

Study on the Knowledge about Intellectual Property with Design Graduates in a Bachelor's Course in Pernambuco

Danielle Silva Simões- Borgiani¹; Pedro Henrique Sobral De Souza Azevedo Mayrinck²;
Ramon Leandro Ferreira³

¹Núcleo De Design E Comunicação – Campus Do Agreste. UFPE – CAA.

¹danielle.ssimoes@ufpe.br

^{2,3}Centro De Ciências Sociais Aplicadas.

²pedro.henriquesobral@ufpe.br

³ramonlfe@gmail.com

^{1,2,3}Programa De Pós-Graduação Em Propriedade Intelectual E Transferência De Tecnologia Para Inovação – PROFNIT.

^{1,2,3}Universidade Federal De Pernambuco – UFPE.

^{1,2,3} Av. Prof. Moraes Rego, 1235 - Cidade Universitária, Recife - PE, 50670-901.

Abstract

This research presents a study carried out with students from a Design course in the University from Pernambuco on their knowledge about intellectual property protection. The protection of Intellectual Property is very necessary for the economic and innovative growth of a nation, and sometimes it isn't discussed or presented in training courses for professionals who will work in the creative economy producing innovations, as through industrial design, creation of trademarks, copyright or patents, as is the case with the training of designers. To carry out the research and measurement, resources as forms, and bibliographic (theoretical references) and documentary surveys (of the curricular structure of the course) were used. The results suggest that the acquaintance is timid, inexpressive, and that it is urgently necessary to bring the knowledge of Intellectual Property closer to training in Design.

Key-words: Creative Economy, Design, Intellectual Property.

1. Introduction

Since the industrial revolution, there has been a search for efficient design methods, as the creation of technological innovation and changes in the way of industrial production, which have the intention of developing the growth of an economy based on creative ideas and intellectual knowledge

(DE MASI, 2001). Seen in these terms, creative economy is currently understood, as an essential tool for the development of economic systems from various countries, from their creative sectors, which aim to explore, the possibilities to achieve their growing objective using innovation (MELEIRO; FONSECA, 2012).

The creative economy has been mostly used in the current market and applied to several businesses, known as creative industries, to the extent that it is been considered more competitive than ever before, since the technological development. Therefore, the creativity is notoriously an differential strategic aspect, mainly in the economic sphere, once that creative strategies are crucial for the success of this sector (KLAUS; PINHEIRO; BESSI, 2015).

Not differently, in Brazil, although it has been utilized various creative processes in the development of the country, with the prospection of innovation, only nowadays the creative economy started to be used in the creation actions and public political actions with creative innovation processes in the scope of implementation by the economic sector from this country, intending to add and reach higher values in the economic system (ALVES, 2012). As an example of this applicability in this country, The state Government from Pernambuco adopted a system oriented towards the diffusion of innovation in the services and technological production in the state, the Pernambucano system of Innovation (SPIn) , which has been developing the production and dissemination of creative knowledge among sectors such as the scientific institutions, technology and organizations directed to the economic activity, which aim for the technological transfer as a support for the innovation processes developed in this state (BRASIL, 2017) .

Given the fact that, innovation is, in this way, a fundamental factor for the development of creative processes, as well as to the applicability in the creative economy as a tool to help the economic development for organizations. In this regard, the innovation is utilized with the intention of promoting improvements in aspects as the demands for sustainability, more efficient productions, creation of new ideas for the promotion and growing of companies and economies, through the use of tools as the creative economy. Clearly, innovation is formed and used in various aspects, however, been new or old, in order to provide an updated overview of an old idea, or the creation of a new concept, with the aim of ensure the expansion of innovative and creative ideas in all the market sectors (PLONKSI, 2017).

The stimulus to the creative and innovative production is constant in the professional formation of *designers*, professionals who directly contributes to the growth of creative economy, both in the industrial design of innovative products, trademarks designs, among others.

In this particular universe the stimulus for the innovation to move the creative economy, the protection for the intellectual property (PI) must be a continuous aspects due to avoid the reproduction or unauthorized copies, as well as to include the source of the work and author, among many other copyright protection and intellectual property laws.

