

Website and Digital Content between Material Property and Intellectual Ownership Rights within the Legal Regulation of Internet

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Abstract

When the owners of the intellectual property rights of digital content have lost control over it in the digital environment, there emerged fears that the intellectual property laws, especially copyright law, would not be effective as in the material (Offline) world. The reason is that the digital environment helps to reproduce copies in high quality and at almost no cost, while copyright law protection has been limited to programs embedded in CDs. According to copyright laws, the owner of the program did not have the right to prevent buyers of the initial physical copy of the program from copying and reselling it to more than one individual without the permission of the original owner. As a result, business owners have invented the idea of licensing digital content and programs instead of selling them. They set out terms that serve their commercial interests regardless of their abuse to intellectual property laws or even the rules of the traditional contract to sell a material property. The abuse has resulted from the way those terms are concluded and the heavy rules that are unfair to consumer rights. Therefore, business owners insisted on dealing with the website and its programs and digital content as material property. Here raises the question of whether the website and its digital content are subject to the protection of copyright law or the rules of the traditional contract or licensing contracts. As the answer to this question affects the protection of consumer rights, is it possible to find a balance between it and the protection of the owners of digital programs' rights. That is what we will discuss in this paper.

Keywords: *Intellectual property - Copyright - Contract - Computer software - Licenses agreements*

1. Introduction

The national legislator has resolved the debate about the digital containers to be subject to the intellectual property rights law and provide them with criminal protection, even in the digital environment, in case these rights were violated. However, it seems that the debate about websites and their digital content may have arisen, before, as it were subject to the general theory of the traditional contract and intellectual property rights laws. This overlap stemmed from the desire of digital business owners to gain the benefits of both intellectual property rights laws and traditional contract rules. To do so, they deal with the user through license contracts that make them benefit from both legal forms and get rid of its

disadvantages according to their interests. This makes it necessary to research this problem and review the most important American and European jurisprudence opinions that dealt with this issue. The aim is, then, to clarify the difference in the nature and characteristics between the off line world and its digital counterpart (Online) with the transactions it contains that have become legal and technical. The objective is, also, to explore the role of copyright law in protecting the website and its digital content so that we benefit from the experience of the countries that preceded us in enacting the rules governing access to the website. We find that the copyright law rules are effective in protecting programs embedded in CDs in the material world, but it lost that aspect in the digital environment because of its exceptional characteristics, such as the principles of the first sale and reverse engineering. These principles allowed copy and distribution operations with little cost and high quality. This has forced business owners to use the license contract to protect their digital literary works. Previously, we have seen that the way to implement the contract and the law within the digital environment is to use technology to control violations. We have, also, explained the necessity of not expanding the concept of unauthorized entry that should not include the person who violates the terms of the license contract and, in return, restrict the scope of the criminal law to anyone who attempts to hack the technical system of the websites. It is worth noting that not every violation of the terms of the license contract means a violation of copyright. In this vein, This paper will be outlined as follow.

1. The distinction between Material and Digital environments
2. Property concept in off line world
 - 2.2. The importance of protecting individual property, whether Material or Intellectual
 - 2.3. The distinction between Material property and Intellectual property in the digital environment
3. Applying Material property concepts to websites

4. The concept of a website and the legal requirements for its establishment under the law of Internet
5. The position of the U.S. judiciary from the technical/legal nature of the website
6. Legal protection for website access
7. Protection of copyright law for computer software on CDs
8. The role of copyright law in protecting the digital content of the website
- 9- The emergence of digital license contracts for digital content organization
10. The relationship of the digital license contracts to the traditional property law
12. The relationship of the digital license contracts to copyright law
13. Conclusion

2. The distinction between the material and digital environments:

According to the Arab perspective, there are no significant differences between the material and digital environments that require new rules or laws concerning the Internet and its digital transactions. Based on this view, the Internet is like any other means of communication, such as telephone, telex, and fax, so the laws that govern them can govern the digital environment and its transactions. Consequently, there is no need for new laws and so was the case in court decisions in the United States. This has been revealed in some court decisions when it applied the concepts of the traditional property (of real estate) violation law to users who hacked emails or websites. However, because of the digital environment, we find that applications such as email, direct communication and websites show the advantage of the Internet and its different nature from other means of communication in integrating communications with information technology. Therefore, it will never be suitable to apply the laws of mobile phones to e-mail because of the latter's characteristics that distinguish it from just a phone call. E-mail does not only transfer the sound from one end to another but also transmits images, sound, other data and documents in digital form that it is stored at some point from the sender's transmission until the sender's reception of data at one of the servers of the service provider. In direct communication [1] we find that it enables users to directly access, without an intermediary, the sources of information including the sending and receiving of files,

media, and various applications like chat service, use net service and video conference. That is why we find it difficult to make an analogy between the material world and the digital one to apply the same laws. Because the mentioned internet applications and websites are not real estate and cannot be compared to it or even to movables as the latter is material in aspect and what exists in the digital environment is not.

