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**The protection of Trade Secrets: A Comparative analysis of the
United States and the European Union.**

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ABSTRACT

The current economic climate has led to an increased importance of trade secrecy which in turn, created a necessity for proper legislation on the topic. Its import has compelled the European Union, for example, to push a new directive on Trade secrecy. The fundamental issue with trade secrecy is its provision of protection and its recognition as the weaker form of Intellectual Property Rights. As a result, this thesis examines the necessity of trade secrets, more specifically, trade secret protection. There are 195 countries in the world, which each operate their own legal jurisdictions and also practice varying systems of law. For that reason, the key differences and similarities of trade secret protection in two specific jurisdictions, the European Union and the United States will be examined. The outcomes include the exposition of the jurisdiction with the most appropriate safeguards for trade secret protection will be exposed by the end of this study. Thereafter, a brief discussion on the role of trade secrecy in the current start-up environment is examined. Moreover, international and domestic legislation must fashion itself to ensure adequate measures for trade secret protection is recognized.

Keywords: Trade Secrets, Misappropriation, Intellectual Property Rights, Trade Secret Legislation.

TABLE OF ABBREVIATIONS

CFEU	Charter of the Fundamental Rights of the European Union
EU	European Union
EEA	Economic Espionage Act
DTSA	Defend Trade Secrets Act
IP	Intellectual Property
IPR	Intellectual Property Law
NAFTA	North American Free Trade Agreement
NDA	Non-Disclosure Agreement
TRIPS	The Agreement on Trade Related Aspects of Intellectual Property Rights
USA	United States of America
UTSA	Uniform Trade Secrets Act
WIPO	World Intellectual Property Organization
WTO	World Trade Organization

INTRODUCTION

Evolution is a natural occurrence. It is a theory in biology that suggests that living creatures such as animals and plants originated in different forms and have changed over the years to reach their current appearance.¹ It takes place in all life forms and for instance, according to Darwin, humans evolved from monkeys. History has shown us that the earth was inhabited by species of plants and animals, some of which, have gone extinct while others have continued to develop. It is the same with laws. Society as a whole is constantly evolving and as a result, laws governing these societies must be dynamic. These laws must keep up with the times. Actions such as Jim Crow and apartheid were legal and heavily practised in some counties, as recently as in the last century, are now deemed absolutely unacceptable and this is all part of evolution.

This evolution also applies to subsections of the law, more specifically intellectual property. Intellectual property laws have existed in one form or another for centuries. Intellectual property rights as a whole are a way to prove intangible ownership over the derivatives of creativity. In the past, signatures on works of art, identifiable patterns in architecture and stamps have been used as forms of proprietary rights.² Intellectual property has grown from a mere signature on a painting to full-fledged ownership rights spanning decades and ensuring legal action against infringers can be taken in full effect. This thesis will mainly focus on a less developed but highly favoured aspect of intellectual property; trade secrets.

This thesis will examine trade secrets as a whole, touching on its definitions across countries as well as the historical development of trade secrets to offer understanding on the present state of its protection. The focal point will be narrowed down to two specific regions, the United States of America and the European Union in its entirety. Traditional legal dogmatic method or legal method i.e. description and analysis of the existing law is the mode of research throughout this thesis.

¹ Ayala, F. J. Evolution. Accessible: <https://goo.gl/gbpEBK>, 6 March 2018.

² Ambastha, L. Evolution of Property Rights. Accessible: <https://goo.gl/5aT1PB>, 6 March 2018.

The thesis will also compare trade secrets with other aspects of intellectual property in terms of protection, registration process, time limits, benefits and so on. More specifically, it will be compared to patent protection and copyright protection in the aforementioned aspects. This is to show better show the advantages and disadvantages of utilising trade secrets instead of other intellectual property protection.

The third chapter will discuss in-depth, the current nature of protection of trade secrets. It will begin by first the legal history and origin of trade secrets (and trade secret protection), as mentioned throughout history and case law, followed by the necessity of trade secret protection especially in light of its frequent use and popularity and finally, it will discuss to an extent the misappropriation of trade secrets in order to provide context for the rest of the thesis as it delves into the fourth chapter.

In the fourth chapter, trade secret protection in the European Union and the United States of America will be discussed in terms of existing statutes in both jurisdictions. The Uniform Trade Secrets Act, Economic Espionage Act, Defend Trade Secrets Act and the European Union's Trade Secret Directive will be examined. This chapter will discuss both criminal and civil remedies available for the protection of trade secrets in the countries in question. The statutes and forms of protection available in both the European Union and the United States of America will then be compared in different aspects such as the definition of terms, methods of acquiring trade secrets in the jurisdictions, remedies, etc. Finally, the last chapter will discuss the import of trade secrecy in the start-up environment. The final chapter is important with regards to the creative and innovative direction society is currently heading in.

The aim of this thesis is to compare both systems of protection (available in the European Union and the United States of America), point out the differences and similarities between the two and finally settle on which provides the most adequate system of protection for confidential commercial information.

1. TRADE SECRETS: NATURE & SUBJECT MATTER

It is a given that certain types of intellectual property are quite popular. Trademarks, patents, design and copyright are well-known aspects of intellectual property rights and most people seem to overlook trade secrets although it is the most frequently used form of intellectual property for securing businesses competitive advantages.³ This chapter covers the idea of trade secrets and goes on to describe the key characteristics on an international level.

1.1. Brief introduction to Trade Secrets

The meaning of trade secrets differs depending on jurisdiction. Trade secret does not have a precise definition because secrets vary from business to business. The World Intellectual Property Organization describes trade secrets as “any confidential business information which provides an enterprise a competitive edge may be considered a trade secret”.⁴ Trade secrets were also defined in Section 757 of the 1939 Restatement of Torts as “consisting of formulas, patterns, devices or a combination of data used in business that gives a part the chance to keep an advantage over competitors that do not know of it or use it.”⁵

The question then becomes why are trade secrets so overlooked when it comes to ensuring intellectual property rights? The answer is easy, it is not as flashy as the other form of protection. It does not need government approval or authorisation, it is not given government protection, there is no process for registration of trade secrets and there are no incentives (unlike patents).⁶ The foundation of trade secrecy in a business evolves mainly around keeping it a secret. In *Rockwell*

³ Pooley, J. (2013) Trade Secrets: the other IP right. Accessible: <https://goo.gl/N3DA1v>, 6 March 2018.

⁴ WIPO. What is a Trade Secret? Accessible: <https://goo.gl/FwTW35>, 9 March 2018.

⁵ American Law Institute. Restatement of Law Torts (1939) §757. Accessible: <https://goo.gl/yX1q2y>, 19 March 2018.

⁶ Rowe, E. A., Sandeen, S. K. (2015). Trade Secrecy and International Transactions: Law and Practice. Cheltenham: Edward Elgar Publishing Limited, p 10.

Graphic Systems Inc. v. DEV Industries, Inc.,⁷ the employees of the Rockwell Graphics Systems Inc. (the plaintiff), moved to work for DEV industries (the defendant) and shared some information gained from working with plaintiff to the defendant. The plaintiff claimed these were trade secrets, however, the defendant was able to convince the court that the information was in fact not a secret and therefore, does not qualify as a trade secret. This case reiterates the importance of secrecy in trade secret protection.

1.2. The Importance of Trade secrets

Companies are constantly creating formulas, processes, etc. to help with growth and efficiency. Enterprises utilise different lawful and business means to secure their information and keep it away from adversaries in the field. Some examples of these mechanisms for protection are confidentiality agreements, non-disclosure agreements and the inclusion of a non-compete clause in employee contracts. Besides from the afore mentioned examples, companies also use a largely inclusive scope of internal safeguards such as computer and file encryption, destroying documented information and the provision of security clearances to certain employees, adding of disclaimers on emails that are sent outside or within the company, etc.⁸ It is noteworthy that although confidentiality contracts, non-disclosure agreements, etc. are reliable in the court of law, it does not mean that a court will uphold the terms of a trade secret agreement when such a case is brought before it.⁹ This was established in *Protégé Software Service Inc. v. Colameta*¹⁰ where Protégé sued an ex-employee for breach of contract (including an NDA and a non-compete) and misappropriation of trade secrets. The suit was denied as Protégé had been the initial violator of the contract because they changed Colameta's job title and decreased his salary, therefore the terms of the NDA was no longer reliable in court.

Trade secrecy also helps with creating diversity in innovative territory including situations where technology develops fast. Particularly noteworthy is the significance placed on trade secrets in small and medium sized enterprises and start-ups, as inventiveness is cumulative and a fundamental aspect of their success. It is especially important that there is adequate defence available to protect the smaller companies from the larger more dominant ones. For example, Best

⁷ *Rockwell Graphic Systems Inc. v. DEV Industries, Inc.* 925 F.2d 174, (7th Cir. III. 1991)

⁸ Trade Secret. Newworlencyclopedia.org. Accessible: <https://goo.gl/dnPqD4>, 8 January 2018.

⁹ *Electro-craft Corp. v Controlled Motion Inc.* 370 N.W.2d, 465, (Minn. Ct. 1985).

¹⁰ *Protégé Software Servicc., Inc. v. Colameta.* No. 09-03168, 2012 WL 3030268 (Mass. Super. 2012)

Buy Co. Inc. (Best Buy) was accused of trade secrets misappropriation by a start-up, Techforward Inc (Techforward) in *Techforward inc. v, Best Buy Co. Inc.*¹¹ Best buy lost this case and was forced to pay Techforward \$27million as compensation.

1.3. TRIPS: Trade Related Aspects of Intellectual Property Rights

The Trade Related Aspects of Intellectual Property Rights (TRIPS) can be seen as the first international trade agreement that puts a meaning to undisclosed information most often used interchangeably with trade secret. It entered into force in January of 1995. It is one of the most all-inclusive cross-border accords involving intellectual property. The TRIPS equip undertakings with protection from revelations to others, transfer of ownership or other commercial practices. Although it is a minor part of IPR, the TRIPS agreement not only safeguards intellectual property like copyrights, trademarks but also protects trade secrets.¹²

The agreement outlines a specific level of protection that should be adhered to by all assignees. Part I covers the general provisions and principles of the agreement which member states must follow (such as implementation into national law). The main subjects of protection, awardable rights and exceptions and time frame of protection are also explained. There are some previous Conventions (the Paris convention of 1967, the Berne Convention, Rome Convention to mention three) that are still to be obeyed according to the TRIPS agreement.¹³

The second part outlines the utilisation and accessibility of intellectual property rights. While the third part covers enforcement of rights and remedies available in the case of infringement. Not only does it contain civil options but interim orders and special circumstances for criminal procedures and cross border matters. The final parts discuss the transfer of rights and dispute resolution methods. The process for protecting of trade secrets must not make revealing them impossible, rather, the security should be at a reasonable level to keep the information undisclosed.¹⁴ The importance of using reasonable procedures to keep the information undisclosed

¹¹ TechForward, Inc. v. Best Buy Co. Inc. [2011] No-01313.

¹² TRIPS: Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, Article 1(2), 1869 U.N.T.S. 299, 33 I.L.M. 1197 (1994) [hereinafter TRIPS Agreement].

¹³ *Ibid*, article 1(3).

¹⁴ Albert, G. P, Jr., Laff, Whitsel & Saret, ltd. (1999). Intellectual Property in Cyberspace. Washington DC: BNA Books, p 341.

can be further illustrated by the case of *Blake v. Professional Coin Grading Service*¹⁵. Blake was a coin collector who created a new form of measuring the “eye appeal”¹⁶ of coins and he chose to use trade secrecy as opposed to other available forms of trade secret protection. He brought action against three coin graders, alleging they had participated in unfair business practices and misappropriation of trade secrets, among other things. The court held that the plaintiff, Blake, did not take reasonable steps to ensure the information was kept secret as Blake had published articles on his idea and did not state definitively which parts were to be kept undisclosed during his communication with the coin graders.