Besides this, the PI is equally interpreted as a tool of exclusive use of its owner and, thus constituted its monopoly, it can be used as an economical asset both in the field of marketing, and valuing the innovative efforts of the business/designers, as much as the interactions with other parts of the market, which can acquire the PI right through license contracts and cession, as an example, or gather knowledge for the product and add an innovative value and, consequently , a major value for the final consumer.

The intellectual property can be understood as a combination of rights, with strong influence of international standards, which there is the protection of intangible property, can or cannot have the commercial purpose. Consisted of human mind creation, in the economical exploration of an aesthetic creation, an investment in an image or technical solution of a product or service. Didactically, it is possible to classify a meaningful part of intellectual property in two great fields of study: copyright law and intellectual property (BARBOSA, 2017).

Pieces not protected can also become innovation means for and fair competition, once they turn out a reference for new products, since they cannot be copied or replicated without the right cession or license.

Not having its piece protected, is giving opportunity for counterfeiting, it is to allow a scenario where there is not the law protection, and therefore a moral and economical mean of the author with its piece. Thus, allowing this vulnerability it is to agree with a discouragement of authors creative production, emerging a stagnated creative atmosphere.

Becoming aware of intellectual property importance to the legal protection of the designers action and is an essential aspect of graduation for the academic formation of them, this paper seeks to investigate whether the bachelor's design from Pernambuco have awareness of the existence of intellectual property, ensuing how to protect their creations and the relevance of this content for their academic formation.

2. Method Used

In order to realize this research, initially, it was classified the nature of this study to be **applied**, once it generates a discussion addressed to the solution of a specific problem. In terms of

approach is **qualitative**, because in the opinion of Menezes and Silva (2001, p. 20) “considered that absolutely everything can be counted, which means translated into numbers, opinions and information to classify and analyse”. Thereby, it was utilised a form as resource, using the answers, to quantify in percentage to make the reflexions here presented.

In terms of objectives this is a **descriptive** investigation, once it describes the characteristics of design students in terms of knowledge about intellectual property during their graduation course.

In the point of view of technical procedures, this analysis is a **bibliography** research (collection of theoretical knowledge, reference, and framework), **documental** (curricular structure of the course and current legislation about PI), it was conducted a **survey** (forms with questions for the students).

As a sample collection, it was considered a total of 10% of the number of design students at the university chosen to applied the research. The questionnaire was applied using the Google forms as a tool, available for students from November 20th, 2019 to December 05th, 2019. It asked 10 closed questions, those that can only be answered using ‘yes’ or ‘no’.

The data collection examination was provided by using graphs and percentage calculation to verify the majority of the answers. It was made a rounding of a decimal point to treat the percentage in absolute values.