As for websites its technology is based on the ability to pick one piece of data from all the data on pages stored in many computers whose different networks and protocols are linked via the Internet. Hyperlinks help the user to easily and quickly browse the web and its pages. Given this technology, we can ask which of the traditional telecommunications laws can deal with such a technique. The two environments have completely different proprieties; while the material environment has clear geographical boundaries agreed upon by all countries, the digital environment has not. It does not need those boundaries as everything within, whether written texts or pictures or sound, is data written in the computer language zero and one. Therefore it cannot be restricted to some limits, especially as the primary mission of the Internet is to connect computer network systems to facilitate, for the user, access to information sources.

In an attempt to distinguish between the material and digital environments, Professor Lemly explains that an individual, in the material environment, cannot occupy more than one space. However, in the digital environment, he, or rather, his data can be present everywhere, and it can be reproduced in an infinite number, especially in light of the spread and ease of copying and redistributing the content. Conversely, movables and real estate, in the material environment, cannot be copied. That is why jurisprudence has emphasized the need to subject the digital content to intellectual property laws, not to material ones, and to regulate access to websites by contracts. Nonetheless, again, the dispute arose between American jurists about how intellectual property laws, especially copyright law, can protect literary works and programs in their digital form, and how the concept of originality, innovation, and material template can be met. Indeed, digitalization has changed the concept of the digital product authenticity, especially in light of the continuous violations of copying and redistribution, within the digital environment, without the permission of the owners of those businesses who deal with websites and their digital content as their tangible property (real estate). Thus, if the matter is resolved by not considering websites subject to the rules of material property, such as real estate, then why do business owners deal with it as such and have set a term stating that the violator of his contractual obligations is subject to the rules of the criminal law and not the civil one. Besides, they have

set some conditions that compel the user to forfeit many of the rights granted to him by copyright law. In this paper, we will only deal with copyright law without the rest of the intellectual ownership sections, given that most of the sites are ruled by programs that national and international legislation has subjected it to copyright law.

To demonstrate the clear difference between material property, in the material world, and intellectual ownership, in the digital world, we will quickly recall its definitions and the importance of protecting the rights, especially copyright, related to each of them. We will, also, distinguish between both concepts so that we can explain why website owners have treated intellectual ownership as a private tangible property like the real estate though digital content and programs are subject to intellectual ownership laws, precisely the copyright one.

3. Material property and Intellectual property

Despite the resolution of the jurisprudential dispute that programs are subject to [3,4,5,6]. business owners still face the risks of reproduction of digital content of programs, especially those shared via the Internet. Since this digital content is often accessed and used via websites, literary works rights' owners should protect those sites by means that enable them to control the access to it and the use of its content by copying and redistributing without their permission. It was found that people justify their violations of literary works without a permit by referring to the copyright law that allows the principle of the first sale. Therefore, to copy and repeat copying over and over again cannot be considered a violation. As a result, business owners viewed that the best way to protect websites and their digital content is to ignore the rules of copyright law that have been unable to protect their online works and resort to the use of license contracts with users. Those contracts permit literary works owners to maintain their rights provided by copyright law and to add to themselves other rights to prevent the mentioned exceptions that are permitted by the copyright law. They included, in the licensing contracts, terms that prevent the user from performing reverse engineering and relying on the principle of the first sale. They, also, include a term that the violator of the license contract terms is subject to the criminal law. They considered that as unauthorized access to the site which is subject to the computer violation laws. The latter has, in turn, been enacted by analogy with the property violation laws in the material world.

Most users do not read the license contract terms for sites or programs as they are not aware of it. This makes them fall into the trap of the sites and programs owners who subject them to their terms and who deliberately prefer to

confuse between the concepts of material property and Intellectual property by using license contracts to protect their interests. Therefore, we should go back to the nineties of the last century to see how the jurisprudential belief that treated the digital environment as a real estate has begun and why it was transferred to the American judiciary which found it one of the best ways to deal with the digital environment as a new medium for human-technical transactions. We will move, now, to explain the meaning of Intellectual property and material property in the material world.

3.1 The concept of Intellectual property in the material world

The World Intellectual Property Rights Organization (WIPO) defines Intellectual property, generally, as the ratio of the production of the human mind to its owner which all legislation, treaties and international agreements emphasized the legal protection of this intangible production against any violation without a permit. This provides, on the one hand, moral support and mental creativity to the product owner who, on the other hand, receives a financial return as a reward for his intellectual effort which makes him continue to be creative. Intellectual property covered by legal protection was classified by WIPO as one of the following categories: copyright and related rights, trademarks, industrial designs, patents, graphic designs, etc. Jurisprudential definitions did not differ much in their definitions of intellectual property, and they all revolve around the sense that it is the ownership of intangible goods.[7,8].

