CHALLENGES IN COPYRIGHT ENFORCEMENT ON THE INTERNET:
NEED FOR AMENDMENT OF THE COPYRIGHT LAWS

Umeh, Samson Obi, Ph.D
&
Aniche, Charity Ngozi, Ph.D

Abstract
Authors of works are conferred with a bundle of monopoly rights in relation to their works. This is to encourage them to create more works by allowing them to reap economic benefits accruing from their creation. There are certain exceptions to these rights in order to strike a balance between the authors’ rights and the public interest right of access to copyrightable works, for advancement of knowledge and information. This long existing rule has been distorted as a result of the emergence of digitalization/Multimedia and the Internet which created more access to copyrightable works; in most cases, unauthorized access; and at the same time, defy the traditional Copyright Enforcement Mechanisms. Copyright Laws have since then embraced the use of technological protective measures in relation to works in the face of the legal uncertainties and a number of lacunae inherent in the obsolete Copyright Laws, which were oriented towards analogue exploitative technologies. The continued use of these technological protective measures which most often, do not admit of fair use of protected works, is bound to end creativity. This work compared the existing Copyright Acts of Nigeria, England and some other Copyright Instruments of selected jurisdictions in order to discover the challenges faced in the Copyright enforcement of Internet based works, and concluded by proffering made recommendations on ways to promote creativity through fair use of works, without infringing the rights of authors.

Keywords: Copyright, Copyrightable works, Copyright Laws, Internet, Enforcement Mechanisms, Technologies, Infringement

1. Introduction
Copyright protection provides a property interest in original intellectual creation and gives the Author control of the creation he has contributed to the society. In return for this contribution, the author is given a monopoly rights for a set period of time, in relation to such creation/work. In doing so, Copyright Laws promote public welfare by the advancement of knowledge with the specific intent of encouraging the production and distribution of new works for public use. The Laws also established Copyright Enforcement Mechanisms charged with the protection of Copyright attached to protectable works by punishing those that infringe them. However, the development of the Internet and the growth of online services which
enable very easy reproduction and worldwide dissemination of information in a way not contemplated in the analogue world, threw off balance, both the traditional analogue exploitative technologies and Copyright Enforcement Mechanism. This utterly destroyed the traditional balance between the rights of authors in relation to their works, and the public interest right of access to copyrightable works through fair use. Eventually, there emerged Copyright Laws which provide for the use of technologically protected works, though without authorizing fair use of such works. However, this development is threatening the existence of creativity.

2. Conceptual Clarifications
An incisive journey into the mainstream of this discourse cannot be embarked upon without a clear understanding of the meaning of some concepts and terms used, such as Copyright. The term ‘Copyright’ is defined by the Nigerian Copyright Act to mean ‘Copyright under the Act’. This definition is too simplistic and does not actual amount to definition of this term. The danger inherent in this definition is that one has to traverse the whole pages of the Copyright Act before determining what Copyright is. In *Sarg Aims Aluminium Products Ltd. v Akagha*, the Federal High Court of Nigeria adopted a restricted approach when it defined Copyright as:

> The right of literary property as recognized and sanctioned by positive Law. An intangible incorporeal right granted by Statute to the author or originator of certain literary or artistic production, whereby he is invested for a limited period, with the sole and exclusive privilege of multiplying copies of the same and selling them.

Copyright has been aptly defined as ‘the right to copy; specifically, a property right in an original work of authorship, including literary, musical, dramatic, choreographic, pictorial, graphic, sculptural, and architectural works; motion pictures and other audiovisual works; and sound recordings, fixed in any tangible medium of expression, giving the holder the exclusive right to reproduce, adapt, distribute, perform, and display the work’.