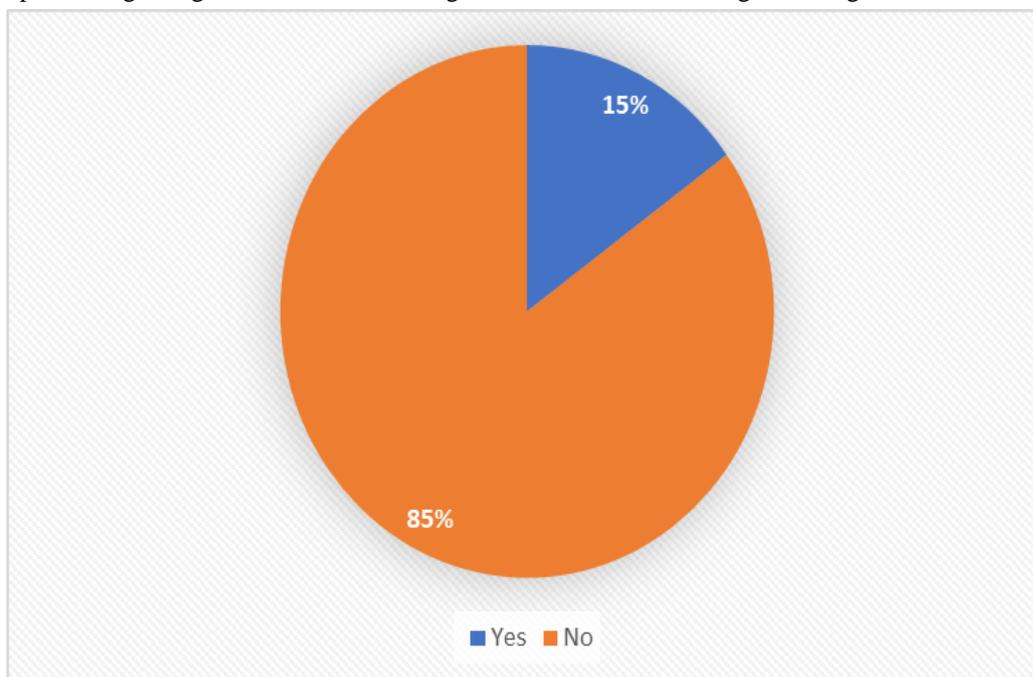
3. Findings

The investigation enabled us to confirm the research hypotheses that there is not a clarification or orientation for the graduation design students during their academic formation about intellectual property. Even if, being intrinsically related to the professional practice of the designer, once that it is the creation agent and innovation of products, trademarks, surface patterns, illustrations, among others, it should be considered a common practice to register their creations. For that reason, it is understood that the minimum knowledge about the matter is necessary, even considering that register and protection must be assisted by an attorney. Knowing the path for the register, the importance, and benefits to assure or protect their creations, as well as respect the creation of others for also having the right for protection, is fundamental in the designer formation.

Before the application of the questionnaire, it was verified that the Pedagogical Project of the Course (PPC), it does not provide content of PI, neither does the specific subjects nor a part of one of the subjects,

In the observation of the questionnaire, according to the responses, 85% of the respondents grasp what it is PI, but only 15% received this information during the graduation (graph 1). It was perceived that the information about PI has been coming to students through external sources, by diffusion programs about PI of INPI¹, OAB-PE², SEBRAE³ or online free courses instead of the formation in design. In the curricular structure, there are various design Project subjects of a practical nature that encourage a creative thought for innovation nevertheless, there is not a discussion or orientation of how those ideas could be protected. In other words, if there had not been those diffusion programs about PI of INPI, SEBRAE or OAB-PE, those numbers of students that know about PI would be even shorter once that the design course is not providing this support for professionals when they graduate.

Graph 1 – Regarding the Level of Knowledge Received about PI during the Design Course Formation



Source: Field research (2019).

In order to make graduation students reflect about the importance of the protection and awareness about the matter, as well as to know if they have already been affected it was asked them a

¹Nacional Institute of Intellectual Property (INPI). It is a Federal Brazilian authority, associated with the Ministry of economy, with the duty to execute all the regularization norms of intellectual property, according to the law 9.279/96.

²Brazilian association of attorneys (OAB). There are in the state of Pernambuco an attorney commission specialized in spread intellectual property knowledge, offering courses, lectures amongst other fields of expertise.

³Support Service for Micro and Small Businesses of Brazil (SEBRAE). It is a private institution of Support that is responsible for educating and promoting the development of small businesses.

previous question, to know if they were somehow affected by illegal copyright of their own creation and 21% claimed that they were affected once or twice about an illegal copy of their creation. In the following question 92% stated the opinion that they would like to have their creations protected against illegal copies.

The main Brazilian normative source for regulation is the copyright law 9.610/98, subjected to the provision of the Art. 5th of Brazilian Federal Constitution, subsection XXVII e XVIII, in spite of being signatory of relevant International treaties, such as the Bern Convention,

The creator rights has been a scope to protect literary works, artistic or scientific and following do Art. 7th, section, of Law 9.610, must be spirit creations, expressed into any mean or attached to any tangible or intangible asset. They are considered designs of the creators like concept drawings of clothes or clothing collection, design of trademarks, the graphics expression of an object etc. In this regard, Bittar (1990) explains that creation and utilisation of literary works in the literary field, artistic or scientific, offer two kinds of rights which emerge simultaneously.

The first property right ensures for the creator of its creation has impacted de property, even immaterial and, which in this way it could be exploited individually and commercially for being profitable in the best way or giving license to others to make use of it. The second greatest right is the moral use of the piece; which it is the notion that intellectual creations, can be derived of its mind, so, an extension of its personality that, in Afonso (2009) perspective, protects indivisible part of its figure, in the example of the do Art. 27th of Law 9.610/98, the moral rights of the creator cannot be transferred or renounced to others, with license or concession. They are common moral rights of the creator and its name is always mentioned to ensure the integrity of the piece final scope of removing from its circulation in case of damaging its image.