Article 39 states the definition of “a manner contrary to honest commercial practices”, which are “at least practices such as breach of contract, breach of confidence and inducement to breach, and includes the acquisition of undisclosed information by third parties who knew, or were grossly negligent in failing to know, that such practices were involved in the acquisition”.¹⁷

TRIPS demand that the member states of the WTO inculcate measures to secure trade secrets in domestic law.¹⁸ Although this promotes autonomy in the implementation process, it also has its disadvantages due to the vast differences in legal systems. The implementation in nations must take into account already existing legal structures which may lead to a wide disparity in verdicts and outcomes.

There are criteria for information to be considered as a trade secret and the first is that information should be unknown or strictly known by a certain group of people. The contents of the trade secret should be difficult to attain and kept secret. Next, the secret should have commercial appeal and finally, the owner should put methods in place to safeguard trade secrets from third parties. Unique data that is created, has high value and is undisclosed, has no commercial value unless it also has usefulness either now or in future events.¹⁹

¹⁵ *Blake v. Professional Coin Grading Service*. 898 F. Supp. 365 (D. Mass. 2012)

¹⁶ *Ibid.*

¹⁷ Pila, J., Torremans, P. (2016). *European Intellectual Property law*. Oxford: Oxford University Press, p 539.

¹⁸ Schultz, F., M., Lippoldt, D., C. (2014) *Approaches to Protection of undisclosed information (Trade Secrets)*. OECD Trade Policy Paper No.162, p 8. Accessible: <https://goo.gl/eRHaLD>, 9 March 2018.

¹⁹ Quinro, D., W., Singer, S., H. (2009). *Trade Secrets: Law and Practice*. 2nd ed. Oxford: Oxford University Press, p 3-13.

1.4. Regional views on Trade Secrets

On an international scale, many countries ascribe to a variety of multinational communities. These communities have a wide range of agreements that cover a variety of topics including Trade. This section takes a look at some Trade agreements ratified worldwide with regard to trade secrets.

1.4.1. North American Free Trade Agreement: NAFTA

The North American Free Trade Agreement (NAFTA) came into force in 1994. It formed one of the world's biggest free trade areas and laid the structure for fast-paced economic development and commercial growth in three countries: Canada, the United States of America and Mexico.²⁰

The United States of America began a cross-boundary trade discussions with Canada and as a result, the US-Canada Free Trade Agreement was created. It took effect in January of 1989 and in 1991, talks began between the US and Mexico which Canada then joined. This resulted in the creation of a free trade area and the elimination of all tariffs, forms of duties and other quantitative restrictions.

The agreement also defines trade secrets in Article 1711. Trade secrets are details that are undisclosed (not widely known or attainable at any time). It is essential to note that trade secrets have commercial value and the party that owns it must have in place adequate means to safeguard the secret.

Although NAFTA has a close definition of “undisclosed information” to that of TRIPS, it still gives a wider margin for definition as it includes both potential and actual commercial value. A trade secret can be both information used in business and information that is not being used but could be used in the future. In other words, a trade secret owner may not gain commercial benefit for the information to be safeguarded.²¹

²⁰ North American Free Trade Agreement. Accessible: <https://goo.gl/pMusDs> 8 January 2018.

²¹ Menise, J. (2007) Legal Protection of Trade Secrets: Case Study of Latvia, Present Issues and Perspectives. p 13 Accessible: <https://goo.gl/UkbtWN>, 19 December 2017.

1.4.2. The European Union

The European Union (EU) is a transnational organization made up of 28 member states. EU laws are made by the European Parliament and the Council.²² After the laws are made, they are expected to be implemented in all member states or they could be held liable if an individual is caused to suffer due to non-implementation.²³ European Union Legislation did not until recently have particular arrangements that protect trade secrets. European Union National laws have consistently had the custom of trade secret protections but have varying perspectives on safeguarding trade secret.

A major hurdle to successful protection within the European Union is the high level of diversity amongst member state national law in this area.²⁴ In the European Union, there is no uniform regulation on trade secrets among the 28 members. Each member, however, has its own national law applicable to this issue, divided into employment, criminal law and some rules derived from certain industries (such as in banking, finance, medical, etc.) on professional secrecy.²⁵

In the absence of any legislation of trade secrets, EU nations deemed confidentiality of undisclosed business secrets as important as seen in *Varec SA v Belgium*²⁶. The court was asked by Varec to be allowed to examine parts of Diehl's bid for the supply of tank track links by the Belgian Ministry of Defence. The court held that Diehl's business could be hurt by exposing the plans and samples of their bid as it contained business secrets. The court cited Article 7 of the Charter of Fundamental Human Rights on respect for private life in its *ratio*.

In recent times, the EU has been faced with the issue that there are not sufficient safeguards in place for trade secrets. This resulted in the European Commission initiating a study (published in 2012) on trade secret protection among its member states. This study revealed the divergence of the various jurisdictions and worse still, some states awarded very limited protection.²⁷ At the time,

²² Craig, P., De Búrca, G. (2015). *EU Law text, Cases, and Materials*. 6th ed. New York: Oxford University Press, p 40-57.

²³ Court decision, 19.11.1991, Francovich, C-6/90, EU:C:1991:428, paragraph 12.

²⁴ Gonzalez, L., H. (2013). Trade secret protection...in the cloud. *Entertainment Law Review*, Vol. 24, Issue 7, 245-249.

²⁵ Wennakoski, A. A. (2016). Trade secrets under review: a comparative analysis of the protection of trade secrets in the EU and in the US. *European Intellectual Law Review*, Vol. 38, no. 3, 154-171.

²⁶ Court decision, 14.2.2008, Varec, C-450/06, EU:C:2008:91, paragraph 20.

²⁷ Bronckers, M., McNeils, N. M. (2012). Is the EU obliged to improve the protection of trade secrets? An inquiry into TRIPS, the European Convention on Human Rights and the EU Charter of Fundamental rights. *European Intellectual Property Review*. Vol. 4 No. 10, 673-688.

only Sweden had laws specific to trade secrets while other countries relied on related forms of protection like tort, contract and case law. In 2013, a final study for the commission was published and it was examined how important trade secrets are in ensuring the effortless running of the internal market.²⁸

The Council of Europe and European Parliament, however, have now ratified the Directive of the European Parliament and of the Council on the Protection of Undisclosed Know-how and Business Information (trade secrets) against their unlawful Acquisition, Use and Disclosure – Directive 2016/943.²⁹ The reason is to prevent the theft and illicit use of trade secrets of companies in the European Union. This will lead to a standardised method of protection in all European Union Nations. Member states have been granted two years to assimilate the directive into national law. The Directive will come into force on the 9th of June 2018 and aims to give a mechanism through which trade secret owners can stop the illegal use and disclosure of trade secrets, the removal of products from the market that were manufactured based on unlawfully obtained trade secrets as well as being able to claim damages caused due to illegal use or disclosure of trade secrets.³⁰

The European Union does not specify an exact definition of trade secrets, rather, trade secrets have to meet certain specifications to qualify as trade secrets. Many countries, including the European Union in the past, do or did not legislate trade secret protection and some countries allow the definition to come about via case law.

1.5. Conclusion

In examining the views on Trade secrets of regions essential to this thesis (the United States and the European Union), it is safe to say that both areas require that information classified as a trade secret be actually kept confidential to be considered a trade secret. Not only should the information be undisclosed but it should also have some sort of commercial standing due to its secrecy. The regions also protect the details itself rather than the enclosed documents or other forms that may be used to store it.³¹

²⁸ Study on Trade Secrets and Confidential Business Information in the Internal Market copy. (2013) European Commission. Accessible: <https://goo.gl/GSf2B8>, 19 December 2017.

²⁹ OJ L 157, 15.6.2016

³⁰ Trade Secrets. European Commission. (2018) Accessible: <https://goo.gl/PDtSP5>, 19 December 2017.

³¹ Patel, A. B., *et al.* (2016). The Global Harmonization of the Trade Secret Law: The Convergence of Protections for Trade Secret Information in the United States and European Union. *Defence Counsel Journal*, Vol. 73, p 472-

Neither the European Union or NAFTA have a specific definition of trade secrets and use different markers such as secrecy or economic value as standards of qualification as a trade secret. The protection of trade secrets in the European Union is mainly influenced by international law such as the TRIPS agreement and fundamental rights.³² The EU's actions in proposing and implementing a new directive on trade secrets shows that the recognition of its importance is on a rise. Although the US is part of NAFTA, it still has important local legislation on the topic like the Defend Trade Secrets Act which will be discussed further throughout this thesis.

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³² Menise, J. (2007) *supra nota* 21, p 14-15.

2. TRADE SECRETS AND INTELLECTUAL PROPERTY RIGHTS

Trade secrets make up only one part of intellectual property law. The Universal Declaration of Human Rights in Article 17 states that “Everyone has the right to own property alone as well as in association with others and no one shall be arbitrarily deprived of his property”³³. Intellectual property rights arise from the idea that rights to creative works lie strictly with the owner and are protected to some extent by the government. This chapter will specifically look into patent and copyright protection in comparison to trade secret protection. Copyright and patent laws require that the “creative work” or result of innovation is given government protection in order to not just award ownership but allow the owner to earn back the formation cost.³⁴ Trade secrets accrue reward for being kept confidential while patents and copyrights accrue rewards for the opposite.

2.1. Comparison with Patent Protection

A patent is an exclusive grant, awarded to the owner for disclosure of technical innovation.³⁵ Patent laws usually outline specific standards that qualify inventions to be patentable while trade secrets do not have an equal level of specification to be seen as a trade secret. As discussed above, there must be a maintained level of secrecy and the provision of a competitive advantage for something to be seen as a trade secret.³⁶ The extensiveness of the definition makes way for both patentable and non-patentable subject matter to qualify as trade secrets.

The process for trade secret protection is significantly less tedious than that of patent protection. First off, there are certain requirements that must be met to make a subject matter patentable. These requirements include practical usage and novelty (i.e. no publication prior to filing), an inventive step by the owner and patentable subject matter according to the definition of the state where the

³³ UN General Assembly. Universal Declaration of Human Rights (217 [III] A). Paris, 1948, article 17.

³⁴ Newworldencyclopedia.org, Trade Secret <https://goo.gl/dnPqD4>, 28 January 2018.

³⁵ Bently, L., Sherman, B. (2014). *Intellectual Property Law*. 4th ed. Oxford: Oxford University Press 2014 p 375.

³⁶ Slaby, D. S. *et al.* (1989). Trade Secret Protection: An Analysis of the Concept "Efforts reasonable Under the Circumstances to Maintain Secrecy. Santa Clara High Tech. Journal, L.J., Vol. 5, p 321-327

patent is registered. Meanwhile, trade secrets, do not need to be new or show an inventive step to be protected.

When taking a deeper look into the process of patenting versus trade secrets protection, patenting is usually more expensive. The application process and the infringement monitoring process involves the payment of various consequential costs by undertakings. The subsequent legal action that may occur upon infringement is also financially burdensome.³⁷ Trade secret protection is not only cheaper than patents to protect but can also be acquired faster as they do not need to be approved by the government and is valid in all industries as well as covers non-patentable subject matter.³⁸ Trade secrets can also be seen as a preferred means of protection for non-patentable subject matter as these costs and processes can be avoided by using it. Though patents are mainly used to protect innovation, trade secrecy could be essential to protect related non-patentable information, to fortify exclusive ownership and as a means of back up protection.

Trade secrets do not require any form of registration in order to be protected, rather, it is enough that a trade secret is kept a secret for it to remain protected. Patents, however, require disclosure in exchange for protection.³⁹ This disclosure has the potential to be detrimental to businesses as the exposure could lead to loss in value of both the undertaking and its technology. *T-Mobile USA Inc. v. Huawei Device USA Inc., et al*⁴⁰, was a case that involved Huawei Device USA (Huawei) employees spying on a “smartphone-testing robot”⁴¹ known as Tappy that belonged to T-Mobile USA Inc. (T-Mobile). The robot, Tappy, was a secret and T-Mobile accused Huawei of stealing its technology to improve its own phone testing device. The court held that Huawei had misappropriated T-Mobile’s trade secrets.⁴² T-Mobile saw it fit to protect its technology with trade secrecy instead of patents because Trade secrecy allowed them to keep their information secret and gave them a possible competitive advantage. It is also noteworthy that trade secrets come into effect immediately and are not delayed by rigorous processes.