---

3 [1994] FHCLR, 188.
Copyright gives authors control over the content and form of a work, and grants them a monopoly of rights for a period of time, with respect to the authors’ creations. It was held in *Yemitan v Daily Times & Gbenga Odusanya*\(^5\) that the primary function of Copyright law is to protect from annexation by other people, the fruit of another’s work, labour, skill or taste. However, it is not every work that is accorded Copyright protection. The Copyright Act of Nigeria enumerated works that are qualified for Copyright protection as: Literary works; Musical works; Artistic works; Cinematograph films; Sound recordings, and Broadcasts.\(^6\) However, these works shall not be eligible for Copyright protection in the jurisdictions under consideration unless they pass the required tests, *viz*, the originality and fixation tests.\(^7\)

Apart from the term Copyright, other relevant terms used in this work such as Computers, Infringement, Internet and Multimedia shall hereby be defined. ‘Computer’ has been defined as ‘a machine which can accept data in a prescribed form, process the data and supply results of the processing on a specified format as information or as signals to control automatically some further machine or process’.\(^8\) ‘Enforcement’ is defined as ‘the act or process of compelling compliance with a Law, mandate, command, decree or agreement’.\(^9\) ‘Infringement’ is defined as ‘an act that interferes with one of the exclusive rights of a Patent, Copyright or Trademark owner’.\(^10\) ‘Internet’ is defined as ‘a computer system that allows millions of computer users around the world to exchange information’\(^11\) lastly, the term ‘Multimedia’ refers to a wide span of technologies which provides an information pull accessible to the computers of average consumers especially through the creation of Information superhighway.\(^12\)

\(^6\) C.R.A.N. Section 1.
3. Rights of Copyright Owners
Copyright Owners are conferred with some exploitative rights, such as the right to reproduce, distribute, display or perform the protected work, or to make derivative work therefrom, subject to the exceptions specified by the Copyright Acts of the jurisdiction under consideration. The owner’s right to control the doing of any of the above mentioned activities extends to the whole or a substantial part of the work either in its original form, or in any form recognizably derived from the original. The author of an architectural an work has the exclusive right to control the erection of any building which reproduces the whole or a substantial part of the work either in its original form, or in any form recognizable derived from the original, but not the right to control the re-construction in the same style as the original of a building to which the Copyright relates. Copyright in a sound recording shall be the exclusive right to control in Nigeria, the direct or indirect reproduction, broadcasting or communication to the public of the whole or a substantial part of the recording either in its original form or in any form recognizably derived from the original; and the distribution to the public for commercial purposes of copies of the work by way of rental, lease, hire, loan or similar arrangement. The rights conferred by Copyright in broadcast are similar to the rights enjoyed by authors of other works considered and includes the recording and the re-broadcasting of the whole or a substantial part of the broadcast. Copyright owner of television broadcast has the exclusive right to control the taking of still photographs from the broadcast.

It must be pointed out that Nigeria borrowed its Laws, including Copyright Act from England. As such, the rights conferred by Copyright above discussed are the same under the English Act.

4. The Development of Internet and Related Works
The development of the Internet in the 1980s and the growth of online services such as the World Wide Web, Electronic Mail, and File Transfer Protocol

---

13 C.R.A.N. Section 6; C.D.P.A. Section 16.
14 C.R.A.N. Section 1(2).
15 Ibid. Section 8.
16 Ibid. Section 7.
17 Ibid. Section 8.
18 Ibid. Subsection (2).
19 C.D.P.A. Sections 16.
20 Hereinafter referred to as ‘www’.
21 Hereinafter referred to as ‘e-mail’.
Servers, enable very easy reproduction and worldwide dissemination of multimedia/digitized works in high speed quantities with almost no expenses and loss of quality. Moreover, because of the specific and innovative nature of the Internet, the process could hardly be controlled by the Copyright holders. One can now obtain a music file, video record, visual or literary work for free and without the license given by the right holder. Furthermore, the fact that the Internet connects Information Centres around the world, led to the astounding amount of information and the number of users on the internet. According to Cerf, over 22,000 networks are connected to the Internet in one hundred and thirty-seven countries. It has been stated that while the National Science Foundation alone logs eight terabytes of information transferred per month, the estimate of the number of people using the Internet are as high as 30 million.