According to copyright laws which were originally designed to prevent the printing of a literary work without permission from its owner, [9]. legal ideas, procedures, methods of work or mathematical concepts are excluded from legal protection. This is what has been stipulated by all Arab laws including the Egyptian Law for the Protection of Intellectual Property [10]. It included the same legal protection on CDs, so there was no need to add new legal rules as the legal protection, here, was focused on the CD. However, legal protection was not restricted only to programs embedded on CDs; it included any violation of the reproduction of the literary work, whether through those CDs, independent from the computer, or reproduction by any other means of electronic publishing via the Internet. Although legal protection for literary works against unauthorized violations on the Internet is assured, research is still underway to answer the following questions:

-Whether this legal protection was sufficient to prevent the reproduction and distribution of programs via the Internet in its digital form, especially in light of the principle of the

first sale and fair use permitted by copyright law whose concept is foggy when relied upon as a defense?

-Has it achieved a balance between the interests of literary business owners and their users via the Internet?

-Whether the traditional rules are sufficient to deal with websites and digital content whose owners consider it as material ownership?

These questions will be answered in the following paragraphs. We will start by answering the last question by mentioning the concept of material ownership in the material world.

3.2 The concept of material property in the material world

Referring to the Egyptian civil law, we find that it had not defined the right of ownership in a specific way, but it left its definition for jurisprudence, which has only mentioned the authorities that are granted by the right, to its owner, and protected by the law. Those rights were defined in Article 802 of the Egyptian civil law , Article 802 ,2011 as rights of use, exploitation, and disposal. The aforementioned article has fully clarified that the owner of the right is the only one, not others, who possess these powers, while the Iraqi property law specifies that the owner has the right to act absolutely in what he owns in-kind, benefit and exploitation. He benefits from his property and what may result from it and he has the right to dispose of all the actions legally permissible [11].

For an individual to exercise these rights over his property, it must be contained on a tangible, concrete, defined object, whether real estate or movable property. Given the US property law, we find that it divides the property into real estate property such as land, what above and below it, and personal property such as movables. Under the right to property required by Arab or American legislation, the property's owner acquires some rights to his property, such as the right to stable possession without a dispute from anyone, enjoying control over it, the right to use it, the right to allow or permit others to use it and the right to dispose of it by sale, rent, gift, or even the right to destroy it, of course, following the law.

This perception of control and how to exercise rights over material property is supposed to take place only in the material world, but it has moved, as it is, to be applied to websites and their digital content. At first, making Internet applications available to all without conditions was the basic reason for inventing the Internet, then controlling access to or use of those applications has become a dominant objective of business owners, especially after the increasing violation of digital content. We, of course,

advocate the legal regulation of websites and the use of their content, but this regulation must strike a balance between protecting the rights of websites owners and the rights of its users. Accordingly, we will clarify the importance of protecting material and intellectual rights.

3.3 The importance of protecting individual property, whether material or intellectual

The protection of the right to material property is considered one of the most important criteria by which the strength of implementation of the national legal system of any country is measured. Because any individual in society has the right to confine to what he owns and to the benefits that result from it without the threat of anyone who disputes this stability. The protection of intellectual property is not less important than the protection of the right to material property, that is why there have been attempts to set legislations to protect it, to provide scientific research in the material world with the state support to amend the copyright law to protect literary works and to prevent the reproduction of digital content without permission. All this will certainly lead to a safe and reliable investment environment that will lead to economic and technical development for any country.

3.4 The distinction between Material property and intellectual-property in a digital environment.

To distinguish between material property and intellectual-property, most importantly copyright, it is necessary to clarify in a nutshell the most important rights that each owner enjoys. As a result, we can determine the interest that the website owner is trying to protect according to the practical reality and its difference to what the copyright law has enacted concerning the ownership rights. We start with the right to material property in which the law establishes, for the material property owner, a set of rights that he exercises over his property. The most important of it is; to enjoy possession of the property or to authorize for others the use of it, to control and to exclusively own his property and to prevent others from using it without permission, and not to violate his material ownership which requires the intervention of the criminal law.

As for the rights granted by the law to the author over his literary works, there are two parts: the financial and literary part. We mention, generally, the most important ones, such as the right to sell a copy of his work, the right to copy and distribution, and the right to publicly perform these works. Thus, the protected interest varies in both types of ownership. Indeed, we find that, while control, preventing interference, and the command of an

individual's privacy over his property is the basis of the concept of material property, the endeavor to spread the intangible literary work to the public and assuring its protection are the basis of the concept of intellectual property. This is the interest that literary business owners aim to protect.