A peculiar aspect about the copyright law is as the juridical protection, however, specifically, as the revindication of creation, because according to the Art. 18th copyright, the protection of the rights for being independent of register, only externalizing the piece of protection for intangible realities to the humans senses, what means to complicate the juridical law entitlement in juridical process, Legal requirement for the genesis of the piece is its externalisation, it is the transfer of its tangible reality for human senses of the author's creation, The use in social media, offline or digital, or the register in institutes as the Art. 19th of Law 5.988/73, they are not legal obligations to the genesis prove of the piece, although they are not previously reliable.

Considering that intellectual protection is related to the professional practice of the designer, besides being copyright related, it has great impacted in the industrial production, it also concerns it to discuss about the issue. The intellectual property can be understood as a group of rights regarding

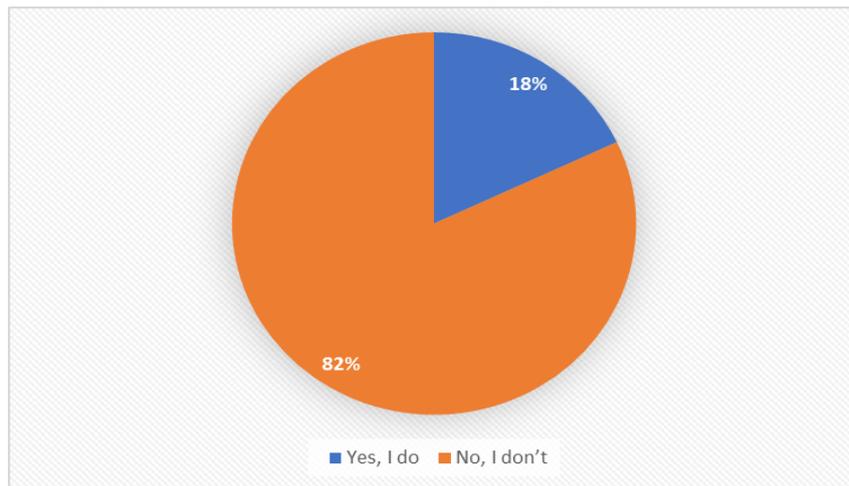
trademarks, patents, industrial designs, among other rights established by the Law n° 9.279/96, the Law of industrial property (LPI). Therefore, the right of industrial property is thought to be a group of rules and principles capable of legally guide juridically the immaterial pieces of business establishment (RAMOS; GUTERRES, 2016). This division of intellectual property has a major scope in the protection of material asset in the economic and competitive perspective, facing such elements as to enable to highlight such business activity in a competitive scenario. In Brazil, the intellectual property, there are few exceptions, it is achieved by formal requirements, previous federal register in the institution known as National Institute of Intellectual Property, the INPI.

The trademarks, in the perspective of the Art, 122 of LPI, they are contrasting signals, visually seen, and they are not a legal instrument. This type of industrial intellectual property has the intention of personalize the service or product, valuing the consumer (BARBOSA, 2010), so as being a sign of quality, the business characteristic of the manufacturer, as a reputation, quality control, research investment and design etc, as written by Jungmann e Bonetti (2010). The trademarks might be classified following its normative elements; figurative or combined, opportunity in which the trademark sign presents, as usual, stylized word elements, with its own typology, accompanied or not by other graphic arts.

Industrial designs, according to the Art. 95 of LPI, can be referred only regarding its aesthetic aspects or ornaments capable of being industrially produced. It consists of three elements, representing an industrial product: in two dimensions, applied in a surface of an object or industrial product; or a combination of both. It also protects lines, colours and shapes which are displayed in a product or service, as long as it must have industrial applicability (MORAES, 2002), explains Barbosa (2010), if it does not have so, only artistic characteristics of possible protection of copyright laws. Considerably important for the emerging creative industry, it can be considered as industrial designs models of clothes, packaging material, furniture, automobile etc, as the solicitation of judicial protection is related to the ornamental aspects of the creation and, not the practical function of them.