³⁷ Erkal, N. (2004). On the Interaction between Patent Policy and Trade Secret Policy. *The Australian Economic Review*, Vol. 37, no. 4, 427-35.

³⁸ Lemley, M. A. (2008). The Surprising Virtues of Treating Trade Secrets as IP Rights. *Stanford Law Review*, Vol. 61, p 311.

³⁹ May, C. (2010). *The Global Political Economy of Intellectual Property Rights*. 2nd ed. Oxon: Routledge, p 6.

⁴⁰ *T-Mobile USA Inc. v. Huawei Device USA Inc. et al.* (2015) No. C14 – 1351RAJ, 115 F. Supp. 3d 1184.

⁴¹ *Ibid.*

⁴² *Ibid.*

There is also expiry dates and durations of a patent to consider. Patents are generally protected for a limited period, usually twenty years. When examined, trade secrets on the other hand can be protected for longer as long as the information remains undisclosed and continues to provide an undertaking with a competitive advantage. Trade secrets can occur for an unlimited period until it is disclosed and only then will it cease to exist (whether disclosed by accident, reverse engineering or third-party discovery).^{43,44} Therefore, the lifespan and commercial value of trade secrets is unpredictable in comparison to patents as patents are protected from unauthorised use. Trade secret laws only cover violations like breach of confidence or theft, etc. and for that reason, reverse engineering is permissible.⁴⁵ Although the level of trade secret protection is different in each country, it is still generally weaker than patents. Patent protection gives you options in event of unauthorised usage with clear legislative and judicial remedies.

Asides from the clear differences between patenting and trade secret protection, there is a possibility that the two can work hand in hand. If patent protection proves to be too tedious and costly, one can opt for trade secret protection instead. They both are compatible in the developmental stage of ideas as the owner of the idea may not want to reveal the idea until it is in its full form. This also prevents poaching and stealing by potential competitors while in early innovation stages. A person may decide to patent an idea at some point or just continue in the line of trade secrets. Therefore, it is safe to say that both patent protection and trade secrecy may be utilized at different stages of development of an idea. However, when the owner decides to patent, the idea must be disclosed. Trade secrets can also be very useful in facilitating initial funding for patentable inventions.

As the topic of trade secrets and patent protection is further looked into, the question “what if the owner of a trade secret wants to register it as a patent somewhere down the line?”. This is tricky as some countries provide a timeframe in which a discovered idea or potentially patentable subject matter must be registered. For instance, some countries offer a one year period for the right of

⁴³ Beckerman-Rodau, A. (2002) The Choice Between Patent Protection and Trade Secret Protection: A Legal and Business Decision." Suffolk University Law School Intellectual Property, Paper 4.

⁴⁴ Chemcast Corp. v Arco Indus. Corp. 913 F.2d 923 (Fed. Cir. 1990).

⁴⁵Linton, K. (2016) The Importance of Trade Secrets: New Directions in International Trade Policy Making and Empirical Research. United States International Trade Commission Journal of International Commerce and Economics. p 4. Accessible: <https://goo.gl/xJ2Dg4>, 4 March 2018.

patent registration.⁴⁶ This period starts from the time of discovery and usually after it has elapsed, the owner is unable to register the discovery as a patent.

Trade secrecy can be both complementary or an alternative to patents due to its ease of access, low cost and the possibility of transitioning into a patent in the future (depending on the jurisdiction). However, it is noteworthy that trade secrecy is imperfect as it can be leaked, stolen or discovered by third parties.

2.2. Comparison with Copyright

Copyright is a form of intellectual property that involves the ownership and use of creative works.⁴⁷ Works covered by copyright include literary works, dramatic works, musical works, artistic works, broadcasts, sound recordings, films and typographical arrangements of published editions.⁴⁸ Copyright and trade secrecy are more complementary than trade secrecy and patent protection. This is mainly based on the steps in the creation of a copyright. For copyright protection to be granted, the work must be original (not be copied) and exist in some physical form.⁴⁹ Trade secret protection, in contrast, does not require originality, which expands the categories of information that can be protected using this means.

The cohesiveness of trade secrets and copyrights lie in the fact that copyright is an automatic right awarded to one if the work meets the criteria mentioned above. As a result, a potentially copyrighted work can also be a trade secret as copyrights do not have to be registered and as a result, do not have to be disclosed. In summary, both copyright and trade secret protection can be used at the same time as forms of protection. Patents, on the other hand, have to go through the tedious process of registration and disclosure.

To infringe on copyrights, there must be unauthorised copying by a party. The “right to exclude” concerns when information is gotten improperly. In that sense, you can compare the fair usage

⁴⁶ Denicolo V., Franzoni, L. A. (2004). The Contract Theory of Patents. *International Review of Law & Economics*, Vol. 23, No. 4, 365-380.

⁴⁷ Gorman, R. A. (2006). *Copyright Law*. 2nd ed., Washington DC: Federal Judicial Centre, p 1.

⁴⁸ Copyright Essential Reading. Intellectual Property Office. Accessible at: <https://goo.gl/aM5wvT>, 23 January 2018.

⁴⁹ What are the Conditions for Copyright. IPRhelpdesk.eu. Accessible: <https://goo.gl/ddATiS>, 4 March 2018.

principle in copyright which allows restricted use of copyright without authorised use from the owner to reverse engineering and third-party independent discovery. It is fair to say copyright law and trade secret law are correlative and harmonious.

2.3. Conclusion

In conclusion, trade secret protection has many advantages but is equally disadvantaged. Patent and copyright protection ensure full ownership rights to the owner and prevent usage (with few exceptions) by any unauthorised party. Trade secrets do not have any actual protection except when violated. If the secret is discovered by legitimate means or is leaked to the public, the commercial value plummets and it could also reduce a firm's competitive advantage. This chapter also analysed and concluded that not only is trade secret protection a good alternative to patents and copyrights but it is can be used in tandem with both patents and copyrights.

3. PROTECTION OF TRADE SECRETS

It is essential to look at the history and development of trade secrets in order to obtain a full analysis of the current as well and future direction of trade secrets protection. That is why in this chapter, not only will the general idea of trade secret protection will be examined but its history as well. As trade secrets have become increasingly relevant, they have also become more prone to theft. This chapter buttresses the necessity of trade secret protection using examples from case law and also discusses misappropriation of trade secrets.

3.1. History of trade secrets

Arthur Schiller argues that there is evidence that Ancient Roman law safeguarded intellectual property via “*actio servi corrupti*” which translates to “action for making a slave worse”. *Actio servi corrupti* involved preventing slaves being corrupted by enemies of their owner.⁵⁰ It protected trade secrets as well and was used by lawyers at the time as a private law action.⁵¹

However, the better-known origin of trade secrets is from English common law in the 1800s. Common law was the foremost source for common law and over the years, other laws have helped shape it into what we have today.⁵² The foremost noteworthy cases in common law history are in *Newbery v James* (England 1817) and *Vickery v Welch* (United States 1837).^{53,54}

Although trade secrets stem from British common law, Massachusetts state supreme court in the United States seems to be the first to give a detailed description of trade secrets in *Peabody v Norfolk*.⁵⁵

⁵⁰ Lindberg, V. (2008). Intellectual Property and Open Source. Sebastopol: O’ Reilly Media Inc. p 110.

⁵¹ Watson, A. (1996). Trade Secrets and Roman Law: The Myth Exploded. Tul. Eur. & Civ. L.F, Vol. 11, 19-29.

⁵² Pappas, E., & Steiger, J. (1991). Michigan Business Torts. Ann-Arbor: Institute of Continuing Legal Education, p 84.

⁵³ *Newbery v James* [1817] 2 Mer. 446, 35 Eng. Rep. 1011, 1012-13.

⁵⁴ *Vickery v Welch* [1837] 19 Pick 36 Mass., 523, 527.

⁵⁵ *Peabody v Norfolk*, 19 Mass, 452,458 (Sup. Court Mass., 1868).

“If a person invents or discovers, and keeps secret, a process of manufacture, whether a proper subject for patent or not, he has not indeed an exclusive right to it as against the public or against those who in good faith acquire knowledge of it; but he has a property in it, which a court of chancery will protect against one who in violation of contract and a breach of confidence undertakes to apply it to his own use or to disclose it to third persons” (Supreme Court of Massachusetts, 1868).⁵⁶

In *Peabody v. Norfolk*, the court explored trade secrets in more detail than in prior cases. It finally brought to light the fact trade secrets should not just be covered by breach of contract but should go beyond that. The court also observed the right of injunction for the plaintiff if there is a confidentiality breach as well as the fact a trade secret can be used for its commercial properties (bought and sold).

Express and implied agreements played a large role in the protection of trade secrets as common law courts used them as a base to press accountability on legal or private persons who breached an agreement. Meanwhile, laws on breach of contract and trust were developing and becoming well formed at the time and this link was important in prosecution. The dilemma that existed at the time was establishing if the so-called trade secret was actually real and this led to the creation of rules to distinguish between secured and unsecured and information. The issue of third-party confidentiality was also looked into by the court. Trade secrecy as a whole mainly relies on confidentiality so it is no surprise that it was of interest to courts. It was finally established that people that were not subject to confidentiality could not be seen as liable for revealing or utilizing trade secrets.⁵⁷

Trade secrets in common law continued to evolve over the years. In the United States, the American Law Institute introduced the Restatement of Torts in 1939 which was a foundation for trade secret laws in succeeding years. There were also various state laws existing and they were finally becoming more aligned when the Economic Espionage Act of 1996 was implemented by Congress. Although the English played an important role in pioneering trade secret protection, Trade secret law only evolved through case law with no proper tangible legislation to its effect.

⁵⁶ *Ibid.*

⁵⁷ Sandeen, S. (2010) The Evolution of Trade Secret Law and why Courts Commit Error When they do not Follow the Uniform Trade Secret Act. *Hamline Law Review*, Vol. 33, p 493-544.

Still, trade secrecy, despite its relevance, has the least protection when compared to other forms of intellectual property.

3.2. Necessity and Current State of Trade Secret Protection

The legal protection of Intellectual Property law as a whole is mainly governed by national legislation. Some of this domestic legislation is governed by transnational laws and agreements. This applies to trade secret laws as well (as can be seen in TRIPS and EU legislation). Trade secret protection on a global scale was introduced in Article 39 of the 1995 TRIPS Agreement. Enforcement of intellectual property rights is discussed in Part III of the TRIPS. Furthermore, the articles under this section stipulate that civil action be permitted where rights are infringed upon in the case of disclosing information to the degree that it opposes honest business practices.⁵⁸ It is noteworthy that the domestic legal systems of member states on the most part vary from country to country and for that reason, the strength of trade secret protection and rights also varies from jurisdiction to jurisdiction.⁵⁹

Technological advancements and the ease of formative storage of information has also led to the portability of information. Information can now be stored on flash drives, company hardware or the cloud and more likely than not, employees have access to this information. Some companies, for many reasons including profitability, hire quite a few employees to grow the workforce and ensure activities are carried out smoothly. Based on business expansion, hiring and technological innovation, company's more private information that qualify as trade secrets have become more prone to public leakage/ exposure and theft. Trade secrets are tricky as once the information is leaked, anyone can use it as there are no actual ownership rights. For instance, as revealed in *Coca-Cola Bottling Co. v. Coca-Cola Co.*⁶⁰, the formula for the drink is secured in a vault to be opened by the consensus of the board and is known by two anonymous people who are not allowed to be on the same aeroplane.