The ruling of literary works in the digital environment is carried out with license contracts for businessmen preferred it as a means of contracting with the user to control the violations that occur in the digital environment. As such, it was necessary to get acquainted with the most important rights and privileges provided by these contracts to the literary work owner in its digital form [12] of which we mention the license for use. License contracts prevent the user from offering others a copy of the program without the digital content owner's permission. Moreover, it prevents the user from conducting reverse engineering for development and scientific research or reproducing literary works, as well as it prevents some of the rights that copyright law provides.

Accordingly, literary business owners seek, in the digital environment, complete control of access to websites and the process of reproduction and use of its digital content. They considered websites as a tangible property like the property of a house or a plot of land. However, they forgot that one of the most important aspects of the material property is the exclusive ownership which prevents others from using it, while website completely lacks this aspect as the site owner will not be able to maintain the exclusivity of his site as long as it is connected to the Internet. For instance, sites were created primarily to be shared, and no one will be able to exclusively own the digital content for himself without sharing it with others. Thus, the users who, simultaneously, use the same site can use the same content and quality without feeling that any of the others are using it.

4. The application of the concepts of material ownership to websites

We find that it has defined the Access Contract [13] as the contract that permits to obtain information by electronic means or employing a data operating system for another person [14]. As paragraph 11 of the same law has clarified, Computer Information Transactions are any agreement to conclude, amend or license computer information or informational rights. This law made it clear that accessing or contracting to obtain information happens, both, in a digital environment and therefore there is no room to talk about any traditional material concepts. However, it seems that an attempt to apply the concept of material property to websites and their digital content started before the enactment of this legislation that regulates information

Transactions via the Internet. Analogy attempts have arisen at a time when some computer-related crime was committed. Some of the attempts view the necessity of applying the movables violation concepts on e-mail and websites [15,16,17] and some others advocate the application of the real estate violation concepts of real estate.

Cases were brought to the US court, which was, at that time, applying the rules of criminal law. At that time, the American law of computer abuse considered that computer is like a house, a private individual property that entering it without its owner's permission is a violation. Therefore it is subject to the criminal violation laws (this is even though the computer itself is not considered as a real estate but instead a movable.

Most US courts preferred the application of the real estate violation law instead of the movables violation law, to apply it to violations entry to computers and e-mails. Because the movables violation law requires the existence of damage that affected the movables to provide it with protection. As for the real estate violation law, it protects the owner right, whether or not the damage exists. By applying criminal laws, website owners feel reassured to subject the violator of the contract to use the website to those laws because of its effective legal rules of deterrence. They started using the same concept by including a condition that everyone who violates one of the contract terms of using the site and its content, is subject to the computer violation laws. Consequently, he is subject to criminal law. Hence the balance between the rights of website owners and the rights of the users has been lost. To this end, we wonder what legislative authority do website owners have to set a clause in a contract that criminalizes violating one of the contractual terms of use and considering it as unauthorized entry to a site. Is not this a violation of the principle of legality?

When jurisprudential opinions in America were divided over the permissibility or not of the analogy in an attempt to apply the standards of the material world to the virtual one, Professor Orin Kerr who is considered one of the leading jurists of virtual crime in America [18] views the analogy impermissible because of the real differences between the two environments. However, the jurist DAN HUNTER [19] sees it useful to apply the standards of the material world to the virtual one because of the clear rules in the first that the second lacks. Furthermore, some went broad to emphasize the change of the concept of the virtual world and should not restrict it to web pages because it is a world too big to be based on mere digital pages. Instead, they prefer to replace it with the concept that perceives the virtual world as a place just like the physical world, even if it has its peculiarities, provided that it must be used as a real-

world in which activities, transactions, arts, and other human sensations and feelings are carried out.

The virtual world is considered a place, not just pages [20] an individual moves through using hyperlinks. The idea of analogy was the starting point to deal with websites or e-mails as the real estate property in the material world. As such, anyone who violates the terms of use becomes like someone who entered the land or the house of a person without his permission. Thus, it is considered an attack on the property of others which necessitates the application of criminal laws. In the same line, it is found that the US judiciary applies the criminal law to the violating person [21] .if the owner of the site has not authorized him to enter. As a result, the lack of permission to enter the site confirms the violation of the terms of use by the user. Consequently, the Criminal Code became the protector of the digital license contract.

In an attempt to solve this problem, Professor Orin ker has explained the necessity of restricting the criminal act to those who violate and circumvent technical procedures or measures so that they can enter the website against the will of its owners. This restriction does not consider a person who violates the terms of the license contract a hacker of the site nor unauthorized entry to the site a violation. Consequently, it is not assumed that he is a criminal according to the criminal legislation of the Internet. Rather, he must be subject to the contractual responsibility rules in civil law.