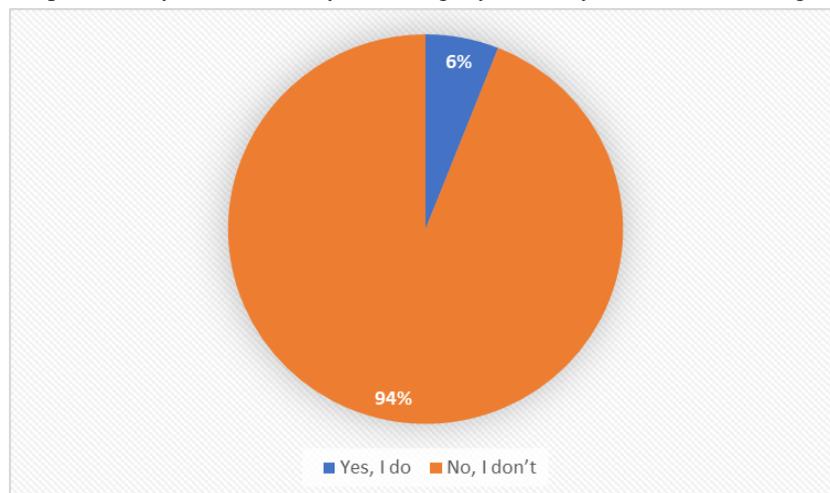
In the conduction of the survey, it was observed that, 92% of the respondents state they know what it is a copyright law, even though, they perceive that they do not know how to protect it, even if they have awareness about what it is the INPI, 65% of the respondents have claimed that they did not know the existence of such an institution. It was verified that they do not know how to protect their trademarks (graph 2) or industrial design (graph 3), with 82% and 94% of the respondents, respectively, claiming that they do not know how to protect their pieces.

Graph 2 – Do you know how you can legally protect your trademarks?



Source: Field research (2019).

Graph 3 – Do you know how you can legally Protect your Industrial Designs?



Source: Field research (2019).

Using the intellectual property protection, it is possible to obtain enormous advantages through contracts, which is a common juridical tool to ensure the transference of its respective assets, in this way the most usual of the business is licence and cession. The licence contracts occur when there is authorization, permission or concession from other person that obtains the same legal rights as the owner during a certain period of time. Licences can be exclusive or non-exclusive; partial or total; simple or mixed; paid or not; compulsory or voluntary. Cession contracts, similarly, they are permanent transference of intellectual property title. It is important to highlight that this regards the copyright law, there is a provision for the transfer of patrimonial rights, that is, those in which it is

possible to obtain an economic profit, being forbidden to change the ownership of the authors' moral rights, according to Art. 49, I, of the Copyright Law.

The lack of attention of the potentially financial gains through the juridical supervision of the intellectual property assets and its negotiation with other parts involved in the businesses can result in a number of opportunity loss for the owners like receiving the profits of its creation. Accordingly, it is seen a close correlation between the PI register by its owners or creators and nation wealth in specific countries, (WIPO, 2019), thus how the greater the attention given to these tangible assets, greater is its economy profit. In national territory, it is also found this pattern of understanding, to illustrate that states from south-southeast has been consolidating the majority of PI owners of this country, discusses o INPI (2018).

Apart from the serious business loss, deny the PI protection significantly contributes to counterfeit, and numerous offences to the copyright and intellectual property legislation. The counterfeit subverts the comprehension of the consumers about the origin of the product either unauthorized reproduction to receive economic benefits, or plagiarism, when others claim to have created the piece to the genuine owner (KROKOSZ, 2012).

Notwithstanding, the business opportunities loss is an implicit stimulus to the practice of counterfeit realized by others, the superficial knowledge of PI and how to protect it gains new perspectives in terms of industrial design. As far as industrial property concerns, it is possible not to have the register got in the INPI, even if the owner for any reason, because according to the Art. 96 of LPI, one of the requirements for the cession is the register of industrial design is unprecedented. It is considered new all the designs that do not belong its technical state, when the information has already been available to the public, in any other mean, before the submission and request is done (BARBOSA, 2010), with exceptions foreseen by the law. Consequently, not being aware of these formal requirements to the register cession of certain specific parts of PI, it might cause permanent damage to its right owner, notoriously about the industrial designs, in great dissemination of its products like social media and other marketplaces on the internet.