⁵⁸ Agreement on Trade-Related Aspects of Intellectual Property Rights (Marrakesh, Morocco, 15 April 1994), Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, The Legal Texts: The results of the Uruguay Round of Multilateral Trade Negotiations 321 (1999), 1869 U.N.T.S. 299, 33, article 39.

⁵⁹Pooley (2013), *supra nota* 3.

⁶⁰ *Coca-Cola Bottling Co. v. Coca-Cola Co.*, [1995] 227 U.S.P.Q. 18,22.

The dilemma here is that trade secret protection is rather weak, allowing competitors to poach each other's competitive advantages and get away with it.⁶¹ Although revealing trade secrets unintentionally or otherwise, diminishes its purpose, disclosure in the right circumstances such as in work-related circumstances is permissible as long as the owner took steps (such as contractual clauses of confidentiality and non-disclosure agreements) to ensure continued secrecy.^{62,63}

Although trade secrets are intellectual property, they are accorded weak protection in comparison to other branches of intellectual property. As in most cases of infringement of rights, legislation is turned to. There are varying legal systems existing in the world but most countries roughly fall into the common law system or civil law system.⁶⁴ In common law countries, trade secret violations could be treated as a tortious claim or in the United Kingdom specifically, they can be heard under laws of equity.⁶⁵ In civil law countries, trade secret violations are treated as part of unfair competition.⁶⁶

3.3. Misappropriation of trade secrets

Misappropriation of trade secrets is an infringement of rights that could transpire in multiple forms. Misappropriation can occur if a person obtains trade secrets through "improper means"⁶⁷. Some examples of "improper means" include theft, espionage, fraudulent means and breach of a confidentiality contract. It can also occur when a person divulges information which is against a contract or which is in breach of trust or confidence as seen in *Tesla Motors v. Anderson et al*⁶⁸. In this case, Tesla Motors, Inc. submitted a lawsuit against their former employee, Sterling Anderson who tried to poach Tesla engineers to Aurora, his new company, and stole a large amount of Tesla's undisclosed information. Tesla claimed Anderson's actions were in breach of

⁶¹ Lang, J. (2003). The Protection of Trade Secrets. *European Intellectual Property Review*, Vol. 25, Issue 10, 462-471.

⁶² Yeh, B. T. (2016) Protection of Trade Secrets: Overview of current Law and Legislation. *Congressional Research Service*, 7-5700, R43714.

⁶³ *Dynamics Research Corp. v. Analytic Services Corp.*, (Mass. App 1980). 254, 400 N.E.2d 1274.

⁶⁴ Menski, W. F. (2006). *Comparative Law in a Global Context: The Legal Systems of Asia and Africa*. 2nd ed. Cambridge: Cambridge University Press, p 129.

⁶⁵ Protecting trade secrets under English Law. (2015) *Osborneclark.com*. Accessible: <https://goo.gl/LHrNTj> 6 March 2018.

⁶⁶ LaFrance, M. (2011) *Passing off and Unfair Competition: Conflict and Convergence in Competition Law*. Scholarly Works, 784. Accessible: <https://goo.gl/JTXjih>.

⁶⁷ Uniform Trade Secrets Act with 1985 amendments. Accessible <https://goo.gl/TdgJmL> 6 March 2018.

⁶⁸ *Tesla Motors v Anderson, Urmson & Aurora Innovation LLC* [2017] 17-cv-305646 SC of CA.

his contract with them. An instance of theft (or attempted theft) is seen in *United States v. Williams*⁶⁹. Williams stole files from Coca-Cola and attempted to sell the information to its rival Pepsi. The defendant was found guilty and sentenced to prison.

Reverse engineering according to the US Supreme Court in *Kewanee Oil co v Bicron Corp* is “the process of starting with the known product and working backwards to divine the process that aided in its development or manufacture”⁷⁰ This description from the supreme court proves that there are situations in which coming into possession of trade secrets cannot be improper. If a trade secret is discovered independently by a third-party then there is no misappropriation involved, it is a proper means of acquisition.

⁶⁹ United States v. Williams, No. 07-12526, (11th Cir. 2008)

⁷⁰ *Kewanee Oil co v Bicron Corp* 416 US 470 (1974)

4. LEGAL PROTECTION OF TRADE SECRETS IN THE EUROPEAN UNION & THE UNITED STATES OF AMERICA

This chapter analyses the forms of protection of trade secrets that can be found in both the European Union and the United States of America. The EU Trade Secret Directive, Uniform Trade Secret Act and the Defend Trade Secrets act will all be reviewed, Furthermore, both criminal and civil resolutions will be analysed in order to paint a picture of how both jurisdictions handle trade secret security. Finally, both systems of protection will be directly compared and the best form of protection with regards to trade secrets will be exposed.

4.1. European Union Trade Secret Protection

As previously mentioned, the EU has no specific laws regulating the misappropriation of trade secrets. Instead, trade secret protection is left to national law to administer it in both criminal and civil aspects.⁷¹ The EU is an amalgamation of countries that practice different systems of law and for that reason, handle their civil and criminal matters in different ways. The difference in legal systems has been a challenge in the area of unified legislation in the EU, including in the area of misappropriation of trade secrets.

4.1.1. Trade Secret Directive

Amidst the divergence, the EU Council endorsed the Directive (EU) 2016/943 of the European Parliament and the Council on the Protection of Undisclosed Know-how and business Information (trade secrets) in May 2016. The aim of the directive is to unify trade secret protection throughout the Union. The objective of the directive is to guarantee there is a standardised and stable means to provide civil law protection in the EU.⁷²

⁷¹ Hernandez, O. D. M. Trade Secret Protection in the US and EU, 2016 <http://arno.uvt.nl/show.cgi?fid=141634> (4.03.18).

⁷² Akenbrandt, B., Vormann, T., Hertlin, R. Comparing U.S. and EU Trade Secrets Laws. Washington/Brussels: Trans-Atlantic Business Council, 2016, Available: www.transatlanticbusiness.org, p 3.

The directive must be authorised nationally by member states in no more than 2 years or will be faced with legal action at the Court of Justice of the EU. The Member States can also face legal consequences if they authorise the law but still do not fully implement it. This directive has direct effect meaning it must not be included in domestic law.⁷³ *Van Gen den Loos v Nederlandse Administratie der Belastingen*⁷⁴ is a good example of direct effect and it demonstrated that EU citizens (natural and legal persons) can enforce their rights under EU law in courts based on EU legislation. Furthermore, an instance of state liability can be seen in *Francovich v Italy*⁷⁵ which demonstrated that member states can be held responsible for their failure to apply EU directives in domestic law.

In Article 1, the directive states clearly that it contains regulations that safeguard trade secrets from unlawful acquisitions as well as the use and disclosure.⁷⁶ It additionally stipulates the standard to be attained by Member States in their implementation of the directive while permitting Member states leeway to increase the level of protection while using the directive as a benchmark (or as a minimum limit).

The directive strives to create a congruent interpretation of the term trade secrets. The definition as granted by the directive, also includes “know-how, business information and technological information where there is both a legitimate interest in keeping them confidential and a legitimate expectation that such confidentiality will be preserved”⁷⁷ The definition bares similarities to those which can be found in both the Defend Trade Secrets Act and the TRIPS Agreement. The directive’s broad definition of trade secrets exposes its resolve to protect them to the advantage of young companies as well as the possibility of also covering a public person subject to public law.⁷⁸

Directive (EU) 2016/943 additionally specifies that there are some ways in which trade secrets can be discovered and obtained legitimately such as reverse engineering or independent discovery. To boot, it offers whistle-blowers an exception if they are working on behalf of public interest and in turn exposes malpractice or crime and secures trade secrets that are the subject or part of court

⁷³ Horspool, M., Humphreys, M. (2012). *European Union Law*, 7th ed. Oxford: Oxford University Press, p 166.

⁷⁴ Court decision, 5.2.1963, *Van Gend en Loos*, C-26/62, EU:C:1963:1, paragraph 5.

⁷⁵ *Francovich v Italy* [1991], *supra nota* 23.

⁷⁶ OJ L 157, 15.6.2016, *supra nota* 29, p 8.

⁷⁷ OJ L 157, 15.6.2016, *supra nota* 29, p 4.

⁷⁸ Lapousterle, J., et. al, (2016) What Protection for Trade Secrets in the European Union? A Comment on the Directive Proposal. *European Intellectual Property Review*, Vol. 38 (5), p 255- 261.

cases. Member states are also allowed to decide whether to exclude the liability of employees that infringe in the absence of intent.

4.1.2. Civil Protection

As previously mentioned, the EU did not until 2016 have a uniform system of trade secret protection. In that case, protection varied between Member States and some offered better protection than others. Sweden was the only Member State that had an Act that directly regulated trade secrets (Act on the Protection of Trade Secrets). Other member states such as Germany, Latvia, Austria and Bulgaria used unfair competition laws in order to protect confidential information. Courts also used other measures which can be illustrated in *CF Partners (UK) LLP v Barclays Bank Plc and another*⁷⁹, the UK court used breach of confidence as a safeguard against infringement.

The third chapter of the EU Trade Secret Directive outlines the methods, procedure and redress to be granted for civil protection of trade secrets. The directive states that Member states should impose steps to fortify civil rights in the area of trade secrecy. Member states must ensure that the methods ensued, procedure and redress are “(a) proportionate; (b) avoids the creation of barriers to legitimate trade in the internal market; and (c) provides for safeguards against their abuse.”⁸⁰ However, there must also be time limits to file claims as well as the confidentiality of trade secrets that may be revealed in the course of a case.

As for remedies, the directive provides monetary indemnification to the injured party as well as damages which factor in consequences of loss of income, unjust gain by the infringer and in certain cases, moral prejudice to the injured party can be taken into account.⁸¹ But it can be argued that the most important remedy granted by the court is an injunction against use of a product derived from a trade secret and barring the use of the secret. Also important is the fact that the directive permits for seizure and the destruction of the trade secret enclosed in documents of other materials.

⁷⁹ *CF Partners (UK) LLP v Barclays Bank Plc*. [2014] EWHC 3049 (Ch.), All ER (D) 179 (Sep)

⁸⁰ OJ L 157, 15.6.2016, *supra nota* 29, p 11.

⁸¹ OJ L 157, 15.6.2016, *supra nota* 29, p 7.

4.1.3. Criminal Liability

The directive targets specifically civil liability, leaving the regulation of criminal liability of trade secret infringers to the Member States. In that case, criminal protection of trade secrets in certain states will be examined.

In France, the disclosure of a undisclosed production information results in imprisonment (maximum 2 years) and a levy of EUR30,000⁸². Theft of trade secrets or breach of trust leads to a maximum of 3 years in jail and a maximum levy of EUR375,000.⁸³

The Greek Criminal Code penalizes misappropriation of trade secrets as a breach of trust and the punishment is, maximum, a levy of EUR15,000⁸⁴ and 10 years in jail. While Belgium has a softer approach, fining the perpetrator between EUR50-EUR2,000 and a jail term of 3 months to three years.⁸⁵

Finally, Estonia punishes the revelation of trade secrets, gained via a work relationship, with a fine or a maximum sentence of a year.⁸⁶

The above-given examples prove that different countries have different means of punishing criminal liability which challenges the grain of the precedent of unification of legislation in EU states. The EU needs to look into unifying criminal liability in order to ensure a uniform standard of protection of trade secrets across the board and ensure its member states are in sync in their criminal punishment.

4.2. United States Trade Secret Protection

Up until recently, the EU did not accord trade secrecy the same respect as other aspects of IPR, unlike in the United States. The Establishment of statutes such as the UTSA, DTSA and the

⁸² European Commission (2013), *supra nota* 28.

⁸³ European Commission (2013), *supra nota* 28.

⁸⁴ European Commission (2013), *supra nota* 28.

⁸⁵ European Commission (2013), *supra nota* 28.

⁸⁶ European Commission (2013), *supra nota* 28.

Economic Espionage Act, show that the United States have pointedly taken trade secrets very seriously.⁸⁷ All three acts will be examined in this section.