On the other hand, the development of ‘Multimedia,’ which is a convergence of technologies from which many information technology products have emerged, has given rise to a wide range of possibilities hitherto achievable in the information and technological sector. The new possibility of amalgamating or combining a diversity of both traditional and entrepreneurial works into one multimedia work seems to confound existing forms and categories of copyright. For instance, Compton’s encyclopedia consisting of 9 million words of text, 15,000 still images, 45 moving image sequences and 60 audio minutes has been put on one CD-ROM disk. Ozioko stated that:

With modern media technologies, works or portions thereof can be altered. It has been reported that a Diet Coke’s commercial was made in which actors Humphrey Bogart and James Cagney; and the Musician Louis Armstrong joined Elton John and other actors in a bar. Bogart was in actual fact not present at the scene because he was dead and buried at that time. Another multimedia type of application is ‘colorization’ which is a process that facilitates the conversion of films

---

22 Hereinafter referred to as ‘FTP’.
24 F Vizard, ‘Building the Information Superhighway that Promised to Revolutionize Communication – and the Way’ We All Live, POPULAR MECHANICS, Jan., 1994, at 28, 32.
26 Ibid. p.266.
initially shot in black and white to be altered such that they seem to have been shot in colour.\textsuperscript{27}

5. Administration of the Internet
The activities associated with the Internet are made possible by System Operators\textsuperscript{28} who run these computer systems; and make resources and information available on the superhighway.\textsuperscript{29} Sysops also monitor the activities on their systems, and also control the types of information present on the Internet.\textsuperscript{30} Sysops have various goals, most times financial goal, in creating access to users, i.e., for a fee. It is because of this obvious goal that Sysops allow Users to log in under the name ‘anonymous’ or under fictitious names; and once they logged in, they can explore the system and usually have the ability to use information to load, transfer or download items. Sysops also have reputational benefits of others seeing the Sysops’ name and associating it with quality and experience, i.e., as an academic writer or a computer expert.\textsuperscript{31} On the other hand, while some Sysops may have altruistic motive of serving others and benefitting society, other Sysops have a mixed motive of providing service to others in the self-interest of having a forum to debate, trade of ideas, files, or information; or for social relaxation.\textsuperscript{32} It must be noted that the more people use Sysops’ resources, the better the exposure and returns for the Sysops. This obviously leads to more material being added or placed on the Internet. However, the extreme growth in computer use and networks show that there is an abundance of demand for access to information. The supply made pursuant to the said demand led to increased online piracy as it practically impossible for Sysops to monitor and control Internet related activities.

These days, soft wares are transported to a computer user through the interstate telephone lines of the WWW, just as it can travel on the interstate highways in the back of a truck to a computer store and the eventual end user.\textsuperscript{33} In this manner, the Internet through the highways, serves the same purpose of moving goods across state lines. For instance, it now easy for a person in Owerri, Imo State to access a FTP location in Canada at the touch of a button. Again, most Educational

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{27} Ibid.
\item \textsuperscript{28} Hereinafter referred to as ‘Sysops’.
\item \textsuperscript{30} Ibid.
\item \textsuperscript{31} Ibid. M Charles, ‘(1995) National and International Copyright Liability for Electronic System Operations’.
\item \textsuperscript{32} Ibid.
\item \textsuperscript{33} Ibid.
\end{itemize}
\end{footnotesize}
Institutions have access to the Internet or other computer networks at their School through which they send out assignments and; even conduct examinations or other related exercises over the e-mail, to their students.\textsuperscript{34} Furthermore, Educational Institutions and many other Corporations that are connected to the Internet allow their staff, customers and visitors access to these resources \textit{via wifi}, while sitting at their desks. For instance, ‘Libraries without walls’ allow people to use materials such as magazines, journals, or newspaper; search card catalogs; or read books \textit{via} their home computers.\textsuperscript{35} Similarly, electronic communications now aid scientists all over the world to co-operate on research and share ideas in ways that was never feasible before.\textsuperscript{36} Electronic communication has since spread to other areas of academia, which have utilized this new spread and access to create public forums where a diversity of views can be heard and discussed. Other uses of online information are entertainment, communication with others and profit.