This proves how necessary it is a deeper knowledge about the topic PI, as the knowledge received by the students is not relevant. This importance is evident for students, because 100% of them answered that they do consider important for the professional formation.

Understanding intellectual property and copyright law as a definition, nonetheless without knowing how to act, and where to seek information or to register in order to make effective use of the protection of its creations, acts as if not having an effective and useful knowledge to the designer daily professional practice. And this was the reality seen in the design course studied, not far from the

reality of other courses around the state, as well as Brazil, where little is being discussed about PI when the student is being formed. There are in these courses an effective effort in the creative formation in project subjects of innovation, not mentioning its register or protection of what is made. The focus is continuously on creativity.

4. Conclusion

The realization of the study allowed us to verify the initial hypotheses of the research. Despite the fact that, the survey was conducted to 10% of the graduation students, it was completed our reflection about the documental research in the pedagogical project of the course. Using the responses and analysis of the PPC, it is concluded the dissemination to other fields of expertise besides the juridical.

The acquaintance about intellectual property is fundamental in the academic/ professional formation of a designer because this immaterial pieces of essential asset in the execution of creative activities.

We are living a moment of great stimulus for the creative economy, innovation, design of products, however, as this is happening, the professional must also know how to protect their intellectual production as what the institution can encourage and support the creative economy providing orientation and right guidance for the intellectual protection.

In the part chosen to be studied in this research, we decided to focus on the Bachelor design course of an institution of higher education from Pernambuco. Although, our previous knowledge about de course in other institutions, enable us to affirm that there is not the focus mentioned in the pedagogical projects of the same specific subjects. So as, the profile of the egress student must be the same in those institutions, they must know how to protect, register their intellectual production in products, trademarks, surface patterns, clothing details, among others that the designer should be able to develop. The formation is very focused in the creation, with a variety of project subjects, conversely none of them gives attention to contracts, cession terms, industrial property protection and so on.

From this moment on, we reflected that the design academic formation must be reviewed, including those acquaintances in their professional formation, once there is not a regimentation institution of those professionals which should support in regarding to the intellectual protection.

It is important to mention the effort made by OAB-PE and SEBRAE-PE, and its own state Government to spread PI through lectures, debating and online courses offered in business incubators,

with the finality of reducing the lack of knowledge, in this way solving the problem temporally the lack of it in the graduation course.

5. Future Prospects

Given the fact that, the findings of this research, reinforce our consideration to spread PI in an effective way is an urgent necessity. Spreading through specific courses or seasonal formation for professionals or students even in small actions to repair the current situation of the state.

It is important in perspective of development of the country, developing the innovation and improve the intellectual property protection. Including in the graduation of designers a subject that addresses this issue, it is necessary and undoubtedly of great value for students that will graduate with this perspective. As well as it can contribute to the social encouragement for innovation fully, running way of neglection, which many times for lack of knowledge of creations “inspired” in something in a mistaken way. This type of creation “really inspired” ends up being used in erroneous manners because it is not public known or for being very similar to the reference, those limits must be addressed in the formation of creative professionals.

Another point to take into consideration is the encouragement of entrepreneurship in graduation, business incubators, and other similar actions. A lot of these formation programs, and business support do not include intellectual property protection, they encourage “the dream of being an entrepreneur”, the owner of its own business, instead of protecting it, growing, and achieving other business possibilities through the protection of intellectual property. Therefore, as the bachelor courses encourage the creative process, without addressing the issue of fair competition and others. There are a lot of support to execute and create a business plan, but a few about protection of trademarks, register and legal process.

This study did not conclude with this piece of work here presented. It was replicated in other courses from different institutions, as well it was started a survey of how companies after the incubation are addressed the issue, and there is an expansion of this PI knowledge for experienced and unexperienced entrepreneurs.

References

- Afonso, O. *Copyright. Essential Concepts*. 1^a Ed. –São Paulo. Ed. Manole, 2009.
- Alves, E. The creative economy of Brazil: cultural modernization, creation and market. *Latitude*, [S.l.], v. 06, n. 02, p. 11-47, abr. 2013. <http://www.seer.ufal.br/index.php/latitude/article/view/873>.