From the above, we can say that the opinion of Professor Oren Care, who goes to narrow the concept and scope of criminal acts, is logic and can be advocate, especially since the one who is concerned with the crime is the legislation, not the private sector. Likewise, this restriction of criminal acts preserves some of the user's rights by not criminalizing the act of violating one of the contractual terms that are rarely read by users, and this has some justice.

5. The concept of the website and the legal requirements for its establishment under the Internet law

If we were to define the web, technically, we find that it depends, in its existence, on digital content of information, programs, and other data. While the role Internet is limited to connecting different computer networks and protocols, hyperlinks link between web pages stored in different computer servers around the world. A website is a page or an interconnected set of pages included in a home page on the same computer or server. It is prepared and adjusted, as a set of information, by an individual, group of individuals or even an organization. It is the first corn stone that builds

the international information network. Its function is based on the process of selecting a page or specific information in the form of data stored in computer servers around the world. Soon, hyperlinks will play a very important role in website technical and legal terms, especially while dealing with digital licensing contracts.

The legal definition of the website, adhered to by most Arab legislations and agreements [22.23] . is based on the same concept that perceives it as a place that makes information available on the international information network and can be accessed through a specific address. The website must be in the required legal form [24]. It must provide security for individuals' financial statements and make them able to enforce legal rights when they purchase through them. A license must be obtained to use any content that the site owner creates. Likewise, the latter must be familiar with the American Millennium Law, international copyright and the exceptions provided by copyright law such as fair use if he needs to use it. Moreover, internet laws require the site owner to provide technical measures that prevent piracy on his site and to provide for its privacy policies. In addition to the protection of his site, the site owner should provide trust among its users. Consequently, he must provide the site user with a license contract to use it.

In the United States, there are computer security and child protection laws. The site owner needs to be familiar with the most important rules required if he decides to sell anything through his website. Moreover, he needs, of course, to be aware of the rights that are mentioned in the program that runs the site as being in the framework of general use or requiring a license.

6. The position of the US judiciary from the technical/legal nature of the website

Some US courts have considered intellectual property via the Internet to be a form of material property [25] . Some of the jurisprudence assumed that information was subject to the traditional meaning of tangible property and asked for the application of the material property violation law rules to websites and email. Some courts have relied on this juristic opinion in many cases in which the US judiciary has applied the material property violation law [26, 27, 28] However, in the cases that were brought to the American judiciary regarding websites, the courts preferred to apply the license contract rules and investigate whether the user approves its terms and whether he had received a sufficient and clear note about those terms as well as other establishment issues of the contract.

7. Legal protection to enter the website

This title addresses two interests that must be legally protected: the interests of website owners and that of the site user. Accordingly, the site owners seek to reinforce legal protections for the website access and to implement criminal and civil protection to protect their interests against those who violate the license terms of using the website. Oppositely, consumer protection supporters ask for the application of civil protection to the person accused of violation if he violates the contractual terms, not the intellectual ownership right.

Having clarified the legal requirements that must be taken into account by the owner while creating his site, which aims to protect it from falling under the penalties of copyright laws, we should consider the role of legal protection for users when they access the website. This requires providing rights to site users. As the user is permitted to enter the site under the license contract he must feel that he will not be criminally prosecuted if he/she violates one of the contractual terms that he does not often know about and even if he knows, he does not understand most of them. The user must also be assured that his personal data [29] will not be used or appropriated for any purpose by providing a clear note about the location of the link that leads him to the privacy policy page that has been regulated through Internet special laws at the international level [30 ,31, 32].

Recently, another problem has arisen concerning hyperlinks that the user navigates through on the websites. It has been questioned about being subject to the protection of intellectual property laws. Are these hyperlinks that move the user from one site to another, opposing the desire of the site owner, considered a violation of the copyright law or a violation of the license contract terms between the user and the website owner?

Jurisprudence opinions were divided upon answering this question. Some of them considered that the matter may not need the establishment of any responsibility for copyright about the work of hyperlinks. Another opinion was that, as long as there is intellectual property protection via the Internet, the website owner must permit the user to use the hyperlink or not. In case he does not permit the user to use the hyperlink; he may use one of the technologies to prevent him from using it. Some have argued that the use of the hyperlink may be included under what is called fair use which is granted by copyright law.

In case when the user calls for a file [33] from a website, the browser stores a copy of that file on a computer server instead of calling for the file from its primary server via the Internet which may take a long time. Also, the

temporary storage of files on a server by a browser software often occurs without permission. In this case, it could constitute a violation of copyright law. The copyright law was unable to address these problems nor did it solve the problems of infringing the digital content of websites.