What emerges from the above is that the relative nonexistence of or difficulty in maintaining direct supervision over Surfers by the owners of the displayed information transforms the Internet into a virtual no man’s land.\textsuperscript{37} Besides, save for the development of technical devices that restrain or limit the amount of copying and manipulation, any attempt to keep records of illegitimate access in order to pursue potential infringers will be costly and counterproductive in the end.\textsuperscript{38}

\textbf{6. Copyright Infringement on the Internet}

Ordinarily, primary infringement of Copyright occurs when any person without the license or authorization of the Copyright owner, does or causes any other person to do any of the acts reserved to the Copyright owner.\textsuperscript{39} On the other hand, secondary infringement of Copyright includes doing the following acts without the authority of the right owner: importing or causes to be imported into Nigeria any copy of a work which if it had been made in Nigeria, would be an infringing copy;\textsuperscript{40} unauthorized exhibition,\textsuperscript{41} distribution by way of trade, offering for sale, hire or

\begin{itemize}
\item \textsuperscript{34} M Ozioko, ‘Emergence of Digital Technology: Implication for Copyright Protection in Nigeria’, \textit{Op. Cit.} p.263.
\item \textsuperscript{36} \textit{Ibid.}
\item \textsuperscript{38} \textit{Ibid.}
\item \textsuperscript{39} C.R.A.N. Section 15 (1) (a).
\item \textsuperscript{40} \textit{Ibid.} Paragraph (b).
\item \textsuperscript{41} \textit{Ibid.} Paragraph (c).
\end{itemize}
otherwise or for any purpose prejudicial to the right owner;\textsuperscript{42} making or being in possession of plates, master tapes, machines, equipment or contrivances used for the purpose of making infringing copies of a work;\textsuperscript{43} permitting a place of public entertainment or of business to be used for a performance to the public of the work, where the performance constitutes an infringement in the work, unless the person permitting the place to be used was not aware and has no reasonable ground for suspecting that the performance would be an infringement of the Copyright in such work;\textsuperscript{44} and performing or causing to be performed for the purposes of trade or business or as supporting facility to a trade or business, any work in which Copyright subsists.\textsuperscript{45} Similarly, criminal infringement of Copyright occurs when a person, without the authority of the Copyright owner does any of the acts discussed above in relation to secondary infringement.\textsuperscript{46}

As stated earlier, the concept of Copyright infringement under the Nigerian Act is the same under the English Act.\textsuperscript{47}

7. Copyright Enforcement: The Challenges
The Copyright Laws in the jurisdictions under consideration put in place proper Enforcement Mechanisms for the effective implementation and administration of Copyright. These Enforcement Mechanisms include: Nigeria Copyright Commission, Copyrights Inspectors, Copyrights Licensing Panel, Collecting Societies, Department of Customs and Excise, Police, and the Courts.\textsuperscript{48} However, because of the afore stated activates associated with the Internet and Multimedia, coupled with the fact that Copyright enforcement is territorial; these traditional Enforcement Mechanisms succumbed to the challenges posed by these developments. The need for an enforcement mechanism that will remedy these anomalies, fostered the development of the Digital Rights Management system\textsuperscript{49} which enabled right holders to physically control access and use of a work made available online. DRM usually make use of technological measures such as Encryption and Watermarking techniques to protect digital media. Unfortunately,

\textsuperscript{42} Ibid. Paragraph (d).
\textsuperscript{43} Ibid. C.R.A.N. Section 15 (1) (e).
\textsuperscript{44} Ibid. Paragraph (f).
\textsuperscript{45} Ibid. Paragraph (g).
\textsuperscript{46} Ibid. Section 20 (1) (a)-(c).
\textsuperscript{47} C.D.P.A. Sections 17-28.
\textsuperscript{48} C.R.A.N. Section 34, 39 44 (1); C.D.P.A. Sections107A, 111, 116, 145-150.
\textsuperscript{49} Hereinafter referred to as ‘DRM’. 
these measures/devices do not admit of fair use of protected works. The challenges encountered in Copyright enforcement shall be discussed below.