4.2.1. Uniform Trade Secrets Act

In the United States of America (UTSA), trade secret laws were developed by each state independently. The Uniform Trade Secrets Act, issued in 1979 and revised in 1985 was adopted in order to unify state laws on trade secrets.⁸⁸ This was for many reasons, including making it easy for companies that functions in multiple states to follow similar standards instead of multiple, diverse ones.

The UTSA is adequately equipped to protect trade secrets and this is proven starting with how it defines a good number of terms related to trade secrets in section 1. When analysed, it states that improper means comprises of “theft, bribery, misrepresentation, breach or inducement of a breach of a duty to maintain secrecy or espionage through electronic or other means”⁸⁹. In addition, it defines also defines misappropriation of trade secret and trade secret. Regarding the definition of trade secret, it expands the definition of trade secret to include information that is not currently being utilised by its owner.⁹⁰

Much like the EU Trade Secrets Directive, the UTSA particularly focuses on civil liability. The UTSA also includes remedies in case of a breach of the stipulations of this act. These remedies include injunctive relief, damages and reimbursement of attorney’s fees.

Injunctive relief (§2 UTSA) permits for the injunction to remain until the trade secret ceases to exist unless there may be a competitive edge that can still be derived from a defunct misappropriated trade secret, in that case, the injunction can remain for an equitable period even after the trade secret no longer does. Section 2 also permits the payment of royalties instead of an

⁸⁷ Czapracka, K. (2009) Intellectual Property and the Limits of Antitrust: A Comparative Study of US and EU Approaches. Cheltenham: Edward Elgar Publishing Limited, p 112.

⁸⁸ Budden, M. C. (1996). Protecting Trade Secrets Under the Uniform Trade Secrets Act: Practical Advice for Executives. Westport: Greenwood Publishing Group, p 8.

⁸⁹ Uniform Trade Secrets Act, *supra nota* 67, p 5.

⁹⁰ Dreyfuss, R. C., *et al.* (2011). The Law and Theory of Trade Secrecy: A Handbook of Contemporary Research. Cheltenham: Edward Elgar Publishing Limited, p 25.

injunction in uncommon occurrences as can be seen in *Prince Manufacturing, Inc. v. Automatic Partner, Inc.*⁹¹

Section 3 of the UTSA provides the possibility to be awarded damages in addition to a court injunction. These damages can be awarded for the amount to be lost due to misappropriation and commercial exploitation due to misappropriation, that is not factored in during the calculation of actual loss. In addition, section 3 also allows the court to grant damages to the maximum of double what may be awarded according to section 3(a) if the misappropriation is “wilful and malicious”⁹² in nature.

With regards to attorney fees, section 4 specifies that a court can additionally award attorney fees to the winning side concerning operations done in “bad faith, or wilful and malicious misappropriation”⁹³. This is illustrated in *R.C. Olmstead, Inc. v. CU Interface LLC et al.*⁹⁴ where the court awarded the CU Interface LLC, the defendants, a total of \$92,523.60 in attorney’s fees after the plaintiff, R.C. Olmstead lost the case due to their lack of material fact.

The UTSA was also a source for many corner stone cases in this area such as *Rivendell Forest Products, Ltd. v. Georgia-Pacific Corporation*⁹⁵. In this case, it was established that parts of a trade secret can also be public knowledge.

4.2.2. Defend Trade Secrets Act

The Defend Trade Secret Act (DTSA) is federal legislation of the USA which permits a trade secret owner to take civil action against an infringer in federal court. The act was signed by the former US President, Barack Obama in 2016. It accentuated Congress’ inclination to fashion it after the already existing Uniform Trade Secret Act which was already implemented in 48 out of the 50 states.⁹⁶ The DTSA also revises the Economic Espionage Act (1996) in order to federalise civil redress derived from the misappropriating of trade secrets.⁹⁷

⁹¹ *Prince Manufacturing, Inc. v. Automatic Partner, Inc.* [1976], 198 USPQ 618 (N.J.Super.Ct.1976).

⁹² Uniform Trade Secrets Act, *supra nota* 67, p 11.

⁹³ Uniform Trade Secrets Act, *supra nota* 67, p 13.

⁹⁴ *RC Olmstead, Inc. v. CU Interface, LLC* 657 F. Supp. 2d 878 (N.D. Ohio 2009).

⁹⁵ *Rivendell Forest Products, Ltd. v. Georgia-Pacific Corp.* 28 F.3d 1042 (10th Cir. 1994).

⁹⁶ Rowe, E. A. (2017). Unpacking Trade Secret Damages. *Houston Law Review*, 55, p 155-198.

⁹⁷ Lobel, O. (2017). Symposium Keynote: The DTSA and the New Secrecy Ecology, *Business, Entrepreneurship & Tax Law Review*, 1, p 369-382.

Much like Directive (EU) 2016/943, the DTSA provides immunity to whistle-blowers. This prevents legal action, whether civil or criminal, being taken against anyone who reveals a trade secret. However, it contains further stipulations which limits the revelation to a government authority (local, state, federal) or a lawyer, with the aim of disclosing the infraction of the law or includes this information in a sealed law suit.⁹⁸

Furthermore, the DTSA echoes the UTSA in interpreting many terms, for instance, misappropriation. According to the DTSA, misappropriation is the attainment of a trade secret through an illegitimate process or from anyone that knew it was obtained illegitimately or in a situation that creates the obligation of secrecy. Or, the person, prior to a substantial change of circumstances, ought to have known that the trade secret was revealed unwittingly.⁹⁹

The act also provides legal remedies similar to the UTSA in the form of court injunctions, damages and cost of counsel. It is noteworthy that injunctions must be reasonable in nature and must be in tandem with state law on the matter. *Henry Schein, Inc. v. Cook*¹⁰⁰ for instance, was the foremost judgement using the DTSA. The case also took into account Californian domestic laws on the matter (California Uniform Trade Secret Act) and the judge awarded a temporary injunction to the plaintiff preventing their former employee from stealing their clients.

An essential remedy provided by the DTSA is civil seizure. This remedy is one (before a judgement is passed on misappropriation) in which a court can instruct the confiscation of property in order to avert the circulation of a trade secret that is the central to an issue.¹⁰¹ This is important for the speedy prevention of additional propagation of the trade secret while a case is underway or pending. However, it is noteworthy that civil seizure should be granted in exceptional situations only or if no other remedy is sufficient. This can be demonstrated in *Magnesita Refractories Co. v. Mishra*¹⁰², in which the court did not permit the application of a civil seizure because there was already an injunction in place which also stipulated the confiscation of the defendant's laptop. The injunction was seen as adequate. This civil seizure can be granted on certain grounds which include the insufficiency of an injunction, the incident of irreversible injury, the person subject to the civil

⁹⁸ Menell, P. S. (2017). The Defend Trade Secrets Act Whistleblower Immunity Provision: A Legislative History. *Business Entrepreneurship & Tax Law Review*, 1, p 11- 16.

⁹⁹ Patel (2016), *supra nota* 31, p 472-486.

¹⁰⁰ *Henry Schein, Inc. v. Cook*, No. 16-CV-03166-JST WL 3418537, (N.D. Cal. Jun. 22. 2016)

¹⁰¹ Cannan, J. A. A (2017). (Mostly) Legislative History of the Defend Trade Secrets Act of 2016, *Law Library Journal*. No 109, p 363-386.

¹⁰² *Magnesita Refractories Co. v. Mishra*. WL 365619, (N.D. Ind. Jan. 25 2017).

seizure decision has material to be seized with regard to proprietary information to mention but 3.¹⁰³

Furthermore, the DTSA also issues a period of restriction for the commencement of legal action. This time period is 3 years subsequent to the date of the realisation of the misappropriation or by when the misappropriation should have reasonably been unearthed.

4.2.3. Economic Espionage Act

The Economic Espionage Act (EEA) deals with a variety of issues but in this section, it will only be examined in the aspect of trade secrets as relevant to this thesis. The EEA formed a uniform standard for the safeguard of weaker intellectual property like trade secrets.¹⁰⁴ The EEA defines terms like trade secrets, etc. just as can be found in the UTSA and the DTSA.¹⁰⁵ Through the analysis of the existing legislations pertaining to trade secrets, it can be discovered that the most noteworthy difference between the acts is that while the DTSA and UTSA take a more civil tone, the EEA introduces a criminal one.

The EEA criminalizes the misappropriation of trade secrets, this also includes the scheme to misappropriate and the appropriation of the undisclosed information, with the aim of empowering a foreign entity.¹⁰⁶ The erring party is sanctioned with a fine up to \$500,000/offense, \$10,000,000 for establishments and a jail term of maximum 15 years for guilty persons.¹⁰⁷ This is illustrated in *The United States v Steven L. Davis*¹⁰⁸. The defendant was sentenced to 27 months in jail and was forced to pay a fine of approximately \$1.3million.

It deems the misappropriation of a trade secret associated with or incorporated in a product created for interstate or international monetisation, with the intent or awareness that the misappropriation will cause loss to the proprietary owner. The punishment for this is prison time of up to 10 years and for establishments, a levy of up to \$5,000,000.¹⁰⁹ A very important observation is that the act

¹⁰³ The Defend Trade Secrets Act of 2015 § 1890 (2).

¹⁰⁴ Rothberg, H. N., Erickson, G. S. (2009). *From Knowledge to Intelligence: Creating Competitive Advantage in the Next Economy* Oxford: Elsevier Inc., p 269.

¹⁰⁵ Kizza, J. M. (2001). *Computer Network Security and Cyber Ethics*, 4th ed. Jefferson: McFarland, p 94.

¹⁰⁶ Pooley, J. H. A., *et al.* (1997). *Understanding the Economic Espionage Act of 1996*, Texas Intellectual Property Law Journal. Vol. 5, No. 177, p 177-229.

¹⁰⁷ Mossinghoff, G. J., *et al.* (1997). *The Economic Espionage Act: A New Federal Regime of Trade Secret Protection*. Journal of the Patent and Trademark Society, 1997, 79, p 191-210.

¹⁰⁸ *United States v. Steven L. Davis*, No. 97-00124 (M.D. Tenn. 1997).

¹⁰⁹ Mossinghoff, G. J. (1997), *supra nota* 107, p 191-210.

also stipulates the surrendering of material gains obtained as result of the violation of the trade secrets and any goods used in the illegitimate proceedings. The act allows for the initiation of civil proceedings as long as it is in accordance with the case of the Attorney of the USA.

Notably, EEA is both friend and foe to American establishments as it can be utilised in safeguarding a company's trade secrets through the legal process, for example, *United States v. Lange*¹¹⁰, the EEA was used to the advantage of the injured company whose ex-employee was trying to market its trade secrets to competitors. The defendant, Lange, received 30 months jail time. Furthermore, it can be used against a company that has possession of a competitor's trade secrets. Notably, all EEA cases have resulted in a conviction or a plea deal.¹¹¹

The EU Trade Secret directive applies within the EU's territory; however, the applicable jurisdiction of the EEA statute extends past the United States if the perpetrator is a citizen or permanent resident of USA, the corporation was established under US laws or if the crime was continued in the USA.¹¹²

4.3. A Comparison of The Protection of Trade Secrets in The EU & US

It is evident that the United States considered the need to protect trade secrets essential, years before it even became a thought in the EU. This chapter is dedicated to comparing both systems of protection, unveiling both their similarities and differences.

4.3.1. Definition of Terms

Both the US statutes and EU Trade Secret Directive define trade secrets identically. It is evident that they both have root in property and privacy law.¹¹³ To reiterate, the legal owner of the trade secret should have engaged sensible measures to safeguard the information and the information must remain widely unknown by others. Finally, the undisclosed information must have economic value.¹¹⁴

¹¹⁰ *United States v. Lange* 312 F.3d 263, (7th Cir. 2002).

¹¹¹ Torren, P. (2003). *Intellectual Property and Computer Crimes*. New York: Law Journal Press, p 53.

