a target company IP portfolio typically, before it is bought or invested in;³⁴ Third limited purpose audits

²⁵ Ian Cockburn, IP DUE Diligence- A necessity , Not a Luxury, WIPO, https://www.wipo.int/sme/en/documents/ip_due_diligence_fulltext.html , (revisited on 18.09.2019)

²⁶ IP Asset Development and Management: A Key strategy for Economic Growth, What is an IP asset, WIPO

²⁷ John M. Fleming, "Do the Due": Performing proper diligence when assessing IP assets for acquisition, 2014;

²⁸ Amy E. Wilson and James J. Decarlo, The Intellectual Property IP (Audit) An Effective IP Asset Management tool, The Society for Biomolecular Screening, 2003, www.sbsonline.org

²⁹ ibid

³⁰ Daniel C. Glazer and Chad J. Perterman of Patterson Belkney WEBB & Tyler LLP, IP Audits: Making most of your intellectual Property, Intellectual Property Today, May 2011

³¹ Mr. Prerak Hora, IP Audit – A Legal Perspective, Intellectual Property IP IPOST Intellectual Property Journal, p 104

³² Shanel Punioose, Vallishobhana, The Intellectual Property Audit, Journal of Intellectual Property Rights, Volume 17, September 2012, pp 417-424

³³ WIPO IP panorama course, chapter 10 ,IP Audit; Intellectual Property Audit Tool, IP assets management series, WIPO

³⁴ Supra note 22

which justify a certain legal position or the valuation of a particular IP.³⁵ A company conducts IP Audit when they are considering a fresh approach to potential acquisition, new marketing initiative, expansion of product lines or services, or any corporate change that would affect the interaction between the company's IP and the marketplace. IP audit can help to identify and mitigate risks of infringement of the third party rights.³⁶ An internal or external auditor conducts IP Audits in number of methods, which generally fall into two methodologies. The first is a top down methodology, the auditor or audit team works downward in an organization by interviewing middle and lower level managers to access information in their respective areas of responsibility. Second, a bottom up approach involves identifying all employees within the organization who have the potential to create IP assets and then meeting with them to collect information.³⁷ The bottom up approach is a highly valuable management tool because more than just raw data are collected.

The process of IP Audit has serious problems. Firstly, gathering material and documents relevant to audit and provide timely access is a concern, the problem of compiling entire historic and current document archived, and maintaining confidentiality during the review of the documents in the allotted time.³⁸ The simplest form of IP audit is itemization of all the company assets.³⁹ However, such itemization often overlooks the other departments of the company, which are the major sources for detail review of IP Assets, such as marketing, business development or the information technology (IT) department.⁴⁰ The potential problem is IP assets are being lost or squandered through lack of education or inattention.⁴¹ A company is composition of different departments, which functions independently and is accustomed to a work and execute its functions. Since the audit process includes extracting information through personal interviews, devising an interview to bring together personnel of different mindsets to the same table is one of the most challenging tasks.⁴² The IP and IP audit solely functions on a human capital. The human capital is responsible for creation, protection and development of the Intellectual property. Therefore, it is necessary that the human capital be utilize for a diligent review and documentation of IP assets in the first-hand document. The internal auditors or managers of the each department who easily gets access to the archives related to IP assets could prepare the first- hand document. This will possibly solve the concerns regarding information asymmetry of IP assets and IP Audit.

³⁵ibid

³⁶Danile C. Glazer and Chad J.Petterman of Patterson Belknap WEBB & Tyler LLP, IP Audits: making the Most of Your Intellectual Property, Intellectual Property Today May 2011

³⁷Supra note 27

³⁸Supra note 35

³⁹Supra note 27

⁴⁰ibid

⁴¹ibid

⁴²Supra note 32

IV. FIRST –HAND DOCUMENT OF IP DUE DILIGENCE

This paper proposes for an IP due diligence, which will meticulously increase the quality of information from their expertise and decreases the information asymmetry on the IP assets, the proposed Symmetry information as a First-Hand document of IP due diligence in Table A.

Table A

First- Hand document of IP due diligence by the Internal auditors

Purpose of Audit	
For use of IP Experts in Respective fields only	Observations
IP Assets Trademark Patent Trade Secrets Designs Copyright Unutilized/Unused IP Assets	
For use of IP Business Management team only	Observations
Marketing Advertisement Finance Loyalty Customer goodwill Product clarification Supply chain Import & Export	

network	
For IP licensing Team only Observations	
Details of IP License in Details of IP License out	
For use of IP litigation, compliance and enforcement team only	Observations
Preemptive measures Negotiation Settlement New issues/ Threats of IP	
For use by IP Accounts and bank Legal representatives only	Observations
IP Non- encumbrance certificate IP Encumbrance certificate	
Search Report Summary by IP Manager, IP Management Team	
Verification by each department	

It is very clear from the above discussion that Intellectual property law creates avenues to create revenues through the process of commercialization. During the process of commercialization, the owner and the prospective investor diligently monitor the market and prospective IP assets of the company. Since, the information and details of the IP assets of the company are asymmetry for the prospective investors. They get access only when the parties are willing to collaborator for commercialization. At this point the interested parties enter into a Non- disclosure agreement, in order to protect and respect the confidentiality of information and give access to information for the due diligence review of the IP assets as a general audit, or an event drawn IP Audit. However, the concerns are the tedious method of gathering documents, scheduling interviews with the managerial supervision of different department and time bound role for submitting the auditor reports. Since, IP audit plays an important role in the creation of value of IP assets. The due diligence or IP audit should have a first-hand information on the IP assets which will cure the concern the of information asymmetry of IP Audit.

The first- hand document is a document, which provides holistic overview of the IP assets. It includes the details of the IP assets, IP asset status in all the departments of the company and reviewed by the IP manager of the company. The first- hand document is a continuous review process adopted by the respective team/department of the company, responsible under the IP management. The team consists of an internal auditor/ manager who careful analyses, with their experience, professional knowledge, expertise. Further, the review under the IP manager's keen diligence and observation on every aspect of the assets provide a diligent checks& balance. The proposal and study on the first- hand document centers on the function of IP management, which is to create value of IP assets, by practicing exclusivity of IP, licensing, deterring, and litigation and use IP as collateral. The first- hand document is a referral point for the IP auditors.

Firstly, as the name suggests the first hand document resolves the issue of the adverse selection due to lack of the information. The document is a guarantee of the presence of IP assets with the strength and the weakness. This will cure the market to turn zero regarding the well-protected IP assets compared to unused and unprotected. Secondly, the first-hand creates a signaling equilibrium stated by Spence in Job information market. The documents signal the elaborate and continuous review of each event of the company affecting the IP assets. It signals the diligence adopted by the company, which will attract prospective investor for investment and collaboration. Thirdly, the IP due diligence conducted by the prospective investor and collaborator will further scrutinize the weakness, strength, opportunity and threats. This is possible when the buyer is aware of the performing economic rights of the IP assets in the market and the buyer has applied a risk factor study on the IP assets. Similar, to study made by the Insurance Company on the risk behavior of the healthy and unhealthy customer for an Insurance policy as stated by the Joseph Stiliz.