7.1 Determination of Online Infringement Liability

It must be stated that in determining Copyright infringement liability on the Internet, some critical issues have to be revolved; ranging from how to identify or determine what constitutes unauthorized exploitation of works vide the Internet, to who may be liable therefor; how will liability be determined in the long chain of information transmission ranging from content provider via several service providers, Network Operators and Access Providers to the end user? Olueze submitted that:

where a Site Operator merely hyperlinks to another website which has obtained the license of the owner of Copyright in respect of a work to post the work on the Internet, it poses some difficulties to ascertain who is guilty for Copyright infringement. Is it the Site Operator who posted or uploaded that work on the internet; or the Manager of the website, or the Internet service provider?

Furthermore, it is often difficult to ascertain which activities or operations that amount to Copyright infringement on the Internet. Assafa questioned whether the storage of information in a database placed at the disposal of those with the means of access constitutes publication? It is submitted that the answer should be in the affirmative considering the authority of Playboy Enterprise v Frena, where an Electronic Bulletin Board Operator was held liable for Copyright Infringement of magazine pictures that had been put online. The operator did not know that the pictures were online, and actually deleted them as soon as he became aware of the infringement; although at that time, other people had loaded these pictures. However, it has been observed that Courts reach various conclusions when dealing with the liability for the posting and uploading of materials on the internet depending on the facts of the case. While some courts found liability where a person merely created and managed a Bulletin Board onto which infringing

51 M Olueze, Copyright Law (Lagos: Maglink International Ltd. 1998) p.11.
52 Ibid.
materials are posted by others without the knowledge of the Bulletin Board Operator, others require something more than mere creation of the forum in order to impose liability. Still, other decisions have declined to find liability due to traditional Copyright defences such as fair use.\(^{56}\) In *Marobie-FL Inc. v National Association of Fire Equipment Distributors*,\(^{57}\) the plaintiff sued the defendant for unauthorized copying of its clip art and joined the Online Service Provider, Northwest Nexus Inc. The court held that the service provider, by merely providing the facilities for public use by third parties was not liable to the plaintiff for the copyright infringement act of the defendant. It is submitted with the greatest respect that this decision was reached in error and should not be relied upon in Nigeria, at least. This is because it runs contrary to the express provisions of the Nigerian Copyright Act which renders the unauthorized usurpation of the author’s exploitative rights of production, reproduction, publication, copying, etc, or cause any other to do any of these acts, a strict liability offence.\(^{58}\)

7.2 Authorship and Copyrightability of Multimedia Works
The new possibility of amalgamating or combining a diversity of both traditional and entrepreneurial works into one multimedia work seems to compound existing problems in Copyright infringement cases. It was stated earlier in this work that Compton’s Encyclopedia which consists of 9 million words of text, 15,000 still images, 45 moving image sequences, and 60 audio minutes has been put on one CD-ROM disk. If peradventure infringement arises in relation to such work, confusion/injustice may ensue as to what kind of protection will be accorded the work. This is because under the Nigerian Copyright Act for instance, the 9 million words of text will be protected as literary works; the photographs as artistic works; the 45 moving-image sequences as cinematograph films; the 60 audio minutes will be covered by copyright in sound recordings, while the underlying computer programs will also enjoy protection as literary works. Besides, the duration of protection for each of these works will vary with their nature. Similarly, enforcement problems usually occur in infringement cases where modern media technology is used to create works or alter portions thereof. For instance, the afore mentioned Diet Coke’s commercial wherein the actors Humphrey Bogart, James Cagney, the musician Louis Armstrong, Elton John and other actors participated. Same situation may occur in works subject of ‘Colorization’ earlier discussed in this work.

\(^{56}\) Ibid.

\(^{57}\) 983 F. Supp. 11167, 45 US PQ 2d. 1236.

\(^{58}\) C.R.A.N. Section 15 (1) (a).
It is not in doubt that since multimedia work is a derivative work, it will enjoy Copyright protection depending on the nature the work substantially takes. This protection extends only to the original contribution of the maker. However, the maker of such work must necessarily seek the consent of the original author of the work. However, the parameters for determining the quantum of such original content in order to attract protection for the end product might be difficult to determine. This is because the Copyright Acts under consideration do not provide for separate protection of a work made up of a combination of other protectable works, as distinct from the protection afforded to constituent works. This development necessitates urgent amendment of the Nigerian and English Copyright Acts to provide that a protectable work can consist of the combination or merger of different individual works. This will ensure that the prerequisites for protection are not examined separately but in relation to the multimedia work as a whole.