Before dealing with this problem, we will quickly review the important role that copyright law has played in protecting literary works in the material world. We will limit our scope to computer programs among literary works to clarify the difference between the efficiency of copyright law in the material environment and its deficiency in the digital environment.

8. The protection of the copyright law to computer programs in CDs

The repeated unauthorized copying of programs has resulted in the excessive need to protect it. The copyright law was specially enacted, in the beginning, in the physical world to protect literary work, including programs if the aspect of objectivity, innovation, and form (i.e. fixing the work on material supports such as a CD) were available. The first sale principle was not initially allowed by the copyright law that was only protecting the first copy that the consumer purchases. If the latter reproduced this copy without permission, he would be a violator of the copyright law. However, in practical reality, using a single copy of the program was not enough to run it. It should have been downloaded to the user's computer, which means making another copy on his computer, and another backup copy in case of the initial damage. The American law has recognized this need, imposed by the practical reality of the program's technology. For this reason, the US law extended copyright protection and modified Article 117 of the US Copyright Act 1980, which allowed the user to make a backup copy of the program.

The Berne Convention [34] and the TRIPS agreement in its Article 10 [35] applied protection to computer programs in whatever way it was expressed or shaped, as did the Egyptian intellectual property protection law.[36] .At this stage, legal copyright protection included programs if they were embedded in CDs such as disks, hard disks, or floppy disks. However, with the spread of technology and the use of the Internet, the problem of reproducing digital content has increased, especially in light of the lack of the physical form in which literary work is installed in the previous traditional concept. Therefore, the question of how to protect websites and their digital content from unauthorized uses has begun and the idea of legal protection for how to use websites and their digital content has disputed in two directions. Whether copyright law rules

are adequate to do the job or are license contracts [37] with technical assistance the solution?

9. The role of copyright law in protecting the website's digital content

Copyright law has provided adequate legal protection for software containers in the material world. However, its deficit appears in the digital environment due to the exceptional rules it provides such as first sale, fair use, and reverse engineering that some users exploit to justify violations and unauthorized use. Therefore, the site owners were forced to resort to the idea of analogy that we talked about previously, by considering the website a material property. This is because copyright law, even if it protects republishing and distribution through all means of communication, including the Internet, it does not protect data, facts, or ideas.

However, the practical reality has proven that most individuals access the website, use, copy, download and distribute its content without permission from their owners under copyright law. It was, then, necessary to protect the digital content owners against unauthorized violations by means other than copyright law, which was unable to provide effective protection within the digital environment. These means may be technical or through the use of digital licensing contracts.

Regarding the Egyptian anti-cyber law, we found that it defines the hack as unauthorized access (i.e. a violation of the license terms) or access in any illegal way, to an information system or computer or an information network, and the like. This Law has, in this sense, stated that the violator of the license terms is considered a hacker and is subject to the contractual term which must be reconsidered.

To this end, an important issue must be mentioned that there is a difference between the criminal act and the mere violation of the license contract terms. On the one hand, under the jurisdiction of the criminal law, the defrauding or hacking of the means of technical protection for protected literary works can lead to jailing the violator and to paying a fine. On the other hand, the mere violation of the license contract terms cannot be considered a violation of the means of technical protection for literary work. In this case, there is no need for criminal law to intervene and it can only be the scope of the civil law as not every abuse of the license contract terms is a violation of copyright law. As such, the Ninth Circuit of the Court of Appeal of America decided in 2011 that for violating the license contract terms to constitute a crime, it must violate one of the exclusive rights of the literary right owner under the American copyright law. For example, if the copy exceeds the scope of the

license and that the plaintiff's case must be established based on violating the exclusive right of one of the copyrights as the reproduction or redistribution of literary works.[38.39].

But the practical reality is not that easy as we distinguished that violations of websites and its digital content are still ongoing. This is not necessarily that the user has the intention to violate but rather, it can be due to not reading the licensing contract terms. With the continuation of these encroachments on digital literary works, it was found that the copyright law, in its traditional manner, does not have the capabilities or the adequate mechanisms to lonely prevent these violations. Especially, in light of the existence of defense against the accusation of the violation based on the fair use doctrine permitted by the US copyright law. This showed the deficiency of copyright law in assuring the actual protection to prevent access and use of the site and its digital content, according to the desire of website and business owners. So they had to resort to the digital license contract.

10. The emergence of digital license contracts to regulate digital content

The UCITA has been enacted in an attempt to support and implement the digital license contracts. This law was supposed to be a unified law to set conditions for the validity of contracts in computer information transactions. However, it was, in practice, unsuccessful as it was only applied in two US states, Virginia and Maryland. The law was strongly criticized for various reasons, including the lack of accuracy in its definitions and its adoption of an expanded concept of computer and the access to information. The scope of application of this law includes license contracts, purchasing software and accessing digital databases.