¹¹² Carr, C., *et al.* (2000). *The Economic Espionage Act: Bear Trap or Mousetrap?* Texas Intellectual Property Journal Winter, Vol 8 No 159, p 179.

¹¹³ Bronckers, *supra nota* 27, p 673-688.

¹¹⁴ Bevitt, A., *et al.* (2014). *Protecting Trade Secrets Globally: Comparing the US And EU*. Employment Law Commentary, Vol. 26, p 1-5.

With regards to misappropriation of trade secrets, both outline that the attainment of misappropriated trade secrets must occur through improper means. Improper means is defined similarly in the respective legislations, with the US Acts including “theft, bribery, misrepresentation, breach of duty and espionage”¹¹⁵ while the EU Trade Secret Directive defines it as unauthorised “appropriation of, or copying of any documents, objects, materials...”¹¹⁶ and other actions viewed as “contrary to honest commercial practices”¹¹⁷.

The DTSA, to be specific, includes language stating that trade secrets must not be readily discovered “through proper means”, which the EU Trade Secret Directive does not include but it does indicate the possibility of attaining trade secrets lawfully.

The Directive also defines infringing goods, which are “goods, the design, characteristics, functioning, production process or marketing of which significantly benefits from trade secrets unlawfully acquired, used or disclosed.” Taking this into account, the component of marketing stands out. It has been argued that marketing has no part in the utilisation of a trade secret. This restriction is harsh as if a misappropriated client list is used in a marketing campaign, classifying the marketed goods as “infringing” seem to be some-what disproportionate.¹¹⁸ If one company obtains the customer list of another illegally and uses it in marketing, this of course is unlawful however, the goods being marketed were not derived through the misappropriation of the trade secret.¹¹⁹

4.3.2. Acquisition of Trade Secrets

The EU and US legislation on misappropriation through acquisition differ regarding the consciousness of the acquirer of the misappropriated undisclosed information. The US legislation demands actual awareness of the status of the trade secret (as an improper acquisition) in order to assign responsibility, whether it was acquired from the proprietary owner or another party. Whereas Directive (EU) 2016/943 differentiates trade secrets obtained from the owner from

¹¹⁵The Defend Trade Secrets Act of 2015, *supra nota* 103 §1839 (6) (A)

¹¹⁶ OJ L 157, 15.6.2016, *supra nota* 29, p 10.

¹¹⁷ *Ibid.*

¹¹⁸ Knaak, R., et al. (2014). Comments of The Max Planck Institute for Innovation and Competition of 3 June 2014 on the Proposal of the European Commission for a Directive on the Protection of Undisclosed Know-How and Business Information (Trade Secrets) against their Unlawful Acquisition, Use and Disclosure of 28 November 2013. *International Review of Intellectual Property and Competition Law*, Vol. 45, Issue 8, p 953-967.

¹¹⁹ Aplin, T. (2014). A Critical Evaluation of the Proposed EU Trade Secrets Directive. King's College London Law School Research Paper No. 2014-25. Available: <https://ssrn.com/abstract=2467946>, 3 May 2018.

information obtained from another party. Unlawful acquisition, when the information is still controlled by the proprietary owner, ought to be unsanctioned or “contrary to honest commercial practices”¹²⁰.

The US statutes and the EU legislation both legalise reverse engineering and independent discovery. The EU Directive elucidates the term reverse engineering by stating that it is the “...testing of a product or object that has been made available to the public or that is lawfully in the possession of the acquirer of the information who is free from any legally valid duty to limit the acquisition of the trade secret”¹²¹, while the DTSA in short, stipulates that reverse engineering is “not improper”.

US legislation in the area of trade secrecy, failed to acknowledge whistle-blowers until the passing of the DTSA in 2016. The EU Trade Secret Directive however, took whistle-blowers into account. Though both statutes protect whistle-blowers, they still have notable differences. The DTSA requires that the whistle-blower has revealed the trade secret “in confidence to a Federal, State or Local government official...or to an attorney”. This limit the scope of whistle-blower protection in the US to only when with certain people.¹²² The EU Trade Secret Directive specifies that whistle-blowers whose actions are on the basis of public well-being should be protected, whether revealed in confidence or not.

4.3.3. Protection During Litigation

Both US and EU legislation convey the importance of trade secret security in the litigation process. EU directive permits for the case proceedings to not only be sealed but to be redacted as well.¹²³ This is similar to the stipulations in the DTSA that demands courts uphold the secrecy of trade secrets through implementing sealed filings.¹²⁴ The courts also have to permit the owner to reveal to the court why they would like to keep the information secret before it considers whether or not the reason is sufficient enough to seal the filings. It is noteworthy that the EU’s Directive allows the minimum of one agent to a party access to the trade secret during litigation. Consequently, the American custom of solely permitting attorneys to view certain information through an attorneys’ eyes-only agreement is unattainable. Therefore, aggrieved parties may not want to take legal action

¹²⁰OJ L 157, 15.6.2016, *supra nota* 29, p 10.

¹²¹ OJ L 157, 15.6.2016, *supra nota* 29, p 10.

¹²² Patel (2016), *supra nota* 31, p 472-486.

¹²³ OJ L 157, 15.6.2016, *supra nota* 29, p 12.

¹²⁴ 18 U.S.C. § 1835(a)

if there is an infringement because they may not want to reveal their trade secrets. Nonetheless, the Directive specifies that the parties provided the access may be under limitations that prevent use and revealing the information.¹²⁵

Finally, the EU Trade Secret Directive specifically focuses on civil liability and nowhere mentions criminal liability. The Member States have the discretion to regulate the criminal aspect of appropriation on their own. Two out of the three US Acts regarding trade secrecy, namely the DTSA and the UTSA, focus on civil liability while the EEA, a federal statute, includes criminal liability.

4.3.4. Remedies

The DTSA and the EU Trade Secret Directive provide various but similar remedies for trade secret misappropriation. Regarding the civil seizure, the Directive permits this without any specifications while US legislation allows only *ex parte* civil seizure, in exceptional situations and when specific prerequisites are satisfied. EU and US legislation also allow the implementation of injunctions in order to stop or avert misappropriation. These injunctions can be substituted by the payment of a reasonable royalty to the proprietary owner. Moreover, all EU member states must provide the option of an initial injunction whereas this is not stipulated in US statutes.

Both the EU Directive and US legislation authorise the award of damages for actual loss incurred by the injured party.¹²⁶ They also permit the award of damages for material or immaterial profits gained by the perpetrator. As a substitute for the aforementioned damages, both EU and US legislation permit the awarding of damages in form of royalty.¹²⁷

With regard to punitive damages, the EU Trade Secret Directive allows the court discretion in taking into account non-pecuniary factors like medical or religious factors endured by the injured party. The DTSA, on the other hand, allows the court to award increased damages with the maximum limit of double the amount being paid in redress in the case of wilful and malicious appropriation.

Furthermore, Trade Secret Directive incorporates a clause that permits Member States to take into account the intent of an employee in the misappropriation of a trade secret and reduces the

¹²⁵ *Ibid.*

¹²⁶ 18 USC §1836(b)(3)(C)–(D)

¹²⁷ 18 USC §1836(b)(3)(B)

employee's responsibility based on intent. This is not stipulated in any US statutes.

4.3.5. Mobility for workers

US legislation and the Trade Secret Directive tackle the issue of employee mobility. Prior to the current version of the DTSA, the earlier editions were found wanting because, in a sense, they hindered free movement of employees between competitors and firms. The DTSA permits for an injunction to be placed on a former employee if there is proof that misappropriation by that employee is imminent and not merely because the employee has knowledge of a trade secret. Meanwhile, the EU's directive outlaws limitation on employee mobility but also omits any stipulations to unify laws affecting non-competes and the likes, allowing national legislation to be applicable in this area.

In addition, the DTSA includes stipulations that intercepts possible conflicts between injunctions that prevents employment in the future and relevant state laws. When there is conflict with state laws, state laws prevail.

4.3.6. Other Differences

When it comes to statutes of limitation, US legislation and the Trade Secret Directive diverge. For instance, the DTSA specifies a period of 3 years from the time discovery or when it should have been reasonably discovered while the EU Trade Secret Directive permits 6 years while allowing Member States to specify shorter time limits.^{128,129}

The DTSA states that the applicable jurisdiction becomes transnational if the perpetrator is a citizen or permanent resident of USA, the corporation was established under US laws or if the crime was continued in the USA.¹³⁰ Meanwhile, the EU Trade Secret Directive makes no mention of this.

¹²⁸ OJ L 157, 15.6.2016, *supra nota* 29, p 12.

¹²⁹ 18 USC §1836(d)

¹³⁰ 18 USC §1837

5. THE IMPORTANCE OF TRADE SECRETS IN THE START-UP ENVIRONMENT

Throughout this thesis, the importance of trade secrets to small businesses has been iterated. The growing value of trade secrets to the commercial and technological sectors has increased the chances for unlawful acts.¹³¹ Furthermore, global acceptance of the new wave of small businesses, start-ups, is on the rise. Organisations and start-ups of all kinds view trade secrets as vital to their operations. This chapter aims to discuss the impact of trade secrets in the current start-up climate.

The world economy as of late has been leaning towards a rise in the prominence of the information industry.¹³² A number of start-up companies depend heavily on their creativity and ideas protected by intellectual property to gain value and a competitive edge. Examples of these companies span from the ride-sharing industry to the medical and financial industry. Start-ups such as Taxify, Uber and Transferwise have revolutionized the transport and banking industry and daily, more start-ups pop up to shake the proverbial table. The introduction of social media also led to a shift in dynamic for advertising and informational reach, working hand in hand with start-ups. Slowly, the focus on tangible assets is dwindling and the information economy is thriving. This is where trade secrets come in.

Proprietary information will only increase in importance as technology continues to develop. Trade secrets can be seen as conducive for the protection of innovation and fresh ideas. It has many advantages including how easy it is to distribute them among workers, investors and so on, especially using methods of protection such as non-disclosure agreements. The growing interest in the use of trade secret protection is not only evident in its constant use, but also in the interest from legislators and its becoming a subject for protection in national, international and

¹³¹ Van Arnam, R. C. (2001). Business War: Economic Espionage in the United States and the need for Greater Trade Secret Protection. *North Carolina Journal of International Law and Commercial Regulation*, Vol. 27, p 95-139.

¹³² Eliasson, G., *et al.* (1990). *The Knowledge Based Information Economy*. Stockholm: Almqvist & Wiksell International, p 15.

transnational law.¹³³ Civil and criminal legislation is now being implemented to ensure accurate trade secret security. Prosecutions in the realm of trade secrets can be illustrated in a number of cases throughout this thesis and also in *Dorset Industries, Inc. v. Unified Grocers, Inc.*¹³⁴

The preference of trade secrets has also grown as a result of the element of revelation that comes with other forms of protection such as patents.¹³⁵ Although patenting technology is always a safe bet, multinational companies such as KFC have led the way in proving just how much trade secrets are equally up to the task. Trade secrets may not give you the same benefits as patents but it certainly keeps valuable know-how away from competitors.¹³⁶ The ride-hailing industry is a clear example of this. Both Uber and Taxify have certain processes that help their success and that they most certainly would want to keep out of each other's reach. Patenting such a process would inevitably lead to revelation which could be a huge blow to either one of their competitive advantages.¹³⁷ With the rising trends in trade secret protection, some disadvantages present themselves. For instance, if a company's secrets are stolen, they will have to prove there was a certain measure in place to secure the information as seen in *Powerweb Energy, Inc. v Hubbell Lighting Inc.*¹³⁸ The plaintiff had to prove that their technology was not widely known by others. To summarise, although it is very important to note that trade secrets help companies utilise secret mechanisms to aid smooth functionality, build a competitive edge and become profitable, reasonable efforts must be made to maintain secrecy.