7.3 Jurisdictional Challenges

It has been observed that one of the main characteristics of digital exploitation of works is that it is not limited to one single national territory but in many cases, crosses borders.\textsuperscript{59} Cate aptly observed that: \textsuperscript{60}

Digital information not only ignores national borders, but also those of states, territories and even individual institutions... governments are finding it increasingly difficult, and in some cases impossible to regulate information effectively, at the very time that the economic power of information is increasing the political pressure for them to do so. The globalization of information may be rendering the traditional concept of sovereignty of the nation states obsolete.

It is not in doubt that the Courts have proven to be the most effective Copyright Enforcement Mechanisms. In the jurisdictions under consideration, the Courts are empowered to exercise jurisdictions over Copyright cases in their respective geographic enclaves.\textsuperscript{61} Thus, unlike Criminal Law which can be enforced internationally through the International Criminal Court, the jurisdiction to entertain Copyright matters is territorially limited. Furthermore, there is no \textit{sui}

\textsuperscript{59} ACLU v RENO, supra, 354.


\textsuperscript{61} Sections 251 (1) (f) & 251 (3) 1999 Constitution of Nigeria (as amended), C.R.A.N. Section 46; C.D.P.A. Section 115 (1).
 generis Copyright Law between countries. Although there are bilateral and multilateral Copyright Treaties such as the Berne Convention and Universal Copyright Convention, there is no International Copyright Agreement on electronic medium. This development has left authors with no choice than to fold their hands and watch extra territorial infringement of their works go on unabated.

It is submitted that Copyright being a natural right attached to work upon creation, there is need to jealously guard this right, especially now that reciprocal enforcement of Copyright through Conventions is not yielding the desired fruits. It is suggested that Regional and International Copyright Courts be established through Convention, to tackle Trans National border piracy.

7.4 Challenges Associated with the use of Technological Protective Devices

It was earlier stated in this work that because of the afore stated activates associated with the Internet, the traditional Enforcement Mechanisms failed. This prompted the development of Digital Rights Management system which enabled right holders to physically control access and use of a work made available online. DRM usually make use of technological measures such as Encryption and Watermarking techniques to protect digital media. Digital Watermarking is a promising technology that supports Copyright information such as the owner’s identity transaction dates, and serial numbers to be embedded as unperceivable signals into digital contents. Watermarking is as seen in television channels when their logos are visibly superimposed in the corner of the television screen. Watermarking system generally involves two processes, that is to say, Watermarking embedding, and Watermarking decoding. With the help of an encoder, the Watermark is applied to the original media signal. On the other hand, Encryption is the technology that supports the Electronic Document Management and Control. DRM uses a cryptographic algorithm to encrypt content that needs a secret key, a particular phrase, or string of numbers. The encrypted content can only be read by the holder of this key after unlocking it. Two main types of encryption are Asymmetric and Symmetric Encryption. In the case of Asymmetric Encryption, each person is given

---

63 Hereinafter referred to as ‘DRM’.
65 Ibid.
66 Ibid.
a pair of keys, ie, a public and a private key, and each person’s public key is kept secret. Messages encrypted using the intended recipient’s public key can only be decrypted using his private key.\(^{67}\) This process eliminates the need for the sender and receiver to share secret information. In order to implement public-key encryption on a large scale, a digital certificate, which is basically a bit of information that says that the Web Server is trusted by an independent source known as a Digital Authority, is required. The Certificate Authority acts as a middleman that computers trust, and confirms that each computer is in fact who it says it is; and then provides the public keys of each computer to the other. On the other hand, Symmetric Encryption, sometimes referred to as secret–key encryption, uses a symmetrical key which is essential for protecting data. It uses the same key for password to encrypt and decrypt data.