11. The relationship of the digital license contract with the traditional property rights law

In the previous section, we have mentioned the inability of intellectual property laws to eliminate violations that occur in the digital environment. Accordingly, website owners restricted the use of their websites through a license contract that is not new to the trading environment in the physical world. But in the digital environment, the user is provided, on digital pages of the website, with uniform terms without having any right to negotiate it. The main objective is to limit the use of literary works protected under intellectual property laws. More importantly, those contracts attempt to prevent some of the rights that the copyright law has given to the user, according to which

violations of those works can occur in the digital environment. Therefore, the copyright law was able to control the redistribution and reproduction in the physical environment to a large extent but with the digitalization, the situation has become very difficult. Consequently, business owners have found that if they can set the terms and duration to use their business, as they like, violations will decrease in the digital environment. However, they demanded more control in the digital environment based on material concepts to deal with websites as private property and forgot the most important element of ownership, which is the right to exclusively own the property and prevent others from infringing it.

Furthermore, we should not forget that, in the sale contract, the seller is obliged to transfer ownership which cannot be done through the license contract. The latter does not transfer ownership to the licensee, but only transfers possession to him and restricts his right to use it on certain terms. Although the license contract differs from the sale contract in their nature, characteristics, and the interest each of them protects, the website is decided to be subject to intellectual property laws.

12. The relationship of the digital license contract to copyright law

The traditional license contract was known in the material environment before the emergence of the Internet. Initially, the relationship between the license contract and copyright law was not problematic. The US Copyright Act is a federal law that the US Constitution has given the right to Congress to enact to protect copyright law. The primary purpose of the protection was the development of science and arts [Tussey, 2019]. Following the excessive protection that the US Congress has provided to the copyright law, it had to achieve the difficult equation of protecting the public interest by stipulating some exceptional rules within the copyright law lest business owners' encroaching. The most important exceptional rules permitted by copyright law are the principle of first sale [40, 41] and the fair use. However, since its emergence, license contracts were specifically designed to prevent these exceptions that are in favor of the public interest. [42] This is justified in relation to the aspects of digitalization that facilitate the reproduction and distribution of works in same quality as the original work without high cost. This has led to the damage to the original software market and the emergence of another parallel market based on copying the digital content with, of course, cheaper prices than the content to be licensed. This is why tension has arisen between licensing contracts and copyright law.

In this vein, programs owners preferred the idea of licensing it in the digital environment instead of selling it as

was the case in the physical world. Hence, the licensee in the digital environment who is used to be called the buyer (i.e. the owner of the copy in the material world), no longer has the right to rely on the principle of the first sale to resell the program. Then, the transaction in the software has become a license, not a sale. Thus, the purpose of their use of digital license contracts is, specifically, to avoid the principle of the first sale and fair use. The first sale principle was based on the exclusive rights of the protected copy owner and was, only, applied to two types of those exclusive rights which are the distribution and the public display that automatically transfers property to the buyer or owner of the copy. [43] .

License contracts are one of the means of controlling the use of digital content to protect intellectual property via the Internet. It is a preventive or defensive method that takes place before violation and unauthorized [45] use has occurred. Under the licensing contract, the literary right owner has the right to own all the copies licensed for others who can only possess that work and may use it without being the owner of it. This use is governed by the restrictions imposed by the owner under the terms of the license contract.

The pioneering issue that granted the digital license contract the basis to be used in the digital environment was the pro CD issue. It was when judge Easterbrook ruled the validity and legality of the license contract ignoring the application of the rules of both the copyright law and of the traditional contract sales law. This was by referring to the freedom of individuals to enter into any kind of contract that they like. Since the data that the accused Zeidenberg redistributed was not protected by copyright law that does not protect facts or data unless they are embedded into a tangible physical container, it is, therefore, considered as public property. Consequently, Zeidenberg is not charged with violating copyright law.

With the proliferation of using digital license contracts, the American judiciary has become confident in its legitimacy with the existence of the licensee's approval. As long as this approval exists, the contracts are valid and legitimate, even if the contract takes the nature of compliance. As such, licensing contracts have played an important role in restricting the licensees' use of literary works. Then, the debate over it has become the preoccupation of scholars to present.

Literary violations are continuing in the digital environment even after the widespread use of digital license contracts because the powerful aspects of both the contract and copyright law depend on the extent of the ability to impose it on users. That is, the ability to execute the punishment on anyone who violates any of the license

contract terms or any particular rule of copyright law, especially, in the existence of piracy.[46] Therefore, it has become clear that legal protection in the digital environment is not enough and technical support for what is called the Digital Rights Management or DRM was required to protect literary works. The legal protection for those technologies was assured by the Millennium Copyright Law [47].