A number of start-ups kick off with minimum funding. The owner of Taxify in numerous talks has stated that he started off with about EUR5000. The process of patenting innovation is not only a long one but an expensive one. If start-ups pour their resources into patent registration, it could lead to a waste of resources or a failure to launch, however, trade secrecy costs significantly less than patenting, saving start-ups funds that could be spent on perfecting their product.

Nevertheless, with the growth of trade secrecy disadvantages are also in tow. Most notably, if a start-up has legal problems, they will be forced to show that they took reasonable measures to protect the trade secret, this can prove to be a dilemma as legislation does not define what

¹³³ Lapousterie (2016), *supra nota* 78, p 255- 261.

¹³⁴ *Dorset Indus., Inc. v. Unified Grocers, Inc.*, 893 F.Supp. 2d 395, 406 [E.D.N.Y. 2012]

¹³⁵ Lang (2003), *supra nota* 60, p 462-471.

¹³⁶ Gilotta, S. (2012). Disclosure in Securities Markets and the Firm's Need for Confidentiality: Theoretical Framework and Regulatory Analysis. *European Business Organization Law Review*, Issue 13, Vol. 1, p 45-88.

¹³⁷ Beckerman-Rodau (2002), *supra nota* 40.

¹³⁸ *Powerweb Energy, Inc. v Hubbell Lighting, Inc.*, 3:12CV220 WWE, WL 5835392 (D Conn 2012).

“reasonable measures” are.¹³⁹ If reasonable measures are not taken, this is grounds for dismissal which is illustrated in *Pop International Galleries Inc. v Swarts*¹⁴⁰. These reasonable measures include but are not limited to the use of NDAs, confidentiality and non-compete clauses, limited accessibility of information, installing security cameras, etc. Smaller companies, however, are held to a lower standard as to what is deemed a reasonable measure of protection as demonstrated in *Elm City Cheese Co. v. Federico*¹⁴¹. Essentially, start-ups can use lower measures to ensure protection but this must change as they grow and become more successful.

In an official quote from the COO of Taxify, Markus Villig, on his take on trade secrets he mentioned that he would rather “everyone shares their trade secrets and make a fully competitive society that would result in the best competition, create the best end products and subsequently create the best choices for clients.”¹⁴² Furthermore, he also stated that “for most industries - information should be more accessible so companies can use the same innovations and compete on their execution. Especially if “cost” to develop these ideas are low.”¹⁴³ This is a noble idea yet, a Taxify work contract still includes a non-compete clause. This is because the society we live in is not fair and competition is not always fair either. The result of such sharing could be the end of capitalism and the formation of a glut. The creation of the best competition in such a society is also questionable. Using the ride-hailing industry for example, if Uber, Taxify and Lyft all used the same formula to achieve success, recruit drivers and please clients, this would be a dead end for dynamism in this sector, something society thrives on. Not to talk of the creation of a monopoly. If all start-ups in an industry share trade secrets and use the same processes, it will only be a matter of time before they realise it would be more profitable to merge and create a monopoly. Monopolies are, in most cases, detrimental to consumers.

In conclusion, trade secrecy has to be the most important form of proprietary protection for start-up companies as not only does it save time and money, it also helps put these companies in beneficial positions and increase their commercial value.

¹³⁹Bone, G. R (1998) A New Look at Trade Secret Law: Doctrine in Search of Justification. California Law Review, Vol. 86, p 241-313.

¹⁴⁰ Pop Intern. Galleries Inc. v Swarts, 34 Misc 3d 1239(A) (Sup Ct. 2012)

¹⁴¹ Elm City Cheese Co. v. Federico, 251 Conn. 59 (SC 15951 1999).

¹⁴² Villig, M. Taxify COO, Views on Trade Secrets, Author’s Question. Social Media Platform. 4 May 2018.

¹⁴³ *Ibid.*

CONCLUSION

This thesis has examined the systems of trade secret protection in the United States of America and the European Union in terms of both civil and criminal liability, comparing their respective aspects in order to expose their main differences. The European Union up until recently did not deem the issue of trade secret misappropriation as important to legislate on a Union-wide level, leaving it to the states. It is clear that the US on the other hand recognized the importance of safeguarding trade secrets and implemented it in legislation from an early stage.

As of today, both the United States of American and European Union legislation have similar provisions with minor differences, however, it is my opinion that as the American statutes are more mature and also regulate on a nationwide level the criminal prosecution of trade secret misappropriation, it is the preferred system of protection. The Economic Espionage Act stipulates remedies and penalties for criminal proceedings, which is essential for uniform application nationwide. It is positive that the European Union grants nations autonomy in the implementation of criminal liability, however, this could lead to disparity in the laws applied union wide. The whole point of the Trade Secret Directive is to unify trade secret laws but the fact that it omits the criminal liability aspect is slightly disappointing. With the current member state laws on the criminal aspect, it is evident that there is a lack of uniformity, with countries like Slovakia imposing a jail term of 7-12 years in aggravated situations, the Czech Republic having no jail time at all and the Netherlands having a 6-month prison sentence. There needs to be a more uniform means of meting out criminal penalties throughout the European Union.

Furthermore, the European Union Trade Secret Directive gives too much room for sanctioning third parties. It allows the possibility of an innocent business being sanctioned even if the business was unaware of a misappropriation. For instance, the misappropriation could have been carried out by a subordinate or could have been inherited in the case of a merger or acquisition. Although this may be seen as unfair, it ironically reminds one of the popular saying, “ignorance of the law is not an excuse”. The Uniform Trade Secrets Act on the other hand, does enforce third-party liability but permits an exception if the trade secret was obtained by mistake or “before a material

change in position”¹⁴⁴, which the European Trade Secrets Directive does not. The European Union should look into this in order to stay within the bounds of proportionality, a principle they hold dearly.

Additionally, the EU trade secret directive outlines limitations of trade secret claims for misappropriation and other forms of unlawful acquisition. The limits prevent the obstruction of employee mobility, allows government officials to demand the revelation of certain trade secrets to the public, protects whistle-blowers, etc. These are all valid limitations that the United States statutes vaguely take into account. This is a positive aspect of the EU Trade Secret Directive for many reasons but taking employee mobility for instance, it deems unfair the restrictions that may hinder the free movement of employees from one organisation to another. If further analysed, the restriction of employee mobility may have an adverse effect on competition, preventing people who are qualified to do a job from working with competitors due to unfair mobility restrictions. Alternatively, companies can protect themselves by using non-disclosure agreements and if the need arises, take legal action if a former employee is exploiting their trade secrets.

These statutes will make businesses examine their already existing trade secrets and see if their so-called trade secrets fit the characteristics as outlined in legislation. They will have to ensure their trade secrets are unknown, are protected under reasonable steps, provide them a competitive advantage and so on. Of course, the United States’ statutes and the EU’s directive did not specifically outline what can be seen as reasonable steps in securing trade secrets which gives leeway for many forms of protection but there should have been an example for a minimum standard of protection which is seen as reasonable.

This paper has analysed the existent methods for protection in two major regions of the world. The EU is on the right track with its current directive but should unify member state legislation on the criminalisation of trade secret misappropriation. It should continue to build on its current material and even improve on the example set by the United States. While both the EU and the US legislation on trade secret protection are positive reinforcements to the concept of safeguarding trade secrets, they also need to take into account rights such as freedom of speech and free competition in order to ensure justice and proportionality in dealings carried out under the law.

¹⁴⁴ UTSA §1(2)(c) (1985).

LIST OF REFERENCES

Scientific books

1. Albert, G. P, Jr., Laff, Whitsel & Saret, ltd. (1999). *Intellectual Property in Cyberspace*. Washington DC: BNA Books.
2. Bently, L., Sherman, B. (2014). *Intellectual Property Law*. 4th ed. Oxford: Oxford University Press.
3. Budden, M. C. (1996). *Protecting Trade Secrets Under the Uniform Trade Secrets Act: Practical Advice for Executives*. Westport: Greenwood Publishing Group.
4. Craig, P., De Búrca, G. (2015). *EU Law text, Cases, and Materials*. 6th ed. New York: Oxford University Press.
5. Czapracka, K. (2009) *Intellectual Property and the Limits of Antitrust: A Comparative Study Of US and EU Approaches*. Cheltenham: Edward Elgar Publishing Limited.
6. Dreyfuss, R. C., Strandburg, K. J. (2011) *The Law and Theory of Trade Secrecy: A Handbook of Contemporary Research*. Cheltenham: Edward Elgar Publishing Limited.
7. Eliasson, G., Folster, S., Lindberg, T., Pousette, T., Taymaz , E. (1990). *The Knowledge Based Information Economy*. Stockholm: Almqvist & Wiksell International.
8. Gorman, R. A. (2006). *Copyright Law*. 2nd ed. Washington DC: Federal Judicial Centre.
9. Horspool, M., Humphreys, M. (2012). *European Union Law*. 7th ed. Oxford: Oxford University Press.
10. Kizza, J. M. (2001). *Computer Network Security and Cyber Ethics*. 4th ed. Jefferson: McFarland.
11. Lindberg, V. (2008) *Intellectual Property and Open Source*. Sebastopol: O’ Reilly Media, Inc.
12. May, C. (2010). *The Global Political Economy of Intellectual Property Rights*. 2nd ed. Oxon: Routledge.
13. Menski, W. F. (2006). *Comparative Law in a Global Context: The Legal Systems of Asia and Africa*. 2nd ed. Cambridge: Cambridge University Press.

14. Pappas, E., & Steiger, J. (1991). *Michigan Business Torts*. Ann-Arbor: Institute of Continuing Legal Education.
15. Pila, J., Torremans, P. (2016). *European Intellectual Property law*. Oxford: Oxford University Press.
16. Quinro, D. W., Singer, S., H. (2009). *Trade Secrets: Law and Practice*. 2nd ed. Oxford: Oxford University Press.
17. Rothberg, H. N., Erickson, G. S. (2005). *From Knowledge to Intelligence: Creating Competitive Advantage in the Next Economy*. Oxford: Elsevier Inc.
18. Rowe, E. A., Sandeen, S. K. (2015). *Trade Secrecy and International Transactions: Law and Practice*. Cheltenham: Edward Elgar Publishing Limited.
19. Torren, P. (2003). *Intellectual Property and Computer Crimes*. New York: Law Journal Press.

Scientific articles

20. Beckerman-Rodau, A. (2002). The Choice Between Patent Protection and Trade Secret Protection: A Legal and Business Decision. *Suffolk University Law School Intellectual Property*, Paper 4.
21. Bone, G. R (1998) A New Look at Trade Secret Law: Doctrine in Search of Justification. *California Law Review*, Vol. 86, p 241-313.
22. Bevitt, A., Timmner, H., Westman, D. (2014). Protecting Trade Secrets Globally: Comparing The US And EU. *Employment Law Commentary*, Vol. 26, p 1-5.
23. Bronckers, M., McNelis, N. M. (2012). Is the EU Obligated to Improve the Protection of Trade Secrets? An Inquiry into TRIPS, the European Convention on Human Rights and the EU Charter of Fundamental Rights. *European Intellectual Property Review*, Vol. 34, No. 10, 673-688.
24. Cannan, J. A. (2017). A (Mostly) Legislative History of the Defend Trade Secrets Act of 2016. *Law Library Journal*, No. 109, 363-386.
25. Carr, C., Morton, J., Furniss, J. (2000). The Economic Espionage Act: Bear Trap or Mousetrap? *Texas Intellectual Property Journal Winter*, 2000, Vol. 8, 159-179.
26. Denicolo V., Franzoni, L., A. (2004). The Contract Theory of Patents. *International Review of Law & Economics*, Vol. 23, No. 4, 365-380.
27. Erkal, N. (2004). On the Interaction between Patent Policy and Trade Secret Policy. *The Australian Economic Review*, Vol. 37, No. 4, 427-35.
28. Gilotta, S. (2012). Disclosure in Securities Markets and the Firm's Need for Confidentiality:

Theoretical Framework and Regulatory Analysis. *European Business Organization Law Review*, Issue 13, Vol. 1, 45-88.