Apart from the above discussed technological protective devices, certain types of technological enforcement mechanisms have emerged to deal with the problem of sovereignty and jurisdiction. These include the creation of electronic borders around a state to secure compliance with laws and policies; imposition of electronic blockades; and the imposition of electronic sanctions to punish violators.\(^{68}\) Electronic borders entail the blocking of states of outsiders from entering the state online through packet interception of filtering.\(^{69}\) Nowadays, Countries such as China and Saudi Arabia have established the equivalent of online national borders by requiring service providers to filter Internet traffic.\(^{70}\) These electronic borders replicate general national boundaries on the Internet. By creating an electronic borderer, a state prevents communication with prospective offenders and isolates those offenders outside the state.\(^{71}\) As a corollary to an electronic Internet border, states may initiate police action to stop an offender’s transmission from going outside the offender’s country.\(^{72}\) This type of blockade bars an offender from participating on the Internet outside his country as if he is under incarceration or home confinement. By so doing, the enforcing state creates an electronic prison that is co-extensive with the host country. Furthermore, states may electronically sanction offenders by using technological means to penalize or destroy the offender’s online resources.\(^{73}\) Such sanctions may include denial of service or

\(^{67}\) Ibid.
\(^{69}\) Ibid.
\(^{70}\) Ibid.p.266.
\(^{71}\) Ibid.
\(^{72}\) Ibid
\(^{73}\) M Henry, Image ‘Watermarking Hidden Bits: A Survey of Techniques for Digital Watermarking’
Challenges in Copyright Enforcement on the Internet: Need for Amendment of the Copyright Laws

seizure of offender’s web pages, or indeed crippling of the offender’s host server. Recently, the Association of American Publishers proposed the use of a digital object identifier system to indicate the origin and ownership of online material, as well as copyright restrictions those accessing it are subject to.\textsuperscript{74} A tag is thus placed in the online material such as books or articles, and accepted by users clicking on an icon which would transport them to the relevant publisher’s homepage.\textsuperscript{75}

Today most Nations of the world have authorized the use of technological protective devices and even criminalized their circumvention. For instance, the Nigerian Copyright Act authorizes the use of same and confers on the Nigerian Copyright Commission, the authority to prescribe any design, label, mark, impression or any other anti-piracy device for use on, in, or in connection with any work in which Copyright subsists.\textsuperscript{76} The Act contains provisions barring the importation into Nigeria, or being in possession of any anti-piracy device, or any machine, instrument or other contrivance intended for use in the production of the anti-piracy device.\textsuperscript{77} On the other hand, the English Act expressly allows the use of technological protective devices and prohibits the circumvention of such devices applied to computer programs; and any effective technology of such nature applied to a Copyright work other than a computer program.\textsuperscript{78} The Act makes it an offence to carry out such circumvention or to promote, achieve, market, manufacture, distribute, sell, let, hire, expose for sale or hire, any facility that circumvents any such protective technological device.\textsuperscript{79} However, the qualification for protection in relation to a protective device is that such device must be effective in the sense that the use of the work is controlled by the Copyright owners through an access control or protection process such as encryption, scrambling, or other transformation of the work; or a copy control mechanism, which achieves the intended protection. It is however noted with dismay that neither this Act nor the English Copyright Act do not provide for fair use of works technologically protected.

It is noted that apart from the fact that the Nigerian and English Copyright Acts do not admit of fair use of technologically protected works, they do not prescribe any

\textsuperscript{75} \textit{Ibid.}
\textsuperscript{76} C.R.A.N. Section 20 (1).
\textsuperscript{77} \textit{Ibid.} Subsection (3).
\textsuperscript{78} C.D.P.A. Sections 296 & 2962A.
\textsuperscript{79} \textit{Ibid.} Sections 296ZA-296ZD.
type of ant-piracy device to be used in these jurisdictions. This will therefore work hardship to fair users of protected works who may not access such works as a result of the sophisticated Copyright unfriendly anti-piracy devices used on them. It also noted that by the wordings of the English Act, it is only the circumvention of an effective technological measure applied for purposes of protecting the work from infringement that will amount to an offence.\(^{80}\) It is submitted that these anomalies make the idea of technical enforcement as provided by the Acts, useless. Having pointed out the anomalies inherent in these Acts, it is submitted that the continued application of these obsolete Acts will restrict the promotion of competition in the field of creativity, and this will eventually stifle creativity. It is therefore suggested that in order to remedy these anomalies, these Acts be amended to conform with the provisions of section 512 of the Amended U.S. Copyright Act\(^{81}\) which now gives Internet Service Providers protection from liability against claims of Copyright infringement concerning material residing at the direction of a user or subscriber on their systems or networks; or arising from infringing materials that a third party routes through their servers in return for making it easier for an infringement claim to be made, and acting expeditiously to remove or disable access to the infringing material.\(^{82}\)