- Barbosa, DB Intellectual Property Treaty: Volume I. 2nd ed. – Rio de Janeiro: Lumen Juris, 2017.
- Barbosa, D.B An Introduction to Intellectual Property. 2nd Ed., 2010. <http://www.denisbarbosa.addr.com/arquivos/livros/umaintro2.pdf>
- Bittar, C. A. Copyright: *violations in commissioned architectural work*, R. Inf. Brasília, a.27, n° 105, 1990.
- Brazil. Constitution (1988). *Constitution of the Federative Republic of Brazil of 1988*. http://www.planalto.gov.br/ccivil_03/Constituicao/Constituicao.htm
- BRAZIL. Decree n° 75.699, of May 6, 1975. Promulgates the Berne Convention for the Protection of Literary and Artistic Works, of September 9, 1886, revised in Paris, July 24, 1971 Paris, July 24, 1971. http://www.planalto.gov.br/ccivil_03/decreto/1970-1979/D75699.htm
- Brazil. *Government of Pernambuco. Science, Technology and Innovation Strategy for Pernambuco. Secretariat of Science, Technology and Innovation*. Recife, 2017.
- Brazil. Law No. 5.988, of December 14, 1973. Regulates copyright and other measures. Brasilia, December 14, 1973. http://www.planalto.gov.br/ccivil_03/LEIS/L5988.html
- Brazil. Law No. 9,279, of May 14, 1996. *Regulates rights and obligations related to industrial property*. Brasilia, May 14, 1996. http://www.planalto.gov.br/ccivil_03/leis/19279.htm
- Brazil. Law No. 9,610, of February 19, 1998. Changes, updates and consolidates copyright legislation and other measures. Brasilia, Feb. 1998. http://www.planalto.gov.br/ccivil_03/leis/19610.htm
- De Masi, D. The future of work: fatigue and idleness in post-industrial society. Rio de Janeiro: José Olympio, 2001. <http://docslide.com.br/documents/de-masi-domenico-o-futuro-do-trabalho-fadiga-e-oocio-na-sociedade-pos-industrialpdf.html>
- Stockholm. Convention establishing the World Intellectual Property Organization. Signed in Stockholm on July 14, 1967, and modified on September 28, 1979. https://www.wipo.int/edocs/pubdocs/pt/wipo_pub_250.pdf
- Jungmann, D.M.; BONETTI, E. A. On the road to innovation: protection and business with intellectual property assets: guide for the entrepreneur. Brasilia: IEL, 2010
- Klaus, V.S.; Pinheiro, C.M.P.; Bessi, V.G. Creative economy and management of creativity: the creative process in communities of practice. *Thematics*, (11)6, 153-169, 2015. <https://www.periodicos.ufpb.br/index.php/tematica/article/view/24622/13449>
- Meleiro, A.; Fonseca, F. Creative economy: a global vision. *Latitude*, 06(02), 11-47, 2013. <http://www.seer.ufal.br/index.php/latitude/article/view/880>
- Moraes, M.A.L.de. *Industrial property: species of immaterial property*, Brasília a. 38 n. 153 Jan./Mar. 2002. <https://www2.senado.leg.br/bdsf/bitstream/handle/id/756/R15314.pdf?sequence=4>
- Plonski, G.A. Innovation in transformation. *Advanced Studies*, 31(90), 7-21, 2017. <http://www.revistas.usp.br/eav/article/view/137882/133468>
- Ramos, A.S.C.; Guterres, T.M. Commented Industrial Property Law: Law 9279 of May 1996 – Salvador: Ed. JusPodvim, 2016.
- Silva, E.L. da; Menezes, E.M. Research Methodology and Dissertation Preparation. 4. ed. Florianópolis: UFSC, 2005.
- Souza, M.A. de; Murakawa, L.S.G. Practical Guide I: Introduction to Intellectual Property. 2016. University of São Paulo. USP Innovation Agency. http://www.inovacao.usp.br/wp-content/uploads/sites/300/2017/10/CARTILHA_PI_bom.pdf