29. Gonzalez, L., H. (2013). Trade secret protection...in the cloud. *Entertainment Law Review*, Vol. 24, Issue 7, 245-249.
30. Knaak, R., Kur, A., Hilty, R. M. (2014). Comments of The Max Planck Institute for Innovation and Competition of 3 June 2014 on the Proposal of the European Commission for a Directive on the Protection of Undisclosed Know-How and Business Information (Trade Secrets) against their Unlawful Acquisition, Use and Disclosure of 28 November 2013. *International Review of Intellectual Property and Competition Law*, Vol. 45, Issue 8, 953-967.
31. Lang, J. (2003) The Protection of Trade Secrets. *European Intellectual Property Review*, Vol. 25, Issue 10, 462-471.
32. Lapousterle, J., Geiger, C., Olszak, N. (2016) What Protection for Trade Secrets in the European Union? A Comment on the Directive Proposal. *European Intellectual Property Review*, Vol. 38 (5), 255- 261.
33. Linton, K. The Importance of Trade Secrets: New Directions in International Trade Policy Making and Empirical Research. United States International Trade Commission Journal of International Commerce and Economics, 2016. Accessible: <https://goo.gl/xJ2Dg4>, (4.3.18).
34. Lemley, Mark A. (2008). The Surprising Virtues of Treating Trade Secrets as IP Rights. *Stanford Law and Economics Olin Working Paper*, No. 358, Vol. 61, 311-353.
35. Lobel, O. (2017). Symposium Keynote: The DTSA and the New Secrecy Ecology, Business, *Entrepreneurship & Tax Law Review*, Vol. 1, 369-382.
36. Menell, P. S. (2017) The Defend Trade Secrets Act Whistle-blower Immunity Provision: A Legislative History. *Business Entrepreneurship & Tax Law Review*, Vol. 1, 11- 16.
37. Mossinghoff, G. J., Mason, J. D., Oblon, D. A. (1997). The Economic Espionage Act: A New Federal Regime of Trade Secret Protection. *Journal of the Patent and Trademark Society*, Vol. 79, 191-210.
38. Patel, A. B., Pade, J. A., Cundiff, V., Newman, B. (2016). The Global Harmonization of the Trade Secret Law: The Convergence of Protections for Trade Secret Information in the United States and European Union. *Defense Counsel Journal*, Vol. 73, 472-486.
39. Pooley, J. H. A., Lemley, M. A. Toren, P. (1997). Understanding the Economic Espionage Act of 1996, *Texas Intellectual Property Law Journal*, Vol. 5, No. 177, 177-229.
40. Rowe, E. A. (2017). Unpacking Trade Secret Damages. *Houston Law Review*, Vol. 55, 155-198.

41. Sandeen, S. (2010). The Evolution of Trade Secret Law and why Courts Commit Error When they do not Follow the Uniform Trade Secret Act. *Hamline Law Review*. Vol. 33, 493-544.
42. Slaby, D. S., Chapman, J. C., O'Hara, G. P. (1989). Trade Secret Protection: An Analysis of the Concept "Efforts reasonable Under the Circumstances to Maintain Secrecy". *Santa Clara High Tech. Journal*, Vol. 5, 321-327.
43. Van Arnam, R. C. (2001). Business War: Economic Espionage in the United States and the need for Greater Trade Secret Protection. *North Carolina Journal of International Law and Commercial Regulation*, Vol. 27, 95-139.
44. Wennakoski, A. A. (2016). Trade secrets under review: a comparative analysis of the protection of trade secrets in the EU and in the US. *European Intellectual Law Review*, Vol. 38, No. 3, 154-171.
45. Watson, A. (1996) Trade Secrets and Roman Law: The Myth Exploded. *Tulane European & Civil Law Forum*, Vol. 11, 19-29.

EU & International Legislation

46. Agreement on Trade-Related Aspects of Intellectual Property Rights (Marrakesh, Morocco, 15 April 1994), Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, The Legal Texts: The results of the Uruguay Round of Multilateral Trade Negotiations 321 (1999), 1869 U.N.T.S. 299, 33 I.L.M. 1197 (1994).
47. Directive 2016/943 (EU) of the European Parliament and of the Council of 8 June 2016 on the Protection of Undisclosed Know-how and Business Information (trade secrets) against their unlawful Acquisition, Use and Disclosure (EU) (OJ L 157, 15.6.2016 p 1-18)
48. UN General Assembly. Universal Declaration of Human Rights (217 [III] A). Paris, 1948.

Other Countries' Legislation

49. American Law Institute. Restatement of Law Torts (1939) §757. Accessible: <https://goo.gl/yX1q2y>. 19 March 2018.
50. S. 1890 – 114th Congress: The Defend Trade Secrets Act of 2016.
51. Uniform Trade Secrets Act with 1985 amendments, 14 U.L.A 537-40.

EU Court Judgements

- 52. Court decision, 5.2.1963, Van Gend en Loos, C-26/62, EU:C:1963:1, paragraph 5.
- 53. Court decision, 19.11.1991, Francovich, C-6/90, EU:C:1991:428, paragraph 12.
- 54. Court decision, 14.2.2008, Varec, C-450/06, EU:C:2008:91, paragraph 20.

International Court Judgements

- 55. *Newbery v James* [1817] 2 Mer. 446, 35 Eng. Rep. 1011, 1012-13.
- 56. *Vickery v Welch* [1837] 19 Pick 36 Mass., 523, 527.
- 57. *Peabody v Norfolk*, 19 Mass, 452, 458. (Sup. Court Mass. 1968)
- 58. *Kewanee Oil co v Bicron Corp* 416 US 470 (1974)
- 59. *Prince Manufacturing, Inc. v. Automatic Partner, Inc.* [1976], 198 USPQ 618 (N.J.Super.Ct. 1976).
- 60. *Dynamics Research Corp. v. Analytic Services Corp.*, (Mass. App 1980). 254, 400 N.E.2d 1274.
- 61. *Electro-craft Corp. v Controlled Motion Inc.* 370 N.W.2d, 465, (Minn. Ct. 1985).
- 62. *Chemcast Corp. v Arco Indus. Corp.* 913 F.2d 923 (Fed. Cir. 1990)
- 63. *Rockwell Graphic Systems Inc. v. DEV Industries, Inc.* [1991] 925 F.2d 174, 7th Cir. III.
- 64. *Rivendell Forest Products, Ltd. v. Georgia-Pacific Corp.* 28 F.3d 1042 (10th Cir. 1994).
- 65. *Coca-Cola Bottling Co. v. Coca-Cola Co.*, [1995] 227 U.S.P.Q. 18,22.
- 66. *United States v. Steven L. Davis*, No. 97-00124 (M.D. Tenn. 1997).
- 67. *Elm City Cheese Co. v. Federico*, 251 Conn. 59 (1999), (SC 15951).
- 68. *United States v. Lange*, 312 F.3d 263, (7th Cir. 2002)
- 69. *United States v. Williams*, No. 07-12526, (11th Cir. 2008)
- 70. *RC Olmstead, Inc. v. CU Interface, LLC* 657 F. Supp. 2d 878 (N.D. Ohio 2009).
- 71. *TechForward, Inc. v. Best Buy Co. Inc.* [2011] No-01313.
- 72. *Protégé Software Services, Inc. v. Colameta*, No. 09-03168, 2012 WL 3030268 (Mass. Super. 2012)

73. *Dorset Indus., Inc. v. Unified Grocers, Inc.*, 893 F.Supp. 2d 395, 406 [E.D.N.Y. 2012]
74. *Powerweb Energy, Inc. v Hubbell Lighting, Inc.*, 3:12CV220 WWE, WL 5835392 (D Conn 2012).
75. *Blake v. Professional Coin Grading Service*. 898 F. Supp. 365 (D. Mass. 2012)
76. *Pop International Galleries Inc. v Swarts*, 34 Misc 3d 1239(A) (Sup Ct. 2012)
77. *CF Partners (UK) LLP v Barclays Bank Plc* [2014] EWHC 3049 (Ch), All ER (D) 179 (Sep)
78. *T-mobile USA Inc v. Huawei Device USA Inc. et al.* [2015] No. C14 – 1351RAJ, 115 F. Supp. 3d 1184.
79. *Henry Schein, Inc. v. Cook* No. 16-CV-03166-JST WL 3418537, (N.D. Cal. Jun. 22 2016).
80. *Magnestia Refractories Co. v. Mishra* WL 365619, (N.D. Ind. Jan. 25 2017).
81. *Tesla Motors v Anderson, Urmson & Aurora Innovation LLC* [2017] 17-cv-305646 SC of CA.

Other Sources

82. Akenbrandt, B., Vormann, T., Hertlin, R. (2016) *Comparing U.S. and EU Trade Secrets Laws*. Washington/Brussels: Trans-Atlantic Business Council, 2016, Accessible: www.transatlanticbusiness.org, 6 March 2018.
83. Ambastha, L. *Evolution of Property Rights*. Accessible: <https://goo.gl/5aT1PB>, 6 March 2018.
84. Aplin, T. (2014). *A Critical Evaluation of the Proposed EU Trade Secrets Directive*. King's College London Law School Research Paper, No. 2014-25. Available: <https://ssrn.com/abstract=2467946>, 3 May 2018.
85. Ayala, F. J. *Evolution*. Accessible: <https://goo.gl/gbpEBK>, 6 March 2018.
86. *Basics of a Trade Secret Claim*. Digital Media Law Project. Accessible: <https://goo.gl/VedqYe>, 6 March 2018.
87. *Copyright Essential Reading*. Intellectual Property Office. Accessible at: <https://goo.gl/aM5wvT>, 23 January 2018.
88. Hernandez, O. D. M. *Trade Secret Protection in the US and EU*, 2016 <http://arno.uvt.nl/show.cgi?fid=141634>, 4 March 2018.
89. LaFrance, M. (2011) *Passing off and Unfair Competition: Conflict and Convergence in*

- Competition Law*. Scholarly Commons @ UNLV Law, 784. Accessible: <https://goo.gl/JTXjih>, 13 March 2018.
90. Menise, J. (2007) *Legal Protection of Trade Secrets: Case Study of Latvia, Present Issues and Perspectives*. Accessible: <https://goo.gl/Ukb1tWN>, 19 December 2017.
 91. Newworldencyclopedia.org, *Trade Secret*. Accessible: <https://goo.gl/dnPqD4>, 28 January 2018.
 92. *North American Free Trade Agreement*. Office of the United States Trade Representative. Accessible: <https://goo.gl/pMusDs>, 8 January 2018.
 93. *Protecting trade secrets under English Law*. (2015) Osborneclark.com. Accessible: <https://goo.gl/LHrNTj>, 6 March 2018.
 94. Pooley, J. (2013) *Trade Secrets: the other IP right*. Accessible: <https://goo.gl/N3DA1v>, 5 March 2018.
 95. Schultz, F., M., Lippoldt, D., C. *Approaches to Protection of undisclosed information (Trade Secrets)*. OECD Trade Policy Paper, 2014 No.162, 8 Accessible: <https://goo.gl/eRHaLD>, 9 March 2018.
 96. *Study on Trade Secrets and Confidential Business Information in the Internal Market copy*. (2013) European Commission. Accessible: <https://goo.gl/GSf2B8>, 19 December 2017.
 97. *Trade Secrets*. European Commission. (2017) Accessible: <https://goo.gl/PDtSP5>, 19 December 2017.
 98. *Trade Secret*. Newworldencyclopedia.org. Accessible: <https://goo.gl/dnPqD4>, 8 January 2018.
 99. Villig, M. Taxify COO, Views on Trade Secrets, Author's Question. Social Media Platform Message. 4 May 2018.
 100. *What is a Trade Secret?* WIPO. Accessible: <https://goo.gl/FwTW35>, 9 March 2018.
 101. *What are the Conditions for Copyright*. IPRhelpdesk.eu. Accessible: <https://goo.gl/ddATiS>, 4 March 2018.