Technical support for DRM systems was found to provide technologies that regulate access to websites and protect their digital content from violations and unauthorized use. It enables digital literary business owners to control it and prevent the user from re-copying the digital literary work or modifying a file or upload or move it to a private storage unit, or encrypt data, or use passwords and watermarks, and other technical protection methods. This extreme ability to control the use of digital content has threatened the principle of the fair and general use of that content which will, in return, threaten the ability to learn, to compete and then production as well as the users and the public interests.

To this end, the debate is no longer about regulating and protecting copyright laws, but rather about controlling literary works. Literary business owners who use these technical measures prevent anyone from evading, defrauding, or breaking these technologies, regardless of whether or not he violates the copyright. Thus, the requirement for legal protection for those technical measures must become independent of the legal protection of copyright in the digital environment. This requirement was met through international treaties such as WIPO.

With the issuance of the American Millennium Copyright Act DMCA in 1998, which was, in its terms, in line with the obligation of the 1996 WIPO Treaty, the aim became to balance the rights of both literary business owners and consumers, as well as to protect Internet service providers. This law has completely banned procedures to circumvent technical systems that protect digital content and prohibited trafficking in any device used to circumvent those technologies that protect digital content. It, even, prohibits entry to sites that offer devices that help break down protection technologies. However, it is criticized for expanding the scope of copyright protection, and, in return, limiting the responsibility of Internet service providers for any copyright violations that its users might make. In my opinion, this development in protection, even if it threatens some interests, has great importance in distinguishing between civil and criminal responsibility, so whoever violates the contractual terms is not considered officially guilty, unless he circumvents the technical measures.

In 2009, it was ruled in favor of the DVD Copy Control Association in a case against Real Networks for it had

violated the copyright law in selling Real DVD programs that allow users to burn DVDs and store them on a hard disk. The DVD Copy Control Association claimed that Real Networks had violated the Millennium Copyright Act the DMCA when it violated anti-piracy measures ARccOS Protection and Rip Guard and it also violated a License Agreement with a content mixing system.[48].

In another case Viacom Inc. v. YouTube, Google Inc in 2013, the US court admitted that YouTube is not responsible for copyright violations [49]. by users on its site.

Another issue regarding the concept of the legal first copy, an individual possesses in the material world, is that it does not exist in the digital environment. Thanks to digitalization, the idea of the original and the copy that must be dealt with in a material environment has disappeared. Thus, no one will be able to control the literary work and make only one copy of the original on which the principle of the first sale [50]. can be built. This is for individuals to share some digital content, be it a song file, that file must be downloaded from the server computer to the user's computer. There is no meaning whatsoever to the idea that the song file is erased from the server computer and transferred to the user's computer in the sense of controlling the reproduction and the initial copy. Because, in all cases, the users of the song file have violated the copyright right, particularly, the redistribution, publication, and reproduction. This is what the American judiciary pointed to in the case of Capital Records LLC v ReDigiInc.[51,52].

Because of the UCITA law, we find that it supports the license contracts' prohibition of the use of the first sale principle because it is based on the premise that the nature of the transaction in the software is the sale of that initial copy. However, the aforementioned law holds that the nature of the transaction in the programs is a license, not a sale. Thus there is no room to talk about the principle of the first sale.

The same concept applies to both fair use and reverse engineering that aims to understand the way programs or digital content work for many legitimate reasons under the law of copying, including adaptation, development, educational and academic research. However, we find that UCITA law supports the license contracts which prohibit what is permitted by copyright law.

The law will continue to face the challenges of the digital environment and the technologies it contains. In this regard, the website will still contain technologies that are still under legal investigations, but we conclude that the website is subject to intellectual property laws and access to it is regulated through digital license contracts. Here

appears the role of technology as a means of law enforcement and contractual obligations.

13. Conclusion

The Egyptian legislator must start enacting legal rules to regulate the creation and access of websites. It must pay attention when enacting these rules not to leave the private sector, such as website owners, complete freedom to regulate the access and use of digital content. Leaving freedom to the private sector has created a conflict between copyright, contract, privacy laws, and even competition laws. This, in return, has led to the disequilibrium between the rights of business owners and users. Therefore, the state must intervene in the legal regulation and raise website owners' awareness about the international legal requirements for website creation and the digital content it contains. Moreover, The Egyptian legislator needs to be aware of Professor Oren Care's proposal regarding the concept of hacking websites by restricting unauthorized entry to those who violate technical procedures, while subjecting the violator of the license contract terms to contractual responsibility under the rules of civil responsibility in the civil law.

Acknowledgment

The author gratefully acknowledges the approval and the support of this research study by the Grant No. -7955 BA2018- 3-9-F from the Deanship of scientific Research at Northern Border University, Arar, KSA

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