There is no gain saying that the technical protection of works has vast negative implications on Copyright in that it does not allow fair use of works. It is submitted that whilst the rationale for effective Copyright enforcement cannot be debated, the damage of legitimizing over restrictive Copyrights Management Systems and criminalizing those who circumvent them, is condemnable.\(^{83}\) This will eventually put an end to creativity. Therefore, finding the right balance between sufficient incentives for creativity on the part of authors, and the promotion of knowledge and information through access to protected works will go a long way in promoting creativity.

\(^{80}\) Ibid. Sections 296ZA.
\(^{81}\) Ibid. Online Copyright Infringement Liability Limitation Act, 1998, amended the U.S. Copyright Act by introducing section 512 thereto.
\(^{82}\) United States Copyright Act, section 512.
8. Conclusion

It is submitted by way of conclusion that the obsolete Copyright Acts of Nigeria, England and other related Instruments operating in the jurisdictions considered have not done enough to enhance Copyright protection and enforcement in relation to Internet based works. These analogue oriented Copyright Acts failed to considered online exploitative techniques the that threw off balance the original balance between the enjoyments of the rights conferred on authors, and the public interest of right of access to works. Besides, these Acts failed to consider the challenges faced in the enforcement of Copyright in relation to internet based works. The only remedial step these Acts took with respect to online piracy, was to provide for the use of technological protective devices on digitized works without prescribing the type of technological devices to be used in these jurisdictions. Moreover, these devices do not admit of fair use of such protected works. Most unfortunately, these Acts have not addressed the issue of territorial enforcement of Copyright which led to the upsurge of infringement on the Internet.

9. Recommendations

There are a good number of steps that could be taken to aid the dissemination of knowledge and information in the jurisdictions considered, by striking a balance between the conflicting interests of authors and those of the general public, in relation to Internet based works; and at the same time help to put an end to Copyright infringement on the Internet. These recommendations are as shall be discussed below.

(a) Amendment of the Copyright Acts

It is recommended that the Copyrights Act of Nigeria and England be amended to prescribe the type of antipiracy devises to be used in these jurisdictions. The Amended Act should fully incorporate the afore discussed Copyright friendly provisions of D.M.C.A. and the Online Copyright Infringement Liability Limitation Act of the United States in relation to the use of anti-piracy devices and fair use of technologically protected works.

(b) Establishment of Copyright Enforcement Units in the Law Enforcement Agencies

There is need to introduce a Copyright Enforcement Units as a Department in each of the Law Enforcement Agencies in the jurisdictions considered, such as the Police, Civil Defence Corps, the Customs Service, State Security Services, the Army, Navy, Air Force, as well as the International Police.
(c) **Creation of Copyright Awareness**
Adequate Copyright awareness should be created to educate the populace and Internet users, especially Nigerians, who are mostly ignorant of Copyright matters, the operation of technological protection mechanisms or the circumvention of protective devices on grounds of fair use. Enlightenment and awareness campaigns should also be organized through commercial ringlets and advertisement in televisions and radios, seminars, workshops, conferences, and by the introduction of Copyright as a course in the curricula of Primary, Secondary and Tertiary Institutions.

(d) **Creation of Copyright Courts**
Municipal and International Copyright Courts saddled with the responsibilities of discharging expeditiously cases relating to Copyright, in the manner adopted by the International Criminal Courts in cases involving Copyright matters, should be established. Copyright Courts’ Enforcement Rules should also be made to aid the proceedings in Copyright matters in these Courts as the case may be.